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1. INTRODUCTION

1.1 Title of project

This study is the Environmental Impact Assessment for the construction and operation of Phase D Electricity Interconnection between the Cyclades and the Hellenic Interconnected Electricity Transmission System. In more detail, the project under study concerns the interconnection of the islands of the southern Cyclades (Serifos, Milos, Fologrou and Thira) with the Greek mainland electricity transmission system (from GIS Lavrio to the new GIS Naxos) via a 150 kV high-voltage submarine AC cable. The project under study is located:

- In the Municipality of Lavretica in the Region of Attica
- In the municipality of Serifou in the Regional Unit of Milos
- In the municipality of Milos in the Regional Unit of Milos
- In the Municipality of Folegandrou in the Regional Unit of Thira
- In the municipality of Thira in the Regional Unit of Thira
- In the Municipality of Naxos and Micro-Cyclades of the Regional Unit of Naxos

1.2 Type and size of the project

The project includes 150 kV submarine cables with a total length of 353.2 km and 150 kV underground cables of a total length of 19.6 km, from GIS Lavrio to the new GIS Naxos watercourse, as well as the new substations on the islands of Serfou, Milos, Folegandrou and Thira. It consists of the following sub-sections:

- 1. Underground section of the 150 kV Cable section of Attica in Lavrio with a length of approximately 1 047 m.
- 2. Submarine section of 150 kV Lavrio Serifou cable section of approximately 109.3 km.
- 3. Underground section of the 150 kV Cable section of Serifou with a length of approximately 1.382 m.
- 4. Construction of a new GIS system on the island of Serfou.
- 5. Submarine section of cabling 150 kV Serifou-Mile approximately 46.7 km long.
- 6. Underground section of 150 kV B.M. of cable, a length of approximately 7 500 m.
- 7. Construction of a new GIS system for the island of Milos.
- 8. Underground section of 150 kV N.M. of cable, length of approximately 6 650 m.
- 9. Submarine section of cabling 150 kV Milos-Folegandrou, a length of approximately 55.2 km.
- 10. Underground section of the 150 kV Folegander cable section of a length of approximately 1 872 m.
- 11. Construction of a new GIS water body for the island of Folegandrou.
- 12. Submarine section of the cable section of 150 kV Folegandrou Game of approximately 59.9 km.
- 13. Underground section of 150 kV Cable G.L. Hunting with a length of approximately 607 m.
- 14. Construction of a new GIS water body for the island of Thira.
- 15. Submarine section of the cable section of 150 kV Thira Naxos, a length of approximately 82.1 km.

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16. Underground section of the 150 kV Naxos cable section of 528 m.

The detailed technical description of the proposed project is set out in Chapter 6 of this Study.

This Environmental Impact Assessment is accompanied by a Special Ecological Assessment study concerning the underwater and underground parts of the project located within Natura 2000 areas, and more specifically:

- In the marine area between Macronos and Lavrio, submarine GM passes within the Natura 2000 SCI area 'GR3000017 Coastal and marine area of Makronus' over a length of approximately 5.8 km.
- In the marine area between Macronso and Lavrio, submarine GM passes within the Natura 2000 SPA area 'GR3000018 Canal Makronisos' over a length of approximately 6.9 km.
- In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 1.1 km.
- In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 1.4 km.
- In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.2 km.
- On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos — Profitis Ilias — Wider Area' over a length of approximately 0.6 km.
- On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 Western Milos, Antimilos, Polygos and Islands' over a length of approximately 5.8 km.
- On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1 km.

1.3 Geographical location and administrative subordination of a project

1.3.1 Location of project

The beginning of the project is located in an existing terminal area of the Lavrio hotspot in Lavrio Attica. In summary, the sub-sections of the project are arranged geographically as follows:

- The existing Lavrio hotspot launches a new 150 kV underground cable line with a length of approximately 1 047 m to the bottling site in a space adjacent to the Lavrio SES. The route to the bottling site will be carried out on a common road or areas to be granted by the Lavrio SES.
- There is then a 150 kV submarine cable of 109.3 km running south of Lavrio and ending at the 'Kycladi' berth on the Tsilipaki bay on the south-eastern part of the island of Serf.
- The underground section of the 150 kV Cable Unit of Serifou (Municipality of Serifou, Regional Unit of Milos, Region of South Aegean), with a length of approximately 1.385 m from the 'Kylaidi' Sierfou bottling site to the new GIS Serifou Water Board. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- It is followed by a submarine cable G.M. 150 kV with a length of 46.7 km which moves south from Serphos and ends up to the 'Ag. Konstantinos' pitch in V. Milos.
- Underground section of 150 kV North Milos Cable (municipality of Milos, Municipal Unit of Milos, Region of South Aegean) with a length of approximately 7 500 m from the 'Ag. Konstantinos' bottling

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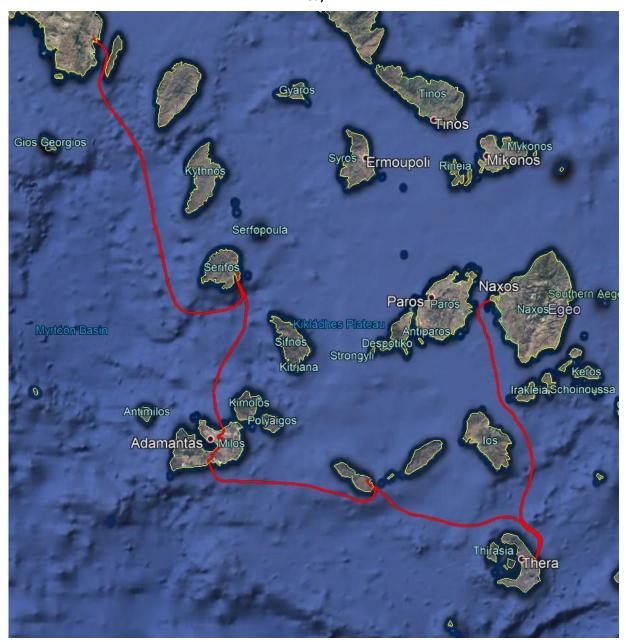
site in the V. Milos to the new GIS Milos watercourse. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

- Underground section of 150 kV Southern Milos Cable (municipality of Milos, Regional Unit of Milos, Region of South Aegean) with a length of approximately 6 650 m from the new GIS Milos Water System to the bottling position in the 'Provvaa' N. Milos area. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- It is followed by a 150 kV submarine cable of 55.2 km, moving east from the Milos and ending up to the 'Libya' Fleangrou berth in the south-east of the island.
- Underground section of the 150 kV Folegandrou cable section (Municipality of Folegandrou, Regional
 Unit of Thira, Region of South Aegean) with a length of approximately 1 872 m, from the 'Livadi'
 Fleangrou to the new GIS Folegandrou. The cables will be routed on a site within a foreshore and
 beach zone, public, municipal or rural or expropriated roads.
- It is followed by a 150 kV submarine cable with a length of 59.9 km, which runs south-east from Fleangrou and ends up to the 'monolithol' hunting position on the eastern coast of the island.
- Underground section of the 150 kV G.U. of Thira (Municipality of Thira, Regional Unit of Thira, Region
 of South Aegean) with a length of approximately 607 m from the 'monolithic' hunting site to the
 location of the new GIS Thira water body. The cables will be routed on a site within a foreshore and
 beach zone, public, municipal or rural or expropriated roads.
- It is followed by a 150 kV submarine cable of 82.1 km which runs north from Hunt and ends up to the 'Stlida' of Naxos berth on the western coast of the island.
- Underground section of a cable section of 150 kV Naxos (municipality of Naxos and Micro-Kyclades, Regional Unit of Naxos, Region of South Aegean) of approximately 528 m from the landing position near the 'Solila' of Naxos to the water body of Naxos. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

The geographical location of the project is shown in the figure below.

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Figure Error! No text of specified style in document.-1 Geographical location under project design (as presented in red)



1.3.2 Administrative subordination of a project

The project under study covers a large geographical area and is located in six municipalities, two regions. Specifically, it is located in the following municipal units:

- Municipal Unit of Lavreotikos, Municipality of Lavretica in the Region of Attica
- Municipality of Serifou, Regional Unit of Milos (South Aegean Region)
- Municipality of Milos, Regional Unit of Milos (South Aegean Region)
- Municipality of Folegandrou in the Regional Unit of Thira (South Aegean Region)
- Municipal Unit of Thira, Municipality of Thira in the Regional Unit of Thira (South Aegean Region)
- Municipal unit of Naxos, Municipality of Naxos and Small Cyclades of the Regional Unit of Naxos (South Aegean Region)

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The municipality of Lavreotikos is administratively part of the Attica Region of the Decentralised Administration of Attica.

The municipalities of Serifou, Milos, Folegandrou, Thira and Naxos are administratively subordinate to the South Aegean Region of the Decentralised Administration of the Aegean.

1.3.3 Project geographical coordinates

The table below shows the coordinates of the individual sections of the project under study.

Table of Error! No text of specified style in document.-1 coordinates of individual sections of the project under study (in the Hellenic Geographic System of coordinates EGSA 87)

Project sub-section	Co-ordinates in NASO 87		
Underground Department GM of Lavrio (Authority: Lavrio Hotspot —	Authority Final		
End: bottling point)	X = 505472 X = 505612		
End. Sotting point)	Y = 4177579 Y = 4177239		
Underground Department GM Serifou (Authority: bottling point — End:	Authority Final		
	X = 547096 X = 546746		
Y/C of Serifou)	Y = 4110062 Y = 4111046		
Underground Department CM North Miles (Authority: P. Miles bettling	Authority Final		
Underground Department GM North Milos (Authority: B. Milos bottling	X = 543291 X = 542223		
point — End: M/S of apple)	Y = 4066750 Y = 4061997		
Lindowsky and Domoston and CNA of Courth Miles / Authority D/C of Miles	Authority Final		
Underground Department GM of South Milos (Authority: P/S of Milos —	X = 542222 X = 539077		
End: tipping point N. Milos)	Y = 4061995 Y = 4057728		
Hadayanayad Dayaytasant CM Falsayaa (Aythayity hattling paint	Authority Final		
Underground Department GM Folganros (Authority: bottling point —	X = 585080 X = 584186		
End: ÕÕ/Σ Folegandrou)	Y = 4051395 Y = 4052837		
Hadayana and Danasharant of Hunting (Authority hattling paint. End.	Authority Final		
Underground Department of Hunting (Authority: bottling point — End:	X = 632294 X = 632325		
H/S Hunting)	Y = 4030801 Y = 4030544		
Lindows and Donoston and CM of Novac / Authority a hoteling a circle. Fools	Authority Final		
Underground Department GM of Naxos (Authority: bottling point — End:	X = 618487 X = 618859		
H/S of Naxos)	Y = 4103993 Y = 4104196		

1.4 Classification of the project

In accordance with Ministerial Decision No DIPA/o ι x. 37674¹ (Government Gazette, Series II, No 2471), as amended by Ministerial Decision No YΠΕΝ/ $\Delta\Delta$ /24593/2902, 21 April 2020, the project under study is classified as follows:

- **Group 11**^h: Transport of energy, fuels and chemicals
- **No 11**: Individual ultra-high voltage centres and individual substations on the ground (including extensions to existing substations)
- subcategory A2 due to the connection of the project to the Lavrio hotspot where its operating voltage is > 150 kV

It should be noted that underground and submarine electricity transmission lines are not classified in any of the sub-categories of the legislation in force. However, for the sake of completeness of the presentation of

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¹ Amendment and codification of Ministerial Decision 1958/2012 — Classification of public and private projects and activities into categories and subcategories in accordance with Article 1(4) of Law 4014/21.9.2011 (Government Gazette, Series I, No 209/2011), as amended and in force.

the project under examination, this EIA sets out the technical characteristics and key elements of the underground/submarine section, as well as an environmental impact assessment and assessment, and for the sections of the underground transport lines located within a Natura 2000 area, a Special Ecological Assessment study included in Annex II to this EIA has been carried out.

It should also be noted that the reason for the size of the project, its passage through various marine and land areas of the Natura 2000 network and their location within two regions of Greece, it is proposed that the Environmental Licensing Directorate of the Ministry of the Environment and Energy be the authorising authority.

The following table shows the classification of the project under study in the Greek statistical classification of economic activities (STAKDE 08).

Table Error! No text of specified style in document.-2 Classification of the project in the Greek classification of economic activities (STAKDE 08)

Code CTAW 08	Project/Activity
D	ELECTRICITY, GAS, STEAM & AIR CONDITIONING SUPPLY
35	Electricity, gas, steam and air conditioning supply
35.1	Electric power generation, transmission and distribution
35.12	Transmission of electric current
35.12-0	Transmission of electric current

The above-mentioned economic activities are not mentioned in Joint Ministerial Decision No οικ. 3137/191/Φ.15 'matching the categories of industrial, craft and electricity generation activities with the levels of nuisance referred to in town planning decrees' (Government Gazette, Series II, No 1048), as supplemented by Joint Ministerial Decision No οικ. 13234/800/Φ.15 'Completion of οικ. 3137/191/Φ.15/2012 (Government Gazette, Series II, No 1048) on the comparison of categories of industrial, artisanal and electricity generation activities with the levels of nuisance referred to in town planning decrees' (Government Gazette, Series II, No 3251 2012).

1.5 Project promoter

The details of the project operator are set out in the table below.

ΑΔΜΗΕ	ADMIE Independent Power Transmission Operator SA Directorate for New Transport Projects
Address:	Durresiou 89 & Kifissou 10443 Athens
Contact telephone:	210-5192306, 210-5192152
Fax:	210-5126999
Director of New Transport Projects:	Mr Tsirekis K.
Contact person for the project under study:	Mr Koukounias D.

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1.6 Environmental designer of the project

This study was carried out by the company 'ENVECO A.E., Environmental Protection and Management' (registeredoffice: Pericles 1, Athens, tel: 210-6125027, fax: 210-6148149, info@enveco.gr_www.enveco.gr], holder of a design degree in Class 27 Class C, to whom it was awarded under a relevant contract with ADMIE.

The study follows the provisions of the current institutional framework on environmental licensing and is led by Mr Spyros Papagrorgiou, Civil Engineer, Environmental Engineer, Dipl, MSc, MLitt., Managing Director of ENVECO A.E. The ENVECO A.E. Group that worked on the preparation of this EIA was set up by the following scientists:

Spyros Papagrorgiou,	Civil Engineer, Environmental Engineer, Dipl., MSc., MLitt, Study Officer
Yannis Katselis,	Mineral Resources Engineer, Machine Environment (MSc), Business Administration (MBA), <u>Study Coordinator</u>
Yannis Bekariis,	Environmentalist Pan/Mio Aigaiou, MDE E.M.P., MEOA Coordinator
Life of Gaidanarou	Mines-metallurgical engineer, Environment Engineer MSc.
Giorgos Nasis	Environmentalist Pan/Minimio Aigaiou, ornithologist
Vaggels Caniastas	Agronomist, ornithologist
Michalis Marulakis	Biologist, Fishologist
Panagiota Brutis	Environmentalist Pan/Minimio Aigaiou, MSc Water Resources Science and Technology
Katerina Kostara	Geographer, Environmental MSc, ref. Dr Dr
Vaggellis Pantelias,	TE Infrastructure Engineer — Digital Project Processing
Maria Haralambopoulou,	Chemical Pan/Miou Patras — Digital Processing of Projects
Marcantonis Christos,	Electrician TEI Kozanis — Digital Processing of Projects

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2. NON-TECHNICAL SUMMARY

2.1 Project under study

General data

This study is the Environmental Impact Assessment for the construction and operation of Phase D Electricity Interconnection between the Cyclades and the Hellenic Interconnected Electricity Transmission System. In more detail, the project under study concerns the interconnection of the islands of the southern Cyclades (Serifos, Milos, Fologrou and Thira) with the Greek mainland electricity transmission system (from GIS Lavrio to the new water/system GIS Naxos) via a 150 kV high voltage submarine and an alternating current Lodium. The project under study is located:

- In the Municipality of Lavretica in the Region of Attica
- In the municipality of Serifou in the Regional Unit of Milos
- In the municipality of Milos in the Regional Unit of Milos
- In the Municipality of Folegandrou in the Regional Unit of Thira
- In the municipality of Thira in the Regional Unit of Thira
- In the Municipality of Naxos and Micro-Cyclades of the Regional Unit of Naxos

Type and size of the project

The project includes 150 kV submarine cables with a total length of 353.2 km and 150 kV underground cables of a total length of 19.6 km, from GIS Lavrio to the new GIS Naxos watercourse, as well as the new substations on the islands of Serfou, Milos, Folegandrou and Thira. It consists of the following sub-sections:

- 1. Underground section of the 150 kV Cable section of Attica in Lavrio with a length of approximately 1 047 m.
- 2. Submarine section of 150 kV Lavrio Serifou cable section of approximately 109.3 km.
- 3. Underground section of the 150 kV Cable section of Serifou with a length of approximately 1.382 m.
- 4. Construction of a new GIS system on the island of Serfou.
- 5. Submarine section of cabling 150 kV Serifou-Mile approximately 46.7 km long.
- 6. Underground section of 150 kV B.M. of cable, a length of approximately 7 500 m.
- 7. Construction of a new GIS system for the island of Milos.
- 8. Underground section of 150 kV N.M. of cable, length of approximately 6 650 m.
- 9. Submarine section of cabling 150 kV Milos-Folegandrou, a length of approximately 55.2 km.
- 10. Underground section of the 150 kV Folegander cable section of a length of approximately 1 872 m.
- 11. Construction of a new GIS water body for the island of Folegandrou.
- 12. Submarine section of the cable section of 150 kV Folegandrou Game of approximately 59.9 km.
- 13. Underground section of 150 kV Cable G.L. Hunting with a length of approximately 607 m.

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- 14. Construction of a new GIS water body for the island of Thira.
- 15. Submarine section of the cable section of 150 kV Thira Naxos, a length of approximately 82.1 km.
- 16. Underground section of the 150 kV Naxos cable section of 528 m.

The detailed technical description of the proposed project is set out in Chapter 6 of this Study.

Geographical location and administrative subordination of the project

The beginning of the project is located in an existing terminal area of the Lavrio hotspot in Lavrio Attica. In summary, the sub-sections of the project are arranged geographically as follows:

- The existing Lavrio hotspot launches a new 150 kV underground cable line with a length of approximately 1 047 m to the bottling site in a space adjacent to the Lavrio SES. The route to the bottling site will be carried out on a common road or areas to be granted by the Lavrio SES.
- There is then a 150 kV submarine cable of 109.3 km running south of Lavrio and ending at the 'Kycladi' berth on the Tsilipaki bay on the south-eastern part of the island of Serf.
- The underground section of the 150 kV Cable Unit of Serifou (Municipality of Serifou, Regional Unit of Milos, Region of South Aegean), with a length of approximately 1.385 m from the 'Kylaidi' Sierfou bottling site to the new GIS Serifou Water Board. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- It is followed by a submarine cable G.M. 150 kV with a length of 46.7 km which moves south from Serphos and ends up to the 'Ag. Konstantinos' pitch in V. Milos.
- Underground section of 150 kV North Milos Cable (municipality of Milos, Municipal Unit of Milos, Region of South Aegean) with a length of approximately 7 500 m from the 'Ag. Konstantinos' bottling site in the V. Milos to the new GIS Milos watercourse. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- Underground section of 150 kV Southern Milos Cable (municipality of Milos, Regional Unit of Milos, Region of South Aegean) with a length of approximately 6 650 m from the new GIS Milos Water System to the bottling position in the 'Provvaa' N. Milos area. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- It is followed by a 150 kV submarine cable of 55.2 km, moving east from the Milos and ending up to the 'Libya' Fleangrou berth in the south-east of the island.
- Underground section of the 150 kV Folegandrou cable section (Municipality of Folegandrou, Regional Unit of Thira, Region of South Aegean) with a length of approximately 1 872 m, from the 'Livadi' Fleangrou to the new GIS Folegandrou. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- It is followed by a 150 kV submarine cable with a length of 59.9 km, which runs south-east from Fleangrou and ends up to the 'monolithol' hunting position on the eastern coast of the island.
- Underground section of the 150 kV G.U. of Thira (Municipality of Thira, Regional Unit of Thira, Region of South Aegean) with a length of approximately 607 m from the 'monolithic' hunting site to

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the location of the new GIS Thira water body. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

- It is followed by a 150 kV submarine cable of 82.1 km which runs north from Hunt and ends up to the 'Stlida' of Naxos berth on the western coast of the island.
- Underground section of a cable section of 150 kV Naxos (municipality of Naxos and Micro-Kyclades, Regional Unit of Naxos, Region of South Aegean) of approximately 528 m from the landing position near the 'Solila' of Naxos to the water body of Naxos. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

The project under study covers a large geographical area and is located in six municipalities, two regions. Specifically, it is located in the following municipal units:

- Municipal Unit of Lavreotikos, Municipality of Lavretica in the Region of Attica
- Municipality of Serifou, Regional Unit of Milos (South Aegean Region)
- Municipality of Milos, Regional Unit of Milos (South Aegean Region)
- Municipality of Folegandrou in the Regional Unit of Thira (South Aegean Region)
- Municipal Unit of Thira, Municipality of Thira in the Regional Unit of Thira (South Aegean Region)
- Municipal unit of Naxos, Municipality of Naxos and Small Cyclades of the Regional Unit of Naxos (South Aegean Region)

The municipality of Lavreotikos is administratively part of the Attica Region of the Decentralised Administration of Attica.

The municipalities of Serifou, Milos, Folegandrou, Thira and Naxos are administratively subordinate to the South Aegean Region of the Decentralised Administration of the Aegean.

Key elements of a proposed project

The planned project of **Phase D interconnection of the Cyclades** concerns the interconnection of the islands of Thira, Milos, Folegandrou and Serif with the continental interconnected system through the Lavrio Terminal Facilities.

The project aims to increase the reliability of supply to the interconnected islands and to reduce production costs (substitution of oil with other energy sources, depending on the evolution of the energy mix of electricity generation in mainland Greece).

The project includes the construction of four new substations (S/S) 150/20kV closed-type GIS on the islands of Serfos, Milos, Foleganros and Hunt.

The interconnection of the above water bodies will be carried out by setting submarine tripole cables of type XLPE for a voltage of 150 kV, with a total length of 353.2 km and a nominal capacity of 200 MWA, as follows:

- Lavrio Serif (approximately 109.3 km),
- Serifos Milos (approximately 46.7 km),
- Milos Foleman (approximately 55.2 km),
- Fologanros Hunt (approximately 59.9 km) and
- Hunting Naxos (about 82.1 km).

In addition, underground sections of 150 kV G.U. with a total length of 19.6 km will connect the drilling points with the water bodies as follows:

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- Attica: 1 047 m simple circuit from GIS Lavrio Terminal to the bottling position
- Serifos: M dual-circuit from the 'Cyclide' of Serifou pitch to the new GIS Serifou water body
- Apple: 7 500 m of a single circuit from the 'Ag. Konstantinos' bottling site in the N. Milos to the new water/body GIS Milos and 6 650 m from the new water/body GIS Milos to the bottling position in the 'Provvaa' N. Milos area (total: 14.150 m).
- Fologanros: 1872 m of dual-circuit from the 'Libya' Folandrou pitch to the new GIS Fologandros bathing site
- Hunting: 607 m double circuit from the "monolithol" game to the position of the new GIS Hunting water
- Naxos: 528 m of a single circuit from the bottling position near the Naxos 'solid' to the Naxos water body/body.

Key elements of construction and operating lights

Construction phase

<u>Technical description of submarine cable operations</u>

From the precipitation areas, each submarine cable, by means of suitable connectors, will be connected to three underground single-pole cables (1 underground cable per pole), which will be routed towards their termination within a canak, first within the foreshore and then on public, municipal or rural or expropriated roads.

Again, the design of the connector shall be such as to ensure the required electrical insulation of the connection, electrical continuity of the conductor while ensuring leakproofness and anti-corrosion protection of the line and mechanical protection of the line against external stresses. The construction and materials of the connector shall be fully compatible with those of the connected cables so as to ensure the safe operation of the system in both normal and non-normal operation conditions.

Once the joints have been assembled, the well will be filled with suitable materials (sand, gravel 3A, concrete slabs), cordlessly concrete with reinforced concrete and its surface restored with the material existing before the excavation. It will then be delimited by four cement pens at its corners. The axis of the cables in the foreshore and beach area will also be defined with their own pens.

The cables will be transported by a special f/F transport/laying vessel, packed in metal rotors. Safe setting requires appropriate tensioning and alignment mechanisms of the cable at different set speeds in order to avoid possible cable failures (mechanical stress, skinning, etc.).

Deep sea excavations are carried out using a special deep-sea (ROV) (Jetter or Trencher) machinery depending on the type of bottom substrate. The Jetter-type ROV vehicle shall be used on a soft substrate and the excavation shall be carried out by means of water shooting which achieves positioning of the cable at the desired depth and minimal disturbance of the bottom. In the case of a rocky bottom, a Trencher-type ROV vehicle is used, which opens the well and then the well is artificially or naturally coated. The depth of the canvas from the bottom surface shall be confirmed by the use of directed beam acoustic devices and/or a magnetometer fitted to the vehicle.

Installation of underground cables

The submarine cable exits into the foreshore and moves to the connector transition well with the corresponding underground, as described in the previous paragraphs.

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Once the connectors have been assembled, the underground cables run on public, municipal or rural or expropriated roads as appropriate.

The drum on which the cables are to be placed, once installed, is refilled with a sand layer or, where appropriate, reinforced concrete, concrete paving, gravel layer 3A and finally restored with material available before excavation. The surface of the shaft and routing of the cables will be restored as it was before the intervention.

The existence of cables can only be seen by the installation of concrete sticks and suitable plates in places necessary for their easy identification.

Substations (C/S) 150/20kV

In order to serve project 'Phase D of electricity interconnection between the Cyclades and the Hellenic Interconnected Electricity Transmission System', four voltage reduction substations must be constructed on the islands of Serphos, Milos, Foleganro and Thira. The downgrading substations shall consist, in terms of functionality, of the following sections:

- The <u>150 kV High Voltage Department:</u> It includes the 150 kV transmission line gateways, which are the functional attachment units of the 150 kV transmission lines at the substation, the 150 kV transformer gates, which are the functional units for connecting power transformers on 150 kV scales and 150 kV scales.
- <u>Power transformers</u> with the corresponding 150 kV gates to be attached to the 150 kV scales (mentioned above). Power transformers reduce electricity from 150 kV to 20 kV, are of an outdoor type and are installed on concrete bases in specially designed spaces within the substation's stadium.
- The <u>20 kV Average Voltage Department:</u> It includes the 20 kV distribution line gates which are the functional attachment units of 20 kV lines at the substation, the protection, measurement and control cells and the 20 kV scales.

All the proposed substations (Thira, Serifou, Milos and Folegandrou) will be closed-end, GIS (Gas Insulated Substation) technology, which will be connected to the 150 kV transmission system exclusively by submarine-underground cables.

The substation will be connected to the 150 kV transmission system via two 150 kV cable lines with the nearest substations. The two (tripolar) submarine cables from the nearest substations will enter the basement of the substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

Through the above gates, electricity is transferred from the 150 kV underground cables to the 150 kV scales and from there to power transformers, which reduce the voltage from 150 kV to 20 kV.

Operation phase

During the operational phase of the project under consideration, regular inspection and maintenance of the equipment and cleaning of the area of works will be carried out, as well as maintenance work if required.

During the operation of the projects, control and supervision will be carried out through remote control, remote supervision and remote control and on-the-spot.

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Raw materials required

In the **construction phase** the main materials to be used are:

- Concrete, and armaments for the construction of building works, for the topping of the pitches for
 placing the underground transport lines, and for the enclosures and the configuration of the
 surrounding area of the installations.
- Electromechanical equipment of factory construction for water bodies
- Underground and underwater pipes, cast iron, etc., for their protection.

In the **operational phase** of the project under consideration, small-scale consumption of water and electricity is foreseen for the operation of the substations (Milos/Serfou, Milos Water/S, Folegandros and Thira water). These quantities will come from the relevant networks of the neighbouring municipalities.

Expected quantities of waste

In the **construction phase** of the projects under consideration, it is envisaged to generate the usual liquid waste generated during the construction of infrastructure projects, taking into account that the underground and underwater parts of the project consist of pre-constructed sections, which are not built in the project area.

In the **operational phase**, any liquid waste arising from the maintenance of the equipment will be collected and delivered to companies authorised to manage it.

2.2 Distances of the project

Project distances from settlement boundaries and approved town planning plans

The table below shows the individual sections of the project under study and their relationship with approved boundaries of agglomerations and town planning plans.

Table Error! No text of specified style in document.-1. Individual parts of the project under study and their relationship with approved boundaries of agglomerations and town planning plans (within the study area)

Sub-part of project Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	Uses permitted under the APS and CWO	
Undergrou nd section 150 kV Attica in Lavrio Lavrio Attica in Lavrio Lavrio, which is located 2 km south of the project (Government Gazette 1260/Δ/1993, 374/Δ/1995).	Most of the underground cable (392 m) in the Attica area falls outside specific town planning plans. 362 m of the cable are located in area I2 and 153 m are located in area B2 of the Lavretic ZE (Government Gazette 125/D/27-2-1998)	 In Area I2 (industrial, industrial, industrial and PPC installations) the following shall apply: It is an area of industrial and artisanal installations, where professional installations which are not particularly nuisance, as defined in the table in the Article, are permitted. Presidential Decree 81/1984 (Government Gazette, Series I, No 33). PPC installations are allowed For building conditions and restrictions, the provisions of Presidential Decree of 31 January 1987 (Government Gazette, Series I, No 303) shall apply. For area B2 (medium protection areas for landscape and archaeological sites): The following uses are permitted in the above areas: housing, rural warehouses, public and municipal cafés and refreshments). The conditions and restrictions on the construction of permitted uses shall be as follows:	

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Sub-part of project	Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	Uses permitted under the APS and CWO			
Undergrou nd section 150 kV Serifou	The closest settlement with statutory boundaries is the	The island of Serif applies 'Special terms and restrictions on	and the construction of more than one building inside the stadium is prohibited. b. For agricultural warehouses: Maximum total permissible surface area of the building of thirty (30) m², maximum permissible height of the buildings: two and half (2.5) metres. C. For public and municipal sedentaries and refreshments: Maximum percentage of coverage: three per cent (3 %), building factor: Maximum total permissible surface area of the building two hundred (200) m², maximum number of floors of buildings: one (1) with their maximum permissible height: four (4) metres and the construction of more than one building inside the stadium is prohibited. D. Above the maximum permissible height of the buildings, it is necessary to build a roof with byzantine tiles or Greek-Russian-type tiles the height of which does not exceed two (2) metres. 3. Articles 28 and 29 of Law 1947/1991 (GG I 70) and the provisions of Presidential Decree 93/87 (Government Gazette, Series I, No 52) shall not apply to the above regions. Article 3 reads as follows: The following shall apply to the non-planned and off-bound agglomerations of the island of Serifou: () 21. Buildings of general interest or cultural activities may be constructed by way of derogation from the			
G.U. New S/S Island of Serifos	Livadi, which is around 0.9 km west of the project (Government Gazette 1373D/1986-12-31).	building in settlements and non-planned areas on the island of Serifou' (Government Gazette, Series I, No 930D/24-10- 2002).	provisions of this Law following approval by the Minister for the Aegean following an opinion of the SSP of the Ministry of the Aegean, provided that they are integrated harmoniously into the environment and comply with local traditional architectural standards.			
Undergrou nd section 150 kV B.M. New Island of Milos	The closest settlement is the Zeteria, which is located 1.2 km east of the project.	There is no GPS, SV being studied in the There is no GPS, SV being studied in the	VOOPO or any other relevant plan that includes part of the area of the projects e Municipality of Milos. VOOPO or any other relevant plan that includes part of the area of the projects e Municipality of Milos.			
Undergrou nd section 150 kV N.Milou Undergrou	The closest	being studied in the	VOOPO or any other relevant plan that includes part of the area of the projects e Municipality of Milos. VOOPO or any other relevant plan that includes part of the area of the projects			
nd section 150 kV Folegandr ou	settlement is Karavostase, through which the GMS passes		e Municipality of Folegandrou.			
New body of the island of Folegandr ou	and is 0.3 km south-east of the new water body (Government Gazette, Series I, No 1373/Δ/1986- 12-31).	·	VOOPO or any other relevant plan that includes part of the area of the projects e Municipality of Folegandrou.			
Undergrou nd section 150 kV Hunting New Island of the island of Thira	Part of the project (Government Gazette, Series I, No 351/1989) passes through the statutory boundaries of the	The entire project falls within Area III of ZE Thira & Thirasia (Government Gazette, Series I, No	Article 2 reads as follows: C. Areas with element III: 1. It includes all areas outside the boundaries of the agglomerations and outside the areas referred to in points I and II above, the area of the islands of Thira and Thirasia and outside archaeological sites. 2. The following uses are permitted in the area: a. Residence, shops b. tourist facilities c. public utility buildings d. agricultural warehouses, greenhouses, pumping installations, tanks e. non-nuisance artisanal installations. ()			

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Sub-part of project	Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	
	conurbation of monolithos (Government Gazette, Series I, No 351/1989).	139/19.3.1990, amending Government Gazette, Series I, No 144, 30.4.2012).	E. General provisions () I. Where the construction of buildings of general interest is permitted, the definition of such spaces and the building conditions and restrictions shall be carried out in accordance with Article 26 of Law 1337/83 (GG I 33), as in force.
Undergrou nd section 150 kV Naxos	The closest settlement with statutory boundaries is Saint Anna, which is located 1.9 km south-east of the project (Government Gazette 264/D/1986).	The entire project falls within area 2a2 of the ZE of Naxos (Government Gazette 846/D/24-11-1988).	According to Article 2(E) 'Areas 2a1 and 2a2': 3. In both areas 2a1 and 2a2 construction is permitted for dwellings, shops, tourist facilities, organised campsites, recreation centres, sports facilities, pumping facilities, water reservoirs, wells, buildings of general interest. 9. The conditions and restrictions on the construction of public utility installations and the other conditions and restrictions on building the other permitted uses are those referred to in the Presidential Decree of 6 October 1978 (Government Gazette, Series I, No 538), as amended by Presidential Decree of 20 January 1988 (Government Gazette, Series I, No 61) and of 24 May 1985 (Government Gazette, Series I, No 270/D).

Project distances from national system boundaries of protected areas under Law 3937/2011

Natura 2000 sites

The project under study falls within or adjacent to the following Natura 2000 SAC and SPA areas:

- In the marine area between Macronos and Lavrio, submarine GM passes within the Natura 2000 SCI area 'GR3000017 Coastal and marine area of Makronus' over a length of approximately 5.8 km.
- In the marine area between Macronso and Lavrio, submarine GM passes within the Natura 2000 SPA area 'GR3000018 Canal Makronisos' over a length of approximately 6.9 km.
- In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 1.1 km.
- In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 1.4 km.
- In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.2 km.
- On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 Island of Milos Profitis Ilias Wider Area' over a length of approximately 0.6 km.
- On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 Western Milos, Antimilos, Polygos and Islands' over a length of approximately 5.8 km.
- On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1 km.

Wild Life Shelters

A description is given below of the wildlife shelters to which parts of the project <u>are adjacent</u>. The remaining KPAs within which parts of the project are located are presented in the Special Ecological Assessment (MEA) study accompanying this EIA (underground sections built on the existing road network and underwater sections).

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The project under study is located near the following wild life shelters:

- 1.5 km to the east of the submarine cable in the Strait of Macronesos is situated in K435 'Marmaroxera' (Government Gazette, Series II, No 522/86).
- 930 m to the west of the proposed substation of Serifou is situated in K481 'Country-Ag. Sunday (Serifos)' (Ministerial Decision 2401/17-7-98),
- 800 m to the south of the landing point of the submarine cable and 2 km to the south of the Folegandrou substation is the K526 KZ area 'Rachides (Folegandrou)' (Government Gazette, Series I, No 410/20-6-84).
- 3.5 km west of the Thira substation is situated in K530 'Faros Akrotia-oia (Thira Thesis Kaderas)' (Government Gazette, Series I, No 634/22-8-94),
- 1.6 km to the east of the landing point of the submarine cable on the island of Naxos is situated in K784 KAZ area 'Alki*Municipality of Naxos*' (Government Gazette, Series II, No 652/04-05-04 Establishment).

The KAZs of the islands of los (K521) and Heraklias (K783) are located far away (> 4.5 km) from the submarine cable crossing and are not detailed in this EIA.

Wetlands

The only island wetlands adjacent to the project, i.e. the wetlands on the island of Serphos and Milos, are presented in the Special Ecological Assessment (MEOA) study accompanying this EIA (underground sections built on the existing road network).

Proposed landscapes of special natural beauty (TFIK)

In the study area, four TFIKs are found on the islands of Milos, Serifs, Fologanros, Santorini, los and Naxos, according to the Filotis database (*Hellenic Nature Database*, https://filotis.itia.ntua.gr/). In particular, these areas are as follows:

- **'Island of Serifos' AT5010088.** The project under consideration (onshore cable and substation of Serifou) is located **within** that TFI.
- 'Fleandra Island' AT5011014. The project under consideration (onshore cable and substation of Serifou) is located within that TFI.
- 'Calfiko Milou' AT5011000. The project under consideration (onshore cable) is located at a distance of at least 8 km from that TFI.
- 'Island of Thira or Santorini' AT5011063. The project under study (landfall and Santorini substation) is located within that TFIK.
- 'Country of Naxos' AT5011064. The project under study (mounting point and substation of Naxos) is located at a distance of at least 3.8 km north-east from the TFIK in question.
- **'Island of los' AT5010086.** The project under study (submarine cable) is located at a distance of at least 4.7 km north-east from the TFI.

Biotopes CORINE

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In the study area, five CORINE habitats are found on the islands of Milos, Foleganros, Santorini, Iraklia and Naxos, according to the FILOTIS database (Greek Nature Database, https://filotis.itia.ntua.gr/). In particular, these areas are as follows:

- 'Admiral Islands and Western Milos' A00060059: The project under study (land cable on the island of Milos) is located 1 km east of this CORINE habitat.
- As stated in the MEA annexed to this study, the project under study passes within the area of CORINE A00040075 — "Fleandros Islands, Skininos, Alphnia, Kardiotissa and good giants.
- 'Area of Profitis Ilias, Santorini' A00030033. The project under study (landing point and Santorini substation) is located 4 km north of this CORINE habitat.
- 'Small Cyclades (Koufonisi, Heraklion, Schinousa, Keros' A00060028: The project under study (submarine cable) is located 3.5 km west from this habitat CORINE.
- 'Algae Naxou' A00060027: The project under study (land cable and Santorini substation) is located 1.45 km north-west from this habitat CORINE.

Other Biotopes

The project under study passes through or adjacent to the following areas "Other Viotope", according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr).

- 'National Forest of Sunni' AB2080003. The project under study (onshore cable and Lavrio substation) is located 1.4 km east from this Other Vyotope.
- 'Small and Grand Avella Islands' AB5080044. The project under study (submarine cable) is located at a distance of 2.4 km west from that Other Viotope.
- 'Agios Prokopi Naxos' AB5090022: The project under consideration (onshore cable and substation of Naxos) is located within that other biotope.

Forests and wooded land

On the basis of the data obtained from the Forest Maps Directorate's 'Growing and Land Use Map', it is stated as follows:

- Areas under agricultural crops (34 %), with shrubs (27 %), grassland (6 %) and settlements (11 %) are dominated in the PoM study area in the Lavretic Regional Unit. Also N Makronso is dominated by areas with Amigian Arkethous (91 %), arid areas (6 %) and mixed juniper forests (3 %).
- Lebanese land (68 %), agricultural crops (13 %), abandoned agricultural crops (9 %) are dominated in the RU study area on the island of Serphos. There are also poor areas (4 %) and agglomerations (5 %).
- The MH study area on the island of Milos is dominated by shrub land (27 %), agricultural crops (52 %) and grassland (10 %). There are also arid areas (4 %).
- Grassland (86 %), agricultural land (6 %), abandoned agricultural crops (5 %) is dominated in the RU study area on the island of Folegandro.
- The PoM study area on the island of Thira is dominated by areas under agricultural crops (86 %),

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grassland (9 %) and arid areas (5 %)

• The PoM study area on the island of Naxos is dominated by areas with shrubs (45 %), agricultural crops (45 %) and arid areas (7 %)

2.3 Significant environmental effects likely to be caused by the project

The table below presents in a supervisory manner the assessment and evaluation of the impact of the construction and operation of the project under consideration by environmental instrument.

Table Error! No text of specified style in document.-1 Supervisory assessment of the impact of the construction and operation of the project under consideration by environmental instrument

	Impact on the construction phase						Impact on the operational phase			
a/a	Nature of the	Size	Duration	Downgrading	Treatment by artificial means	Nature of the	Size	Duration	Downgraded with	Treatment by artificial means
1.	Impact	on clim	atic and l	pioclimatic charac	cteristics	•	•			
	_	Α	ВР	MEAN	MEANDOT	+	Р	MT	MEAN	MANIFOLD
2.	Impact	on mor	phologica	al and ecologic ch	aracteristics		_			
	_	Р	ВР	MEAN	MEANDOT	_	Α	MT	MEAN	MEANDOT
3.	Impact	on geol	ogical, te	ctonic and soil ch	aracteristics					
	_	Р	ВР	MEAN	MEANDOT	0				
4.	Impact	on the	natural e	nvironment			_			
	_	Α	BP	MEAN	MEANDOT	_	Α	MT	IF	INSTEAD
5.	Impact	on land	use			_				
	_	Р	BP	MEAN	MANIFOLD	0				
6.	Impact	on the	structure	and operations o	of the man-ma	de envir	onment		.	
	_	Α	BP	MEAN	MEANDOT	0				
7.	Impact	on cult	ural herit	age					,	
	0					0				
8.	Social -	– econo	mic impa	ect					,	
	+	Α	BP			+		MT		
9.	Impact		nical infr	astructure			1	ı	<u> </u>	
	_	Р	BP	IF	INSTEAD	0				
10.	Impact	on the	atmosphe	ere				T		
	_	Р	BP	MEAN	MEANDOT	+		MT		
11.	Impact	on the	acoustic e	environment				T		
	_	Р	BP	MEAN	MEANDOT	+		MT		
12.	Effects	related	to electro	omagnetic fields		1	1	T	r	,
	0					0				
13.	Impact on surface water									

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	Impact on the construction phase						Impact on the operational phase			
a/a	Nature of the	Size	Duration	Downgrading	Treatment by artificial means	Nature of the	Size	Duration	Downgraded with	Treatment by artificial means
	_	Р	BP	IF	ANT	0				
14.	Impact on groundwater									
	0					0				

Legend Table

- :	Negative
0:	Neutral
+:	Positive
S:	Important
P:	Moderate
A:	Patients
BP:	Short-term
MT:	Long-term
IF:	Reversible by physical processes
MEAN:	Partially reversible by physical processes
DO NOT:	Irreversible by physical processes
INSTEAD:	Manageable by artificial means
MEANT:	Partly manageable by artificial means
MINUT:	Unaddressable by artificial means

2.4 Proposed environmental protection measures

Measures to address the impact on climate and bioclimatic features

The projects studied are not related to significant impacts on the climate and bioclimatic characteristics of the study area and therefore no relevant preventive or compensatory measures are proposed.

Measures to address the impact on morphological and biologic characteristics

Construction phase

In order to address the impact on the morphological and opiological characteristics of the construction of the proposed projects, the following measures are proposed:

- The width of the occupation area of the project is limited to what is strictly necessary for the construction of the project.
- For the whole project and before the construction phase, a delimitation of the catchment areas is made, so that any excavations to be carried out are limited to what is strictly necessary and avoid unnecessary openings, drainage and clearing.

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- All waste materials shall be collected and removed from the project site and shall be disposed of in accordance with the provisions in force.
- After completion of the construction works, all materials and equipment transferred to the intervention area for the needs of the project will be removed.
- In addition, at the end of the construction work, the contractor must restore the landscape of the
 intervention areas by removing obsolete materials and machinery and carrying out morphology
 restoration work, such as removing a backfilling to cross a stream.
- The rehabilitation areas will be rehabilitated in accordance with a special plant-technical study to be carried out.
- In order to organise the construction site of the projects under consideration, the location area of the site will need to be configured. The operation of a construction site is usually related to the generation of urban waste as well as liquid and solid waste. Therefore, appropriate measures will be taken to address the effects that may arise on the landscape from site development work and from the generation of waste and waste.
- Sites should be sited in areas not covered by vegetation of high ecological value and at sufficient distance from residential areas and protected areas as far as possible.
- The movement of construction vehicles should take place on the existing road network and on the proposed access zones.

Operation phase

 Regular maintenance will be carried out on the proposed sections of the project (underground transport lines, substations, etc.). Any waste materials will be removed immediately from the project area.

Measures to address the impact on geological, tectonic and soil characteristics

Construction phase

During the construction phase, efforts will be made to maintain in good condition the access zones and construction sites required for the construction of the works, as well as to rehabilitate and regenerate these areas at the end of the construction works, which will be carried out in accordance with the following:

Maintain natural slopes of the soil so that there is no change in the run-off of surface water.

In order to address issues relating to the management of excavations and materials in general, it is proposed to optimise the planning of the project, with a view to direct re-use of excavated products in the building blocks and rational management of the necessary aggregates.

All necessary measures will be taken to minimise the impact on the soil characteristics of the intervention area, as set out below.

The excess material that will arise during the construction phase and cannot be used in the
construction works shall be deposited in an environmentally licensed deposit chamber or in landfills
or in areas where other projects are carried out, which have approved environmental conditions and
where those materials can be used in inactive quarries or through alternative management systems.

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Account should also be taken of the legislation in force, i.e. Ministerial Decision 36259/1757/E103/2010 onmeasures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (Government Gazette, Series II, No 1312), as amended by Law No 4030/2011 on anew way for the issuing of building permits, building controls and other provisions (Government Gazette, Series I, No 249). according to Article 40 (Article 40on waste from excavation, construction and demolition) and explanatory circular 4834/2013 on the management of excess excavation materials from public works — Clarifications on the requirements of Joint Ministerial Decision 36259:

- 1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
- 2. Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Account will also be taken of Law 4014/2011 on the environmental authorisation of projects and activities, arbitrariness in connection with the creation of an environmental balance and other provisions falling within the remit of the Ministry of the Environment (Government Gazette, Series I, No 209) and, more specifically, Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity':

- Paragraph 2 states that: 'The installations and works resulting from the technical design of projects or activities at a stage following the issue of a DAEC, such as construction sites, depots, car service stations, centres for the servicing and maintenance of works or activities, toll stations, noise protection projects, specification of technical measures and terms of the DAEC of the project, shall be approved by submission and evaluation of a Technical Environmental Assessment (Technical Environmental Assessment) to the authority responsible for the environmental permit, by decision of its Director-General. The following conditions are necessary for the submission and approval of TEMM: a) the general assessment of the impact and the provision of general and/or specific conditions and restrictions for such installations and works in the DAEC and b) the express provision in the DAEC of the project or activity of the possibility to submit and approve TEMM.'
- Paragraph 4 provides that: 'For projects or activities, the use as a storage chamber of an area already extracted and inactive on forest or reforestation land, with the exception of restoring it and integrating it into the natural surroundings of the area, shall be permitted. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.'
- If authorisation of a storage chamber is required for the needs of the projects under consideration, a TEMM will be prepared, in accordance with the provisions of Law 4014/2011.
- The deposit of excavations to be reused as embankment should be done in a way that does not allow corrosion and leaching of materials.

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- During earthworks, take the necessary measures to avoid any kind of soil destabilisation or dispersal of earth moving and aggregate materials of the project such as landslides or slope erosion, leaching of aggregate heaps, etc. In cases where the likelihood of these phenomena appears to be increased, for example during a period of high rainfall, earthworks should be stopped until favourable conditions for their implementation are restored, with the exception of works which need to be carried out immediately for reasons of safety or environmental protection (e.g. stabilisation of excavated slopes, removal of materials to prevent their drifting).
- The excavation materials must be transported by means of transport with suitable covers in order to prevent them from being dispersed or diffused in the streets.
- Earthworks should be avoided during days with heavy rainfall.
- To ensure that car services serving construction sites do not pass through the centres of settlements and residential areas.
- Any materials required for the construction of the project must be provided by legally operating
 quarries in the area, which must be provided with the required decision approving the
 environmental conditions.
- For the whole project and before the construction phase, demarcation of the catchment areas, so that any excavations are carried out, are limited to what is strictly necessary and avoid unnecessary openings, drainage and clearing.
- It shall be prohibited to dispose of surplus materials and any solid construction waste:
 - Points on the hydrographic network.
 - Any uncontrolled waste disposal sites of local authorities in the area.
- If leaching of construction machinery is required, in order to protect the soil from spills of mineral
 oils, fuels, etc., special spaces with a watertight floor and an inclined collection hole should be
 provided. Otherwise, the washing of manufacturing vehicles and machinery will be carried out in
 authorised workshops.
- For all waste and waste arising from construction activities during the construction of the projects (solid and liquid) appropriate management is implemented to avoid pollution of the area (soil, subsoil, surface water and groundwater) from uncontrolled disposal or leaks.
- Construction sites shall be supplied with domestic waste bins, with a volume of at least 0.5 m³, in
 which the urban waste of workers on the construction sites is collected. This waste will be
 periodically disposed of at the nearest waste disposal site by the project promoter. It should be
 noted that particular care should be taken to ensure that such solid waste does not include rubbish
 or material which is potentially hazardous, which should be disposed of in accordance with the
 legislation in force on the respective categories of waste.
- The mineral oils used must be managed in accordance with Presidential Decree 82/25.02.2004 (Government Gazette 64A/02.03.2004) laying down measures and conditions for the management of mineral oils used, which replaced Royal Decree No 98012/2001/96. Waste lubricating oils and liquids of each type shall be collected separately per category in suitable tanks with a capacity of 0.50 m³ or in drums and shall be temporarily stored in a covered area.

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- Any toxic and hazardous waste must be managed in accordance with Joint Ministerial Decision 13588/725/06 (Government Gazette, Series II, No 383, 28.03.2006) replacing KYA 19396/1546/97 (Government Gazette, Series II, No 604/18-7-1997).
- Take all precautionary measures to avoid leakage of petroleum products from damage, negligence, etc. and carry out appropriate handling to minimise such incidents. However, if, despite the control and proper functioning measures, such materials are leaked, care must be taken to avoid widespread soil impregnation. Absorbent materials (e.g. sawdust, sand) should therefore be available in sufficient quantities to seek adsorption and thus contain the leak fuel and lubricant. After use, these absorbent materials should be carefully collected and disposed of for landfill. Absorbent materials stored in a suitable roofed area must be checked at regular intervals whether they have adsorbed moisture (e.g. from water leakage) at which point they will be less effective if used. In this case they should be replaced as soon as possible.
- Prohibit any form of burning of materials (shapeds, rubbers, oils, etc.) in the project area.
- The project promoter shall be responsible for the good condition and leakproofness of the mechanical equipment. In order to protect the soil from leakages of mineral oils, fuels and other petroleum products from construction machinery, appropriate measures should be taken, such as good and regular maintenance of machinery, oil change and refuelling of vehicles and machinery in a specific suitable place and compliance with all measures to deal with leakages and fire safety. The maintenance and refuelling of machinery will be carried out in legally operating service stations and workshops in the area, except in the case of exceptional circumstances (damage, accidental leakage, etc.).
- At the end of the construction work, it is necessary to remove all construction machinery from the
 area, collect the equipment and collect waste materials, waste, lubricants, etc. that will arise during
 the construction work, in accordance with the legislation in force, so that there is no permanent
 impact on the ground of the operating area.
- Slopes formed by loose soil material should be properly concentrated and planted as soon as possible.

As regards the management of the materials that will arise during the construction phase, taking into account also the underground sections of the project located along the existing road network, please note that in any case the legislation in force will be complied with, namely Ministerial Decision 36259/1757/E103/2010 on measures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (DEEK)(Government Gazette, Series II, No 1312, 2010); as amended and in force, also taking into account explanatory circular 4834/2013 on the management of excess excavation materials from public works — Clarifications on the requirements of Joint Ministerial Decision 36259.

It should be noted that the above-mentioned Ministerial Decision was amended by Law No 4030/2011 on anew method for issuing building permits, building controls and other provisions (Government Gazette, Series I, No 249, 2011), according to which (Article 40 'Objectives relating to waste from excavation, construction and demolition (DEEK)')

1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.

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2. Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Finally, under Law 4014/2011 (Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity'):

4. Projects or activities may use as a storage chamber already extracted and inactive on forest or reforestation land for the sole purpose of restoring it and integrating it into the natural surroundings of the area. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.

Operation phase

No special additional measures are required beyond the systematic maintenance of the whole project, so that all types of waste which, in addition to aesthetic degradation, may also have an impact on the functionality of the project are not disposed of uncontrolledly.

During the operational phase of the project, small quantities of solid waste are expected to be generated, which will come from the packaging of materials/maintenance of the facilities and from the cleaning and hygiene materials of the staff. For the collection of this waste, there is provision for the installation of bins in the premises of the water bodies, at selected points of the facility. Litter should be removed from the project site at regular intervals. Any other solid waste arising during maintenance (electrical or mechanical parts, batteries, etc.) will be removed immediately under the responsibility of the technical maintainers.

Waste water from water bodies will also be taken into account in accordance with the health provisions in force.

The methods for the management of the main categories of waste material that can be generated during the operation of the project are set out below:

- Collection of waste lubricating oils (L.L.): The holder of the Port Facility Security Fund must conclude a
 contract with an approved alternative management system for the Port Facility Security Fund (ALC). The
 primary collection of waste water treatment plants from the holder's establishment must be carried out
 by a collector with a nationwide licence for collection and transport of waste water treatments and who
 must issue an 'identification form certificate of receipt of the waste water treatmentfacility'. The
 holder of the waste water treatment plant (i.e. the project operator) is required to keep a register of
 potentially dangerous materials.
- 2. Waste electrical and electronic equipment and waste batteries and accumulators: they will be managed by a specialised company contracted by the project promoter.
- 3. Other wastes: Other (non-hazardous) waste is disposed of in consultation with local local authorities and with competent bodies and always in accordance with the general provisions governing waste management and recycling of paper, glass, aluminium, etc.

Measures to address the impact on the natural environment

Marine Environment

Floating equipment

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All evacuations from the work vessel and support/accompanying vessels shall be carried out in accordance with the requirements of the MARPOL Treaty and the applicable regulations. In particular:

- waste water and household waste shall be treated using a marine treatment device capable of generating liquid waste meeting international requirements (Annex IV MARPOL) prior to discharge at sea at a minimum distance of 3 nautical miles from the coast;
- oily liquid waste may be stored on board until it is delivered to appropriate port facilities. If this is not possible, oily liquid waste shall be treated in accordance with MARPOL Annex I (& 15 ppm) before discharge at sea.

All vessels involved in the operations and their equipment shall comply with all applicable international regulations.

Preventive maintenance, leak detection and repair programmes will be implemented to equip vessels that may cause undesirable leakage.

In addition, proper planning will minimise vessel movements and avoid as much as possible the simultaneous presence of many vessels in the area, thus minimising noise levels.

In the event of a requirement to illuminate outdoor spaces necessary for the activities of the project, they will be limited to the areas of interest, in terms of safety conditions and in accordance with the law, thus avoiding nuisance particularly in relation to night fauna.

Submarine cable construction work

The width of the occupation zone of submarine cables should be limited to what is strictly necessary for the safe construction of the project.

In addition, any amendment to the methods of protection at the stage of final technical design of the project and to the extent that it differs from those described in this EIA will be done through the **preparation of a Technical Environmental Study (TEMEM)** by the project operator. TEMM will be submitted, assessed and approved in accordance with the provisions of the applicable environmental licensing legislation (Law 4014/2011 and Law 4685/2020).

Measures to address the impact on the anthropogenic environment

Construction and operational phase

In order to address the impact on land use, structure and operations of the man-made environment from the construction and operation of the individual parts of the project under consideration, the following measures are proposed:

- Land occupation will be limited only to those areas that have been identified as necessary for the implementation of the projects under consideration.
- The construction machinery will move in the operating area and access zones and not uncontrolled by shrub or agricultural land.

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- The location of construction sites and areas for temporary storage of aggregates must be based on the least possible nuisance to the residential environment and always on the basis of the possibility of full rehabilitation.
- In the operational phase of any construction sites, special preventive measures will be taken to avoid
 fire in the surrounding areas. Any construction site should have firefighting infrastructure and an
 immediate mobilisation plan in cooperation with the local fire brigade.
- In addition, an incident response system, such as accidents, water pollution, etc., should be
 designed, and health and safety rules for personnel from hazardous materials should be precisely
 defined and complied with.
- Temporary piles of excavated material shall be arranged within the intervention zone and not accidentally on adjacent land, even in the case of abandoned land.
- During the construction of the project, road transport between residential areas and any existing
 access to sites of legally conducted activities must not be interrupted.
- The parking of wheeled wheels serving the needs of the project in places other than construction sites, in particular residential activities, is prohibited. These vehicles should be parked in suitably configured sites.
- To ensure that the journeys of vehicles serving construction sites do not pass through the centres of settlements and residential areas. These routes should be defined once all vehicle alternatives have been assessed.
- Care should be taken to ensure that workplaces are labelled and excluded by appropriate means.
- After completion of the construction work, any type of construction site (offices, workshops, warehouses, etc.) must be removed and the site restored, irrespective of the ownership of the site.
- Rehabilitation works will be carried out in the access areas in accordance with a special phytotechnical restoration study to be carried out for this purpose, in order to integrate them more effectively into the surrounding area.

As regards the protection of the public health of the inhabitants of the surrounding agglomerations and of farmers whose parcels are located in the areas of the routing of the underground transport lines under study, it should be noted that the emission of electromagnetic radiation is in any case below the limits of the legislation in force. In addition, given that the four new substations on the islands of Serphos, Milos, Falangrou and Hunt are built using GIS technology, the electromagnetic radiation emitted will be lower and below the limits of the current legislation. Therefore, no further measures are proposed regarding the reduction of electromagnetic radiation emitted.

In order to address the potential impact of the proposed projects on the historical and cultural environment of the study area, all excavation and earthworks will be monitored by archaeologists designated by the competent Antiquities Inspectorates. If antiquities are identified in the course of the work, the work will be interrupted to carry out excavation research in accordance with the provisions of Law 3028/02 (Government Gazette, Series I, No 153) on the protection of antiquities and cultural heritage in general. The results of the investigation will depend on the further progress of the project following the opinion of the competent bodies of the Ministry of Culture. No construction work will be carried out without prior consultation with the jointly competent Antiquities Inspectorates. Prior to the implementation of the project, the results of which will depend on the further progress of the project will be carried out by diving teams of the Marine Antiquities Tax Office at the landing points, following the opinion of the competent tax authority. If

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antiquities are found at the landing points, the course of the cables and the points of landing shall be shifted in accordance with the instructions of the Marine Antiquities Inspectorate.

Finally, after the definitive closure of the project, the operator must take the necessary measures to restore the environment of the intervention area and remove all elements of the project which may cause damage to the environment or pose a risk to public safety (oils, electrical installations, etc.). To this end, it must, not later than one (1) year before the scheduled date of closure of the project, submit to the department responsible for its environmental authorisation, on the basis of the provisions in force, an Environmental Rehabilitation Study — Plant Technician Study.

Measures to address the impact on the socio-economic environment

Construction and operational phase

In order to minimise the potential impact on the social and economic environment of the region, appropriate measures should be taken, summarised below.

- During the operation of the individual construction sites of the project, continuous and systematic signalling is required in accordance with the instructions of the competent services (speed reduction signs, by-passes, distress signals, etc.).
- With regard to the provincial road network in the study area, which will be affected by the traffic of
 construction vehicles and machinery, appropriate traffic regulations should be put in place, with
 information signs and appropriate road signs to avoid accidents.
- The owner or contractor of the construction of the project must, in good time and before the start of
 the main works which will cause traffic obstruction, submit to the supervising service a study of
 traffic regulations, which he will carry out in order to reduce the impact (traffic arrangements, bypasses, enlargements, etc.).
- In any event, access to houses or properties will not be cut off, nor will the economic activities carried out in the project transit areas (agricultural and livestock activities, but also activities in the secondary and tertiary sectors) be interrupted.
- The handling of the various materials and the movement of machinery and vehicles related to the
 construction of the works must not cause problems in the traffic conditions (prevention of traffic,
 increased risk, etc.) of existing roads. Appropriate timetables for individual works should be
 established, taking into account the peak times of traffic on existing roads and the routes required
 from the construction works.
- At night there should be light-signalling on site sites as well as traffic setting areas.
- Any damage to agricultural or urban land must be kept to a minimum and all protective measures in
 the agricultural and urban environment must be respected. Construction vehicles should therefore
 operate on the existing road network and on the proposed access zones and not uncontrolled
 through agricultural crops even if they are abandoned land.
- All technical requirements for the safe operation and easy construction and maintenance of the line shall be complied with.
- The staffing needs of the project will be met, as far as possible, by the residents of the study area.
- Adequate fencing and construction sites will be provided for the safety of adults and minors.

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Measures to address the impact on technical infrastructure

In order to address the potential impact on existing technical infrastructure of the construction of the projects under consideration, the following measures are proposed:

- Any intervention in an existing infrastructure project must be carried out in accordance with a
 relevant study and in cooperation with the competent public interest bodies, in order to ensure the
 smooth operation of the infrastructure project affected.
- The smooth circulation of vehicles in the project area should be ensured during the construction phase of the project (location of site markings).
- As already mentioned above, before construction of the underground sections of the project starts, a Traffic Arrangements study will be prepared to determine the traffic arrangements to be put in place to ensure the safe operation of traffic during the construction of the project.
- With regard to addressing the impact on the maritime traffic of ships and vessels, it is first proposed that the location and timing of installation work be notified to seafarers via the relevant Hydrographic Service of the Navy. In addition, the following measures are foreseen:
 - o Inform the Navy Hydrographic Service of any update of the maritime maps of the area.
 - The installation of submarine cables shall be carried out in an appropriate manner by a special submersible vehicle which achieves the laying of the cables at the desired depth of design with minimum disturbance of the bottom.
 - The main safety risk for submarine cables is fishing activity. Information on the installation of submarine cables of local authorities as well as national and international maritime chart producing services and the ICPC (International Cable Protection Committee) is a very important measure for the protection of cables. However, this measure is not always effective. The most effective measure has been shown to be the burial of cables, which is integrated into the design of the project under consideration. At least for low depth sea transit areas, the depth of the upper part of the ditch, if possible below the bottom, for the natural restoration of the benthic ecosystem.
 - o In order to address any potential impact caused by the laying work on any existing submarine cables (mainly telecommunications), the procedures and designs foreseen by the ICPC for these cases will be applied in cases where submarine cables are crossed with already installed and operating telecommunications cables. In this way, it is not expected that there will be any impact on the operation of these cables.
 - Moreover, as regards any old and out-of-service cables, no information is available on a programme for the removal of old cables that are currently out of service, from Greek Spatial Waters or International waters in the Aegean Sea. In any event, before the cable is installed, it must be checked that the cable is free of obstacles before it is set.

It should be noted that the landing points of the submarine cable on the islands of Milos and Naxos are located far away from protected areas in the South Aegean Water District that have been classified as recreational/sicken water (0.8 km west from the submarine cable landing point in the south Milos and is located close to the 'Côte Provaa' and 0.6 km west of the landing point of the submarine cable in the western Naxos is located close to "Côte Agios Prokopios") and therefore no measures to reduce the impact related to bathing are proposed.

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Measures to address the impact on the environment

Construction phase

During the construction phase of the projects under consideration, the following measures must be observed to limit the impact on the environment of the area:

- Frequent and periodic maintenance of all manufacturing machinery by qualified personnel.
- Systematic maceration of aggregates during the dry period of the year.
- Maceration of the aggregates transported in the works as well as covering heavy-duty transport vehicles with suitable fabric.
- A ban on permanent parking of wheelchairs serving works outside the construction site.
- The quantities of aggregate stored for the purposes of the projects should be limited to the most necessary and covered as far as possible;
- The machinery working in the area is operated carefully to limit the release of dust;
- Ban on trucks from passing through settlements during hours of common quiet
- The uninsured passageways of machinery and other vehicles on the construction site must be kept at regular intervals.
- The site site shall be stratified with crushed material ("3A") to limit dust emissions.
- Incineration of any form of material (useless material, waste, etc.) is prohibited.
- All the areas where interventions are planned should be delimited before the start of the construction works.

It is also necessary to comply with the legislation in force on exhaust emissions of machinery and construction vehicles. The main relevant legal provisions are the following:

- Ministerial Decision 28432/2447/92 (Government Gazette, Series II, No 536/25.8.92), measures to limit the emission of gaseous and particulate pollutants from diesel engines.
- Ministerial Decision 13736/85 (Government Gazette, Series II, No 304//20.5.85), measures against gaseous emissions from diesel engines for the propulsion of vehicles.

Operation phase

Based on the nature and design of the projects under consideration, no significant emissions of gaseous pollutants are expected during their operation, so no specific measures to protect the atmosphere are required.

Measures to address the impact on the acoustic environment

Construction phase

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In places where construction works in the vicinity of residential areas are planned, special attention shall be paid to measures to reduce construction noise. Special attention is required in the areas where the underground parts of the project pass through residential areas, as presented in **Chapter 9** of this EIA.

The measures to reduce noise generated during the construction phase can be summarised in the noise reduction of machinery etc. of construction vehicles (i.e. reduction of emissions) in the vicinity of sensitive recipients.

Measures can also be taken in the spread of noise, mainly by local noise intervention in the form of mobile 'enclosures' around individual point sources of noise (e.g. airheads). This application is particularly successful in local, small-scale but particularly sound work. This measure must be taken only if noise levels of more than 65dBAs are reached on the boundaries of the intervention area when the works are carried out.

For noise emitted by construction equipment during the construction phase of the project, the provisions of Joint Ministerial Decision 37393/2028/29.3.2003 on measures and conditions relating to noise emissions into the environment from equipment for use outdoors shall apply.

As regards construction noise, the construction contractor must comply with all the applicable provisions of national and European legislation and must take all appropriate measures to minimise major noise emissions so as to ensure that the noise level is within the acceptable limits during the construction of the works. In particular:

- It is prohibited to remain at the site of the project and to use machinery without the EEC type-approval certificate relating to noise.
- The average noise energy level for the operation of the construction sites of the individual sections of the works is defined as 65 dB(A).
- In specific cases where high noise levels are expected, noise barriers of 2 m-3 m high on the perimeter of the construction site will be used to avoid deterioration of the acoustic environment.
- Where high noise levels are emitted by point sources (e.g. use of air clamps, air compressors or other nuisance tools), mobile sound insulation barriers around the emission points shall be used to reduce noise.
- In the underground parts of the project located within agglomerations, noise activities should not take place during the hours of common quiet.

With regard to vibrations generated during the construction phase of the proposed projects, the level of vibrations shall in no case exceed 0.5 m/s² weighted acceleration or 13 mm/s equivalent top ground particle speed, in the nearest building to the vibration generation point.

Operation phase

In accordance with Chapter 9 of this study, no measures are proposed to address the impact on the acoustic environment of the study area during the operational phase of the project.

Measures to address the effects related to electromagnetic fields

Construction and operational phase

The design, construction and operation of the transmission line under study and the proposed water bodies will be in accordance with the Greek Regulation (standard ELOT ENV 50166-1 "Exposure of humans to electromagnetic fields — Low frequencies (0-10000 HZ)") and with the directives and limits and the

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corresponding international regulations (Directive ICNIRP — International Commission for Non-Ionising Radiation Protection of the World Health Organisation, the recommendation of the Scientific Committee of the Council of the European Union).

The Recommendation of the Council of the European Union on the limitation of exposure of the general public to electromagnetic fields was published in July 1999. In this recommendation, the Council adopts the ICNIRP limits after their validation by the Scientific Steering Committee of the European Commission.

The common limits of the ICNIRP Directive and the Recommendation of the Council of the European Union on the continuous exposure of the public to 50 Hz are:

for magnetic induction: B= 100 μT

• for electric field strength: E= 5KV/m.

The above limits apply in Greece on the basis of Joint Ministerial Decision No 3060 (Φ) 238 (Government Gazette, Series II, No 512/25.04.02): "Measures to prevent the public from operating low-frequency electromagnetic field emission devices".

Compliance with the limits of the Regulations ensures the protection of humans against the electric and magnetic field.

According to what is stated in Chapter 9 of this study, the maximum electromagnetic field values at the fence limits of existing ADMIE substations are not only much lower than the maximum permissible values, but are in many cases close to zero or reach the limits of sensitivity of the measuring instrument.

These prices are much lower than in the homes and are due to household electrical appliances (Report of the University of Patras).

Given that in the operational phase of the project under consideration, the electric and magnetic fields produced along the individual sections of the transmission line and in the substations are below the limit values, according to Greek legislation, no response measures are proposed in relation to the electromagnetic radiation emitted.

Measures to address impacts on water

Construction phase

To address the impact on water resources of the construction of the individual sections of the project under consideration, the following measures are proposed:

- When carrying out earthmoving operations, measures must be taken to limit the movement or leaching of solid flow in adjacent receiving waters. For this reason, if temporary excavation sites are created during the construction phase, ditches should be built around them to retain solids, which can be drifted during heavy rainfall in the adjacent natural recipients.
- More generally, the proper planning of the works, with a view to avoiding as far as possible heavy earthworks during the period of heavy rainfall and avoiding excavation on the rain days, helps to reduce emissions of suspended solids into the environment. In fact, major excavations and trenching during the summer months also help to protect groundwater as much as possible, as the aquifer levels are relatively lower in summer.

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- In order to address the impact on water resources of the operation of the individual project sites, the following measures should be taken:
 - The petroleum products of the machinery and vehicles to be used for the construction work shall be managed in accordance with the provisions of the legislation in force.
 - The mineral oils used in machinery and vehicles must be collected and disposed of in accordance with the legislation in force on 'disposal of mineral oils used': Presidential Decree 82/2003 (Government Gazette, Series I, No 64/2.3.2004). Replacement of Joint Ministerial Decision 98012/2001/1996laying down measures and limits for the management of mineral oils used (Government Gazette, Series II, No 40), 'Measures, conditions and programme for the alternative management of waste oils from lubricating oils'.
- For site staff (washing, WC, etc.) it is proposed to install chemical toilets in order to avoid the low burden of urban waste water during the construction phase of the project.
- Accident response should be provided for in the construction contractor's programme. The
 contractor must make suitable absorbent materials (e.g. sawdust, sand) available on the
 construction sites in sufficient quantities to seek adsorption and thus contain and limit the
 dispersion of leak fuel and lubricants. These absorbent materials should be carefully collected and
 disposed of after use.

Operation phase

During the operation of the projects under consideration, no significant impact on the water resources in the area is expected and no corresponding remedial measures are proposed.

2.5 Benefits of the implementation of the project, including effects on the local and national economy

As already explained above, the project under study will actively contribute to the resolution, in whole or in part, of the majority of the issues currently facing the Western Cyclades power system, summarised as follows:

- variable electricity production costs due to the use of oil in power stations,
- the high annual growth rate of the island's load,
- the stability problems that RES penetration may cause; and
- the low level of reliability of supply, especially in cases of system failures.

At the level of the Region of the South Aegean, positive effects are expected due to the reduction in the FRS in operation. This positive impact is country-wide, as it is foreseen that:

- Optimising the management of energy produced
- Reducing the amount of energy produced from fossil fuels, which means reducing burning in areas where GFCs currently operate and thus improving the quality of the surrounding environment.
- Exploitation of the energy produced from renewable energy sources

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• Contributing to the achievement of national and European energy targets (in line with the National Action Plan to achieve the contribution of RES to final energy consumption > 35 % by 2030).

Therefore, the implementation of the project under consideration is expected to have significant positive effects on the development of the South and Western Cyclades, in terms of the social and economic environment, but also positive effects for the whole country.

2.6 Viable alternatives considered and an indication of the main reasons for the chosen solution

Presentation of the sustainable alternatives examined

No solution

In the case of a zero solution (non-implementation of the project), the islands of Serfos, Milos, Foleganros and Hunt will continue to be dependent on costly and environmentally unfriendly fuel oil burning to meet the ever-increasing electricity needs. Comparatively higher environmental impacts will continue to be borne by neighbouring areas of existing SPPs. As a result, the zero solution relates to both longer-term higher financial costs and the continuation of electricity production, mainly by the use of fuel oil. Use that is not environmentally friendly due to the emissions of pollutants produced.

Alternative substation positions

Two options were considered for the location of each new substation on the islands of Serof, Milos, Fologrou and Thira.

Alternative underground cable route

Alternatives to the route of the underground cable in the Lavretica Regional Unit, Attica and on the island of Thira were examined.

Alternative submarine cable route

The alternative route via the islands of Syros, Sifnos and Paros was examined, as well as the alternative route of submarine cable in the southern Milos

Justification in favour of the chosen solution taking into account the environmental impact

Alternative locations for the substation of Serifos (P.E. Milou)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;

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• Cause the least visual discomfort possible.

Alternative locations of the Moul substation (P.E. of Milos)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

Alternative locations of Folegandrou substation (P.E. Thira)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

Alternative places of Thira substation (P.E. Thira)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

Alternative underground cable route at the Lavretica Regional Unit, Attica

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In view of the above, the two solutions appear to be environmentally equivalent. In view of the technical difficulties that may arise during the construction of the project (the existence of many OKO networks on the route of the line), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

Alternative underground cable route on the island of Thira

In view of the above, the two solutions appear to be environmentally equivalent. In view of the technical difficulties that may arise during the construction of the project (the existence of many OKO networks on the route of the line), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

Alternative route of submarine cable through the islands of Syros, Sifnos and Paros

Taking into account the above (as well as the analysis contained in ADMIE's "Technical Note D — Phase D Interconnection of Cyclades", attached in Annex 1 to this study), the solutions are environmentally equivalent. Option B (proposed) was chosen on the basis of:

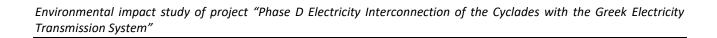
- 1) The proposed electrification method for the Non-Interconnected Islands (Figure A) is not sufficient to ensure the secure supply by the ESMIE of the peak load of the Northern and South-Western Cyclades complex. For this reason, the draft proposed by ADMIE (Figure B) provides for the creation of an additional strong supply route from Lavrio (Lavrio-Serfos Cable), which, due to economies of scale, serves a twofold objective:
 - i. closure of the interconnection loop of the South-Western Cyclades complex
 - ii. increase the reliability of the supply of all the Northern and South-Western Cyclades over a 25year horizon
- 2) In the economic assessment of the two solutions, the capital costs of the Lavrio-Serfos cable of the B-shaped cable are allocated to the two Cyclades (North and South-West) units served on the basis of energy demand and account is taken of the costs corresponding to the South-Western Cyclades complexes, with the result that Figure B ultimately also outweighs economic efficiency.
- 3) As regards the need to maintain local units in emergency reserve status and its height, Figure B takes precedence over A, as the total reserve level that should be maintained for the two agglomerations of the Nordic and South-Western Cyclades is overall lower (by ~20MW), while the number of N-1 disruptions in which units may be required to be placed in service is significantly lower. If the fixed cost of maintaining the reserve of PPPs is taken into account in the economic valuation of the two options, the financial difference in favour of Scheme B is widened.

On the basis of the above, it appears that the interconnection scheme proposed by ADMIE (Figure B) prevails significantly and is proposed as the best alternative.

Alternative routing of submarine cable in the southern Milos

In view of the above, the two solutions appear to be environmentally equivalent. Given the technical difficulties that may arise during the construction of the project (increased terrain), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

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3. SUMMARY OF THE PROJECT

3.1 Key elements of a proposed project

The planned project of **Phase D interconnection of the Cyclades** concerns the interconnection of the islands of Thira, Milos, Folegandrou and Serif with the continental interconnected system through the Lavrio Terminal Facilities.

The project aims to increase the reliability of supply to the interconnected islands and to reduce production costs (substitution of oil with other energy sources, depending on the evolution of the energy mix of electricity generation in mainland Greece).

The project includes the construction of four new substations (S/S) 150/20kV closed-type GIS on the islands of Serfos, Milos, Foleganros and Hunt.

The interconnection of the above water bodies will be carried out by setting submarine tripole cables of type XLPE for a voltage of 150 kV, with a total length of 353 km and a nominal capacity of 200 MWA, as follows:

- Lavrio Serif (approximately 109.3 km),
- Serifos Milos (approximately 46.7 km),
- Milos Foleman (approximately 55 km),
- Fologanros Hunt (approximately 59.9 km) and
- Hunting Naxos (about 82.1 km).

In addition, underground sections of 150 kV G.U. with a total length of 19.88 km will connect the drilling points with the water bodies as follows:

- Attica: 907 m simple circuit from GIS Lavrio Terminal to the bottling position
- Serifos: 1 540 m double circuit from the 'Cycl' Sirpos to the new GIS Serifou bathing position
- Apple: 7 500 m of a single circuit from the 'Ag. Konstantinos' bottling site in the N. Milos to the new water/body GIS Milos and 6 650 m from the new water/body GIS Milos to the bottling position in the 'Provvaa' N. Milos area (total: 14.150 m).
- Fologanros: 2 039 m dual-circuit from the 'Libya' tipping position of Foleangrou to the new GIS Folegandrou bathing site
- Hunting: 750 m double circuit from the "monolithol" game to the position of the new GIS Hunting water
- Naxos: 530 m of a single circuit from the bottling position near the Naxos 'solid' to the Naxos water body/body.

This proposal concerns connections without some modifications to the facilities of the Lavrio hotspot terminals (GIS) and to the 150/20kV GIS Naxos.

As part of the siting of the submarine cables, taking into account the characteristic sizes of the marine area of study (slopes, dynamometers, etc.), a routing zone with an average width of 1500 m has been established, within which the submarine cables will be set. Their exact position will be determined following an analytical oceanographic-Bythometric survey carried out by ADMIE, which will provide the information on the bathymetry of the area, the geomorphology of the bottom surface (indications of the presence of rocky areas, rocky areas, steep slopes, etc.) and the structure of the seabed (settlement of the ground below the surface of the sea) on the whole of the submarine route. It should be noted that approximately 1 km before the vacation on each island, the routing zone is quite limited, reaching approximately 100-200 m wide.

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The mooring areas of the cables, for which an application for a licence to use will be submitted for the execution of civil engineering works on the foreshore and common beach, were selected on the basis of accessibility, the least nuisance to the public and the possibility of routing the underground cables to the terminal areas. The surface area of the requested areas is determined by the number of underground cables and the surface required for the joints of submarine cables and the corresponding underground cables, which then run to the terminal areas.

The detailed technical description of the proposed project is set out in Chapter 6 of this Study.

3.2 Key elements of the construction and operating phases of the project

3.2.1 Construction phase

3.2.1.1 <u>Technical description of submarine cable operations</u>

From the precipitation areas, each submarine cable, by means of suitable connectors, will be connected to three underground single-pole cables (1 underground cable per pole), which will be routed towards their termination within a canak, first within the foreshore and then on public, municipal or rural or expropriated roads.

The drum from the pitch point to the connector well for submarine cables shall be approximately 1 metre wide and 2 m deep.

The GI-HB transition connectors of single-pole cables are used to connect the underground section to the submarine section of the interconnection at locations close to beaches where provided for in the relevant routing study of the cable line.

Again, the design of the connector shall be such as to ensure the required electrical insulation of the connection, electrical continuity of the conductor while ensuring leakproofness and anti-corrosion protection of the line and mechanical protection of the line against external stresses. The construction and materials of the connector shall be fully compatible with those of the connected cables so as to ensure the safe operation of the system in both normal and non-normal operation conditions.

The assembly of these couplings requires a well of suitable dimensions (indicatively 4×14 m and a depth of approximately 2-2.5 m). A concrete substrate is made on the bottom of the well. Once the couplings have been assembled and placed on the substrate, the well shall be filled with the appropriate materials.

The connection will be 50-200 m from the coastline. Submarines are usually connected to underground cables on the beach, unless for some reason it is not possible. Such as:

in Lavrio, due to the fact that other submarine cables connected to the Lavrio water body have been bottled at the same site, the connection between the submarine and the basement will not take place on the beach.

as a result of the winter wave and the morphology of the soil, the area of the beach in winter is permanently covered with water.

in Serfos, due to the winter wave and the morphology of the soil, the beach area in winter is permanently covered with water. Also in the bay there is a stream with waste water. For the above

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reasons, the landing point is adjacent to the beach, where it has a small slope. The connection between the submarine and the basement will therefore not take place on the beach but then after the slope, where a sloping is created.

there are slopes at the landing point on the N. Milos, in which case the link will be made at a distance from the coast.

Once the joints have been assembled, the pit will be filled with suitable materials (sand, gravel 3A, concrete paving), it will be cordlessly concrete with reinforced concrete and its surface restored with the material existing before the excavation. It will then be delimited by four cement pens at its corners. The axis of the cables in the foreshore and beach area will also be defined with their own pens.

The cables will be transported by a special f/F transport/laying vessel, packed in metal rotors. The following protective measures shall be taken to protect cables from the landing point and for the entire length of the interconnection against external damage or seabed movement from damage caused by fishing or anchors and, more generally, by external factors, in order to ensure that cables are tensioned and aligned at different speeds at different setting speeds in order to avoid damage to the cable (mechanical stress, skinning, etc.).

- The terrestrial parts of submarine cables shall burst at a depth of 1.6 m or more, unless a different design of ditches is explicitly allowed for special reasons. The ground section of the submarine cables must be protected from concrete slabs in accordance with the instructions of the Surveillance Authority (ADMIE).
- The cable shall be placed in a pit, at least 2 m below the original seabed and covered with a strong concrete layer 25 cm thick, up to and including 30 m from the coastline.
- After this, and up to a depth of 15 metres, and in shallow water areas (up to 15 m) along the cable route, the cables are placed in a 2 m pit. Then, for the rest of the journey, the cable is placed in a 1 metre depth pit. In the case of a rocky seabed, this pit should be at least 1 and 0.5 m deep respectively, for each of the above depths. Where no depth of 0.5 m can be achieved, cables shall be protected by the use of cement bags, pig iron covers or equivalent protection, depending on the conditions.
- Jetting and excavation, depending on the background analysis, may be used to carry out the work required to achieve the protection described above.

Deep sea excavations are carried out by means of a special deep-sea (ROV or TRENCHER) machine depending on the type of substrate. The ROV vehicle shall be used on a soft substrate and the installation shall be carried out by means of an irradiation that achieves positioning at the desired depth and minimal disturbance of the bottom. In the case of a rock bottom, a TRENCHER vehicle is used, which opens the well and then the well is coated with concrete or other suitable material. The depth of the well from the bottom surface shall be confirmed using a directed beam acoustic devices and/or a magnetometer fitted to the vehicle.

3.2.1.2 <u>Installation of underground cables</u>

The submarine cable exits into the foreshore and runs towards the manhole for the installation of connectors with the corresponding underground, as described in the previous paragraphs.

The joint pit shall be 3×8 metres deep and approximately 2 m in depth. After the cables and fastenings have been installed, the refilling of the cannails and the manhole shall be carried out in accordance with the procedure referred to in paragraph 6.1.3 of this report.

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Once the connectors have been assembled, the underground cables run on public, municipal or rural or expropriated roads as appropriate.

The drum on which the cables are to be placed, once installed, is refilled with a sand layer or, where appropriate, reinforced concrete, concrete paving, gravel layer 3A and finally restored with material available before excavation. The surface of the shaft and routing of the cables will be restored as it was before the intervention.

Since it is possible to install the RA/C cables only in equal sections up to approximately 850 m, it is necessary to construct connector pads Y/C cables at suitable locations along the routes. The final siting of pits along the route will be carried out by the contractor's implementation study on public, municipal, agricultural or expropriated roads or land.

The existence of cables can only be seen by the installation of concrete sticks and suitable plates in places necessary for their easy identification.

3.2.1.3 <u>Substations (C/S) 150/20kV</u>

In order to serve project 'Phase D of electricity interconnection between the Cyclades and the Hellenic Interconnected Electricity Transmission System', four voltage reduction substations must be constructed on the islands of Serphos, Milos, Foleganro and Thira. The downgrading substations shall consist, in terms of functionality, of the following sections:

- The <u>150 kV High Voltage Department:</u> It includes the 150 kV transmission line gateways, which are the functional attachment units of the 150 kV transmission lines at the substation, the 150 kV transformer gates, which are the functional units for connecting power transformers on 150 kV scales and 150 kV scales.
- <u>Power transformers</u> with the corresponding 150 kV gates to be attached to the 150 kV scales (mentioned above). Power transformers reduce electricity from 150 kV to 20 kV, are of an outdoor type and are installed on concrete bases in specially designed spaces within the substation's stadium.
- The <u>20 kV Average Voltage Department:</u> It includes the 20 kV distribution line gates which are the functional attachment units of 20 kV lines at the substation, the protection, measurement and control cells and the 20 kV scales.

All the proposed substations (Thira, Serifou, Milos and Folegandrou) will be closed-end, GIS (Gas Insulated Substation) technology, which will be connected to the 150 kV transmission system exclusively by submarine-underground cables.

The substation will be connected to the 150 kV transmission system via two 150 kV cable lines with the nearest substations. The two (tripolar) submarine cables from the nearest substations will enter the basement of the substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

Through the above gates, electricity is transferred from the 150 kV underground cables to the 150 kV scales and from there to power transformers, which reduce the voltage from 150 kV to 20 kV.

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3.2.2 Operation phase

During the operational phase of the project under consideration, regular inspection and maintenance of the equipment and cleaning of the area of works will be carried out, as well as maintenance work if required.

During the operation of the projects, control and supervision will be carried out through remote control, remote supervision and remote control and on-the-spot.

3.3 Required quantities of raw materials, water and energy, expected quantities of waste, etc.

3.3.1 Raw materials required

In the **construction phase** the main materials to be used are:

- Concrete, and armaments for the construction of building works, for the topping of the pitches for placing the underground transport lines, and for the enclosures and the configuration of the surrounding area of the installations.
- Electromechanical equipment of factory construction for water bodies
- Underground and underwater pipes, cast iron, etc., for their protection.

As reported, the submarine part of the cables will be three-polar, XLPE insulated with triple extrusion polyethylene, with lead alloy cladding and single or double-armed steel wires (depending on the depth of set). More details are given above in chapter 6.1.5.

The underground part of the cables shall be XLPE-type, monopolar, insulated with triple extrusion polyethylene, with lead or aluminium alloy cladding. More details are given above in chapter 6.1.6.

In the **operational phase** of the project under consideration, small-scale consumption of water and electricity is foreseen for the operation of the substations (Milos/Serfou, Milos Water/S, Folegandros and Thira water). These quantities will come from the relevant networks of the neighbouring municipalities.

3.3.2 Expected quantities of waste

In the **construction phase** of the projects under consideration, it is envisaged to generate the usual liquid waste generated during the construction of infrastructure projects, taking into account that the underground and underwater parts of the project consist of pre-constructed sections, which are not built in the project area.

Chemical toilets will be installed for the collection of urban waste water, which will be produced by the staff working on land-based projects. Assuming a construction site of 10-12 people, a waste water supply is estimated to be equal to:

50 lit/person/day x 10-12 individuals = 500-600 lit/day or $0.5-0.6^{m}$ 3/day.

The waste water to be collected will be disposed of by means of specialised tankers to the nearest operational waste water treatment plant.

For cable-laying operations, the staff's liquid urban waste water generated will be collected on board the ship to be used and managed in accordance with the legislation in force on the management of urban waste water from ships.

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Used Lubricant Oil Waste (PFL) resulting from the machinery and construction equipment will be collected and stored in a temporary storage of liquid waste until it is delivered to approved waste water collectors.

The construction machinery is not to be washed or maintained in the construction area, as this will be done in specialised workshops.

For the disposal of liquid waste, Health Decree No E1 β /221/1965 (GG II 138) on waste water disposal and industrial waste, as amended by Nos Γ 1/17831/07.12.1971 (GG II 986), Γ 4/1305/02.08.1974 (Government Gazette, Series II, No 801) and Δ .Y Γ 2/ Γ . Π . oik. 133551/30.09.2008. Law 4042/2012 on criminal protection of the environment — harmonisation with Directive 2008/99/EC — Waste generation and management framework — Harmonisation with Directive 2008/98/EC — Regulation of matters relating to the Ministry of the Environment, Energy and Climate Changeis also in force.

In the **operational phase**, any liquid waste arising from the maintenance of the equipment will be collected and delivered to companies authorised to manage it.

A watertight tank will be constructed for the sewerage of the proposed water/Sierfos, Milos, Folegandro and Huntawater bodies, if it is not possible to connect to the relevant municipal sewage network. The watertight tank shall be evacuated at regular intervals from a special tank-vehicle to the nearest NWP in operation.

During the operation of the projects, solid waste will be generated periodically from the maintenance work of the equipment of the project. Such waste, if hazardous, will be delivered to authorised companies for appropriate disposal. If they are not hazardous, they will be either recycled or recovered (e.g. metallic materials) or if they fall within the category of municipal waste they will be disposed of in landfills.

3.3.2.1 Balance of earths under consideration for a project

3.3.2.1.1 Substations (C/S) 150/20kV Serifou, Milos, Folegandrou and Thira

Y/Σ 150/20kV Serifou

The excavation volume of the site is approximately $25\,000\,\text{m}^3$ (for a $55\,\text{m}$ level), while the volume of infusions is approximately $4\,000^{\text{m}^3}$.

There will therefore be a surplus of material volume of around 21 000 m³. The surplus of materials that cannot be used in the construction of the project will be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.

Y/Σ 150/20kV of apple

The excavation volume of the site is about 3 000 m³ (for a level of 7 m), while the volume of infusions is approximately 300 m³.

There will therefore be a surplus of material volume of around 2.700 m³. The surplus of materials that cannot be used in the construction of the project will be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.

Y/Σ 150/20kV Folegandrou

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The excavation volume of the site is approximately $6\,000\,\text{m}^3$ (for a level of 55 m), while the volume of infusions is about $13\,000^{\text{m}^3}$.

There will therefore be no surplus of materials, but there will be a need for additional infiltration of approximately $7\,000^{m^3}$.

Y/Σ 150/20kV Hunting

The excavation volume of the site is approximately $9\,500\,(3.500+6\,000)\text{m}^3$, while the volume of infusions is approximately $11\,300\,(11\,000+300)\,\text{m}^3$. (for an levelling level of $13.5\,\text{m}$ in the eastern part of the substation and $20\,\text{m}$ in the west).

Consequently, there will be no surplus of materials, but there will be a need for additional infiltration of approximately 1 800^{m³}.

3.3.2.1.2 <u>Underground parts of the project</u>

Please note the following with regard to the underground parts of the project:

• In the Regional Unit of Eastern Attica, the volume of excavation material was estimated at 4 000 m³- 5 000 m 3, of which 25 % will be reused (i.e. 1 000 m³ -1 250 m³material).

Surplus material of a volume of about 2.750 m 3-4 000 m³ will therefore arise

• In the Milos Regional Unit, the volume of excavation materials was estimated at⁴⁸ 000 m^{3–52} 000 m 3, of which 25 % will be reused (i.e. 12 000 m³ -13 000 m³materials).

Surplus material of a volume of around 35 000 m 3 to 40 000 m³ will therefore arise.

• In the Regional Unit of Hunting, the volume of excavation material was estimated at 8 000 m³ - 9.500 m 3, of which 25 % will be reused (i.e. 2 000 m³ -2.375 m³material).

Surplus material of a volume of about 5 525 m 3-7.500 m³ will therefore arise.

• In the Regional Unit of Naxos, the volume of excavation materials was estimated at 1 500 m³ - 2 000 m 3, of which 25 % will be reused (i.e. 375 m³ to 500 m³materials).

Thus, surplus material of a volume of about $1\,000\,\mathrm{m}^3-1.625\,\mathrm{m}^3$ will arise. On the basis of the above, the total quantity of excavated material from the project for re-use or removal and tipping amounts to $44.375\,\mathrm{m}^3-53.125\,\mathrm{m}^3$.

The excess material that will arise during the construction phase and cannot be used in the construction works shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials can be used in inactive quarries or through alternative management systems.

3.3.2.1.3 Submarine parts of the project

Taking into account the project design, with regard to underwater excavations, please find below the estimate of the maximum volume of materials that may be obtained, if the maximum depth of pit for the deepest depths (1 m) is respected throughout the route. In particular, for the submarine parts of the project, please note the following:

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• For the Lavrio-Serios section, the volume of excavation materials was estimated at 110 000 m³ of which 25 % will be reused (i.e. 27.500 m³materials).

Surplus material of a volume of around 82.500 m³ will therefore arise.

• For the Serifos-Molum section, the volume of excavation materials was estimated at 47 000 m³ of which 25 % will be reused (i.e. 12 000 m³materials).

Surplus material of a volume of around 35 000 m³ will therefore arise.

• For the Apple-Fleander section, the volume of excavation materials was estimated at^{55,000 m 3}, of which 25 % will be reused (i.e. 13.750 m³materials).

Consequently, surplus material of a volume of around 41 250 m³ will arise.

• The volume of excavation materials was estimated at 58.500 m³ for the Folegandros-Thira section, of which 25 % will be reused (i.e. 15 000 m³materials).

Surplus material of a volume of around 43.500 m³ will therefore arise.

• For the Thira-Naxos section, the volume of excavation materials was estimated at 82 000 m³ of which 25 % will be reused (i.e. 20 500 m³materials).

Surplus material of a volume of around 61.500 m³ will therefore arise.

On the basis of the above, the total quantity of excavated material from the project for re-use or removal and deposition amounts to 260 000 m³ -265 000 m³.

These materials shall be made available in open seas deeper than 50 m, at a distance of more than 1 km from the coastline, outside closed bays and sensitive/protected areas. The exact disposal site will be indicated by the competent port authorities as part of the relevant authorisations.

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4. OBJECTIVE AND FEASIBILITY OF THE PROJECT — WIDER SYNERGIES

4.1 Objective and feasibility

The implementation of European Commission Directives 2010/75/EU and (EU) 2015/2193, which impose very strict limits on air pollutant emissions from thermal stations (existing and new ones) and impose significant restrictions on the operation of local units in the Cyclades, and given that no new capacity is planned, leads to the prediction that a significant part of the loads cannot be covered for 2019-2028.

In order to address the above weakness in such a short period of time, in the context of the new 2019-2028 Transmission System Deployment Plan of ADMIE, it was planned to interconnect the Southern and Western Cyclades with the ESMIE (Phase D of Interconnection of the Cyclades) by means of submarine E.R. cables (alternative power), with a length of approximately 353.2 km and underground E.R. cables, with a length of approximately 19.6 km. It also includes the construction of four new substations (S/S) 150/20kV closed down GIS on the islands of Thira, Foleganro, Milos, Serif. The project aims to increase the reliability of supply to the interconnected islands and to reduce production costs (substitution of oil with other energy sources, depending on the evolution of the energy mix of electricity generation in mainland Greece).

4.1.1 Objective and feasibility of carrying out the project under consideration

The objective and feasibility of implementing the project under consideration are set out in detail, in accordance with the Ten-Year Transmission System Development Plan 2019-2028 (Plan to RAE, March 2018).

The work of Phase IV interconnection of the Cyclades concerns the interconnection of the islands of Thira, Milos, Folegandrou and Serifou with the ESMIE. The project aims to increase the reliability of supply to the interconnected islands and to reduce production costs (substitution of oil with other energy sources, depending on the evolution of the energy mix of electricity generation in mainland Greece).

The design of the project was based on the conclusions of the relevant financial and technical investigation of alternative electrification scenarios for the electrical systems of the Non-Interconnected Islands (NII), for which no existing electricity interconnection planning is in force with the ESMIE, carried out by a competent committee composed of staff of the RAE, ADMIE S.A., DEDDIE S.A. and DESFA S.A.. On the basis of this investigation, the Committee issued a relevant 'Conclusion on the electrification of the islands of the Cyclades not included in the Directorate for Transmission System Operators for the period 2017-2026', which was submitted to the competent DEDDIE, which was submitted to the relevant DEADs (the relevant TENDPs).

In accordance with the Commission's findings and the further analysis carried out by ADMIE, the interconnection with the ESMIE is the cost-technical optimum for feeding the NIIs of the Cyclades examined, because of the increased reliability of supply to the islands, the limitation of the operation of local thermal power plants and the possibility it offers to support the development of RES on the interconnected islands.

The design of the project was designed with a view to minimising environmental nuisance on the islands. To this end, the new water bodies on the islands have been sited close to the coast in order to avoid as far as possible the construction of aerial metropolitan areas on the islands, while the interconnection of the islands with each other and with the Continental System is planned to take place via submarine cable connections. In view of the above, the proposed basic project design includes the following:

- 1. **Naxos Hunt:** interconnection with submarine tripole cable E.P. XLPE 150 kV with a nominal capacity of 200MVA.
- 2. **Hunting Fellow:** interconnection with submarine tripole cable E.P. XLPE 150 kV with a nominal capacity of 200MVA.

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- 3. **Fologanros Milk:** interconnection with submarine tripole cable E.P. XLPE 150 kV with a nominal capacity of 200MVA.
- 4. **Milos Serifs:** interconnection with submarine tripole cable E.P. XLPE 150 kV with a nominal capacity of 200MVA.
- 5. **Serifos Lavrio:** interconnection with submarine tripole cable E.P. XLPE 150 kV with a nominal capacity of 200MVA.
- 6. Construction of four new substations (C/S) 150/20kV closed-type GIS on the islands of Thira, Foleganro, Milos, Serifo.

The aim of the project is to make it possible, once completed, to place in cold reserve all the FFCs operating on the Cyclades islands whose interconnection is proposed with the project in question, in particular on the islands of Thira, Foleganros, Milos and Serif, and to initiate their gradual dismantling. This allows maximum savings to be made by the Public Utility Services (SGI) due to the operation of oil units and the reduction of gaseous pollutants. However, in any case during the period when the existing power plants on these islands are kept in cold reserve, the plan provides for their interconnection with the corresponding new 150 kV water bodies to be built at M.T. level to deal with any emergency situations following major failures (worst loss of interconnection with Lavrio).

The above interconnection scheme has the following important advantages:

- It creates an additional powerful route for the supply of the Cyclades complex by the ESMIE, both the Northern Cyclades complex and the South-West complex, the interconnection of which is the subject of this project. The proposed scheme takes precedence over alternative solutions that use the Cyclades' supply routes by the ESMIE with a central interconnector at the Syros Water Station, as it ensures greater reliability in the event of a significant failure to the Cyclades. It also ensures reliable supply to the islands over a longer time horizon if increased capacity is provided.
- Increased transport capacity significantly enhances the capacity to deploy RES on interconnected islands, enabling the cost-effective integration of these NIIs into the EU's Single Energy Market and the gradual transition to zero- or very low-emission energy systems, which are key pillars of the European Energy Strategy.

The main criteria on the basis of which ADMIE implements the project are the following:

- Promote the implementation of the project in phases in order to:
 - The priority in the declaration of the part of the project relating to the interconnection of Naxos — Thira, through which the bulk (60%) of the load on the islands to be interconnected will be fed (radially in the first phase) and its speedy implementation with a view to their electricity load being served by units of the ESMIE, so that direct economic benefits can be derived from the reduction of public utilities costs.
 - The partial tendering of the project with the aim of involving more stakeholders (increasing competition) and thus achieving a lower price for the cost of the project, also taking into account the experience of the call for tenders of Phase I of the Cyclades.
 - Maximum use of funds from the NSRF
- Reduce the rate at which project disbursements take place taking into account the current potential in the economic context.

As regards the production capacity to be maintained on the interconnected islands, on the basis of the Commission's findings and further investigations carried out by ADMIE, it appears that even after the construction of all phases of the Cyclades interconnection project, it is necessary to maintain at least one existing PPP in cold reserve, which will become operational only in cases of emergency. These are detected in cases of disturbances (N-1) in the Syros — Paros — Naxos — Mykonos loop, in high load conditions towards the end of the period considered.

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This FMP should be located at a load-baric point of the Interconnected Cyclades complex with its in-service position capable of serving all emergency situations (N-1) for the time horizon of analysis. As such, the PARO was selected, which is located centrally in relation to the loads of the interconnected islands of the Cyclades. For other local power plants, they can be regarded as a gradual dismantling of their production capacity after a trial period. The planning of the gradual dismantling of the potential of the remaining existing FPAs, as well as the amount and location of the capacity that will ultimately be maintained, will be determined at a later stage.

4.1.2 Development, environmental, social and other criteria supporting the implementation of the project

The implementation of the project will have positive effects on the development of the South and Western Cyclades, since the interconnection of the electricity transmission system of the islands of Serifos, Milos, Folamdro and Hira with the Greek electricity transmission system will ensure the stability of the system.

Therefore, the project under study will contribute to improving the services provided in all sectors, with positive effects for the local and regional economy, but also to improving the living standards of local residents, with significant positive effects on the social environment. Positive effects of the implementation of the project under consideration are also expected at country level, as explained in the next paragraph.

4.1.3 Benefits expected at local, regional or national level

As already explained above, the project under study will make a major contribution to the total or partial resolution of the majority of the issues currently faced by the power system in the South and Western Cyclades, summarised as follows:

- variable electricity production costs due to the use of oil in power stations,
- the high annual growth rate of the island's load,
- the stability problems that RES penetration may cause; and
- the low level of reliability of supply, especially in cases of system failures.

At the level of the Region of the South Aegean, positive effects are expected due to the reduction in the FRS in operation. This positive impact is country-wide, as it is foreseen that:

- Optimising the management of energy produced
- Reducing the amount of energy produced from fossil fuels, which means reducing burning in areas where GFCs currently operate and thus improving the quality of the surrounding environment.
- Exploitation of the energy produced from renewable energy sources
- Contributing to the achievement of national and European energy targets (in line with the National Action Plan to achieve the contribution of RES to final energy consumption > 35 % by 2030).

Therefore, the implementation of the project under consideration is expected to have significant positive effects on the development of the South and Western Cyclades, in terms of the social and economic environment, but also positive effects for the whole country.

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4.2 Historical evolution of the project

As stated in the 'Ten-Year Transmission System Development Plan 2019-2028' (Plan to RAE, March 2018), the Cyclades interconnection project concerns the interconnection of the islands of Syros, Mykonos, Paros and Naxos with the ESMIE and the strengthening of the interconnection of the Androi-Tinos complex and has been designated by Ministerial Decision (November 2006) as a project of 'general importance for the economy of the country'.

In particular, the work of Phase D interconnection of the Cyclades concerns the interconnection of the islands of Thira Milos, Folegandrou and Serifou with the ESMIE. The design of the project was based on the conclusions of the relevant financial and technical investigation, issued in the relevant 'Findings on the electricity efficiency of the Cyclades islands not included in the DESMIE 2017-2026', which was submitted to the competent operators (ADMIE and DEDDIE), who assessed it and made recommendations to the RAE.

Further information on the historical development of the project under consideration was already presented above in paragraph4.1.1 'Objective and feasibility of carrying out the project under examination' of this FIA

4.3 Financial data of the project

4.3.1 Estimated overall budget

Based on ADMIE's planning for Phase D Interconnection of the Cyclades, as included in the submitted revised draft Ten-Year Transmission System Development Plan 2019-2028, the total cost of the projects is EUR 385 750 000.

4.3.2 Estimation of individual approximate budget of proposed environmental measures

Appropriate provisions for the safe operation of the project have been laid down in the project design. Therefore, the costs of these provisions have been included in the main budget of the project and are not included in the budget for environmental measures. The cost of refilling the underground and submarine cables has also been included in the main budget of the project.

4.3.3 How to finance the development and operation of the project

The financing for the construction of the project under consideration will be made from public and Community funds, as well as from funding from the EIB and other commercial banks, while the operation of the project will be financed by the project body (ADMIE S.A.).

4.4 Correlation of the project with other projects

The interconnection of the Southern and Western Cyclades with the ESMIE, which is the subject of this study, is Phase D of the overall project to connect the Cyclades with the continental system. Below is a summary of Phases A, B and C of the projects to interconnect the Cyclades with the previous continental system.

4.4.1 Phase 1

On the basis of the revised planning, Phase A includes the connection of Syros to Lavrio, as well as to the islands of Patro, Mykonos and Tinos. Once completed, the FMP units will be placed in cold reserve and the loads on the islands will now be fed by the ESMIE (the Andros-Tinos loads are already supplied by the ESMIE via the Secretariat-General for Infrastructure, which connects Prefecture of Evia to Andros).

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In particular, Phase A of the interconnection of the Cyclades includes the following sub-projects:

- Initial connection of Syros to Lavrio with an underwater three-pole E.P. cable of 150 kV nominal capacity of 200MVA, length 108 km.
- Connecting Syros to the northern end of Tinos with a submarine three-pole E.P. cable of 150 kV nominal capacity of 200MVA, length 33 km.
- Radial supply to Paros from Syros with a 150 kV E.P. submarine supply of 140MVA nominal capacity 46 km.
- Radial supply to Mykonos from Syros with an underwater three-pole E.P. cable of 150 kV nominal capacity of 140MVA, 35 km long.
- Construction of the GIS water bodies on Syros, Paros and Mykonos (including the installation of coils and SVC on Syros, coils and capacitors on the Paros) as well as the required connection works in Lavrio (GIS with an OMC and gates) and at the junction point on Tinos. In addition to the purpose of connecting the Lavrio-Syros cable, the 150 kV GIS connection in Lavrio will also be used to divert to it all the 150 kV departures of the existing 150 kV outdoor water in Lavrio. This diversion achieves the following:
 - A stronger connection between the 400 kV and 150 kV systems in the Lavrio complex (through the existing and the new AM/S), which will increase the reliability of the system in the wider area, taking into account the withdrawal of units I-III (definitive) and II (continuous) of the Lavrio SES.
 - Greater reliability in the interconnection of the Cyclades following the completion of Phase I, as
 in the event of the loss of one AM/S, the Lavrio-Syros link remains active through the second
 AM/S.
 - It is possible to serve the second Lavrio-Syros link (Phase III) without additional IT/S.
 - In addition to the above, the addition of new 400 kV gates to the Lavrio GIS 400 kV hotspot may be postponed for the future.

Phase A of the interconnection of the Cyclades ensures the transmission of power from the ESMIE to Syros for power up to ~170 MW in N conditions and up to ~120 MW in the event of loss of the Lavrio-Syros cable (more adverse disturbance N-1). This volume of mobile capacity is generally sufficient to meet the demand power of the islands for the planned project time horizon. In N-1 conditions, depending on the load demand conditions of the islands, local FFCs may need to be operational.

4.4.2 Phase II

Phase B of the Cyclades interconnection comprises the following sub-projects:

- Connection between Paros and Naxos with an underwater three-pole E.R. cable of 150 kV nominal capacity of 140MVA, 7.6 km long.
- Connection of Naxos Mykonos to an underwater three-pole E.R. cable of 150 kV nominal capacity of 140MVA, length 40 km.
- Construction of a new GIS system on Naxos, as well as the required connection works to the water bodies of Paros and Mykonos.

The upgrading of the existing Andros — Livadi (N. Evia) cable connection of 14.5 km and Andros-Tunis 4 km is also being promoted by installing new submarine XLPE 150 kV cables with a nominal capacity of 200MVA.

Phase II of the project, by closing the loop between Paros, Naxos and Mykonos, makes a decisive contribution to enhancing the reliability of supply to these islands. Once Phase II has been completed, there is also a double supply for these islands, with the result that cases of loss of cable (N-1), which may give rise to the need to operate the Lavrio-Syros cable, are limited to the loss of the Lavrio-Syros cable under high load conditions. In addition, the strengthening of the capacity to supply the existing interconnection with Evia (replacement of the Andros — Livadi and Andros — Tinos cable) ensures the flow of power of ~170MW

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from Evia to the interconnected Cyclades, in the event of the loss of the Lavrio-Syros cable (different N-1 disturbance), which is generally sufficient to meet the demand power of the islands for the planned time horizon of operation of the project, depending on the evolution of the load demand of the islands, further reducing the need for the local ASPs to operate even in N-1 conditions.

4.4.3 Phase C

Phase 3 of the interconnection of the Cyclades includes the completion of the interconnection with the setting of the second Lavrio-Syros cable, as well as with the necessary connection projects (inducts and gates) in Lavrio and Syros.

The objective of Phase III is to ensure the necessary reliability for all operational conditions, depending on and depending on the evolution of demand on the interconnected islands. On completion of Phase III, full reliability of supply to the Cyclades complex is ensured for the project's planned operating horizon and in N-1 conditions for the Lavrio-Syros route. In any case, even after the construction of all phases of the project, production capacity on the islands should be maintained so that exceptional circumstances (e.g. damage to the Syros water body, etc.) can be dealt with. To this end, ADMIE, in cooperation with PPC and with the assistance of DEDDIE, has launched procedures to determine which PPPs will remain in cold reserve on the islands and the corresponding financial and operational conditions.

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5. COMPATIBILITY OF THE PROJECT WITH ESTABLISHED TERRITORIAL AND REGIONAL COMMITMENTS

5.1 Position of the project with regard to the areas of the natural and man-made environment of the area

5.1.1 Statutory boundaries of agglomerations and approved town planning plans

The table below presents the approved General Town Planning Plans (GPS) and the Open City Spatial and Housing Organisation (SPOAP) plans in force in the municipal units where the project is located, from which it emerges that there are no issues of incompatibility of the project with the conditions and restrictions of the statutory boundaries of settlements and approved urban plans.

Table Error! No text of specified style in document.-1 Approved General Town Planning Plans and Open City Spatial and Housing Organisation Plans in force in the municipal units where the project is located

Municipality of the municipality	D.E.	Spatial planning	GOVERNMENT GAZETTE
		'Definition of land uses and building conditions and restrictions in the non-planned and off-bound agglomerations before 1923 of the peninsula of Lavreotikos (N. Attica).'	GOVERNMENT GAZETTE 125/D/27-2- 1998
Lavatics	D.Lavretica D.C.	Housing Control Zone of the Prefecture of Attica	PRESIDENTIAL DECREE (GOVERNMENT GAZETTE, SERIES I, NO 284) OF 22.6.1983
	D.C.	Lavrio GPS	GOVERNMENT GAZETTE 1993 1260
		Amendment of the APS	GOVERNMENT GAZETTE 1995 374 D
		Amendment of the Lavrio GIS (BIPA)	GOVERNMENT GAZETTE 2006 456
		For FIFGs to be resolved	GOVERNMENT GAZETTE 2009 135AAAA
Serifou	_	Specific building conditions and restrictions in the settlements and non-planned areas of the island of Serfou	930D/24-10-2002
Apple	_	_	_
Folegandrou	_	_	_
	D.E. Hunting	Hunt and Thirasia Household Control Zone	GOVERNMENT GAZETTE 139/D/19-3- 1990
Hunting		Amendment of ZE	GOVERNMENT GAZETTE, SERIES I, NO 144 OF 30 APRIL 2012
		APS of the Community of Hunting (West)	GOVERNMENT GAZETTE 932Δ/24-09- 1987
Name		Approval of the GAEC of the	GOVERNMENT GAZETTE, SERIES II, NO
Naxos and	Navas	agglomeration of Naxos Country	207/18-03-1986
Micro Naxos Cyclades		Naxos Housing Control Zone	GOVERNMENT GAZETTE 846/D/24-11- 1988

For the works provided for in the landing stations on Lavretica, Serphos, Milos, Fologrou, Thira and Naxos, an application shall be made for the use of the foreshore and beach and sea space in accordance with Law 2971/2001, on the basis of the provisions of Article 14(10) (Projects for the interconnection of islands with the National Interconnected Transmission System).

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The table below shows the individual sections of the project under study and their relationship with approved boundaries of agglomerations and town planning plans.

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Table Error! No text of specified style in document.-2 of individual parts of the project under study and their relationship with approved boundaries of agglomerations and town planning plans (within the study area)

Sub-part of project	Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	Uses permitted under the APS and CWO
Underground section 150 kV Attica in Lavrio	The closest settlement with statutory boundaries is Lavrio, which is located 2 km south of the project (Government Gazette 1260/Δ/1993, 374/Δ/1995).	Most of the underground cable (392 m) in the Attica area falls outside specific town planning plans. 362 m of the cable are located in area I2 and 153 m are located in area B2 of the Lavretic ZE (Government Gazette 125/D/27-2-1998)	 In Area I2 (industrial, industrial, industrial and PPC installations) the following shall apply: It is an area of industrial and artisanal installations, where professional installations which are not particularly nuisance, as defined in the table in the Article, are permitted. Presidential Decree 81/1984 (Government Gazette, Series I, No 33). PPC installations are allowed For building conditions and restrictions, the provisions of Presidential Decree of 31 January 1987 (Government Gazette, Series I, No 303) shall apply. For area B2 (medium protection areas for landscape and archaeological sites): The following uses are permitted in the above areas: housing, rural warehouses, public and municipal cafés and refreshments). The conditions and restrictions on the construction of permitted uses shall be as follows: For residential buildings: Maximum total permissible coverage and area of the building one hundred (100) m², maximum number of floors of the buildings: one (1) with their maximum permissible height: four (4) metres and the construction of more than one building inside the stadium is prohibited. For agricultural warehouses: Maximum total permissible surface area of the building of thirty (30) m², maximum permissible height of the buildings: two and half (2.5) metres. For public and municipal sedentaries and refreshments: Maximum percentage of coverage: three per cent (3 %), building factor: Maximum total permissible surface area of the building two hundred (200) m², maximum number of floors of buildings: one (1) with their maximum permissible height: four (4) metres and the construction of more than one building inside the stadium is prohibited. above the maximum permissible height of the buildings, a roof with byzantine or Greek-Hellenic tiles must be constructed, the height of which does not exceed two (2) metres.
Underground section 150 kV Serifou G.U. New S/S Island of Serifos	The closest settlement with statutory boundaries is the Livadi, which is around 0.9 km west of the project (Government Gazette 1373D/1986-12-31).	The island of Serif applies 'Special terms and restrictions on building in settlements and non-planned areas on the island of Serifou' (Government Gazette,	Article 3 reads as follows: The following shall apply to the non-projected and outlying agglomerations on the island of Serifou: () 21. Buildings of general interest or cultural activities may be constructed by way of derogation from the provisions of this Law following approval by the Minister for the Aegean following an opinion of the SSP of the Ministry of the Aegean, provided that they are integrated harmoniously into the environment and comply with local traditional architectural standards.

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Sub-part of project	Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	Uses permitted under the APS and CWO		
		Series I, No 930D/24-10- 2002).			
Underground section 150 kV B.M.	The closest settlement is the Zeteria, which is located 1.2 km east of	There is no GPS, SWOOPO or any other relevant plan that includes part of the area of the projects being studied in the Municipality of Milos.			
New Island of Milos	the project.	There is no GPS, SWOOPO of Municipality of Milos.	or any other relevant plan that includes part of the area of the projects being studied in the		
Underground section 150 kV N.Milou		There is no GPS, SWOOPO of Municipality of Milos.	or any other relevant plan that includes part of the area of the projects being studied in the		
Underground section 150 kV Folegandrou	The closest settlement with statutory boundaries is Karavostase, through	There is no GPS, SWOOPO or any other relevant plan that includes part of the area of the projects being studied in the Municipality of Folegandrou.			
New body of the island of Folegandrou	which the GM passes. The agglomeration is 0.3 km south-east of the new water body (Government Gazette 1373D/1986-12-31).	There is no GPS, SWOOPO or any other relevant plan that includes part of the area of the projects being studied in the Municipality of Folegandrou.			
Underground section 150 kV Hunting New Island of the island of Thira	Part of the project (Government Gazette, Series I, No 351/1989) passes through the statutory boundaries of the conurbation of monolithos (Government Gazette, Series I, No 351/1989).	The entire project falls within Area III of ZE Thira & Thirasia (Government Gazette, Series I, No 139/19.3.1990, amending Government Gazette, Series I, No 144, 30.4.2012).	Article 2 reads as follows: C. Areas with element III: 1. It includes all areas outside the boundaries of the agglomerations and outside the areas referred to in points I and II above, the area of the islands of Thira and Thirasia and outside archaeological sites. 2. The following uses are permitted in the area: a. Residence, shops b. tourist facilities c. public utility buildings d. agricultural warehouses, greenhouses, pumping installations, tanks e. non-nuisance artisanal installations. () E. General provisions () I. Where the construction of buildings of general interest is permitted, the definition of such spaces and the building conditions and restrictions shall be carried out in accordance with Article 26 of Law 1337/83 (GG I 33), as in force.		
Underground section 150 kV Naxos	The closest settlement with statutory boundaries is Saint	The entire project falls within area 2a2 of the ZE of Naxos (Government	According to Article 2(E) 'Areas 2a1 and 2a2':		

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Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

Sub-part of project	Approved boundaries of agglomerations	Forecasts of General Urban Development Plans and CCWO	Uses permitted under the APS and CWO
	Anna, which is located 1.9 km south-east of the project (Government Gazette 264/D/1986).	Gazette 846/D/24-11- 1988).	3. In both areas 2a1 and 2a2 construction is permitted for dwellings, shops, tourist facilities, organised campsites, recreation centres, sports facilities, pumping facilities, water reservoirs, wells, buildings of general interest. 9. The conditions and restrictions on the construction of public utility installations and the other conditions and restrictions on building the other permitted uses are those referred to in the Presidential Decree of 6 October 1978 (Government Gazette, Series I, No 538), as amended by Presidential Decree of 20 January 1988 (Government Gazette, Series I, No 61) and of 24 May 1985 (Government Gazette, Series I, No 270/D).

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5.1.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

5.1.2.1 Natura 2000 sites

Please note the following with regard to Natura 2000 sites closest to the design of the project under study (north to south):

- In the marine area between Macronos and Lavrio, submarine GM passes within the Natura 2000 SCI area 'GR3000017 Coastal and marine area of Makronus' over a length of approximately 5.8 km.
- In the marine area between Macronso and Lavrio, submarine GM passes within the Natura 2000 SPA area 'GR3000018 Canal Makronisos' over a length of approximately 6.9 km.
- In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 1.1 km.
- In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 1.4 km.
- In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.2 km.
- On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos — Profitis Ilias — Wider Area' over a length of approximately 0.6 km.
- On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 — Western Milos, Antimilos, Polygos and Islands' over a length of approximately 5.8 km.
- On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1 km.

5.1.2.2 Wild Life Shelters (AZA)

The project under study is located near the following wild life shelters:

- The Serifos H/S is located 930 m west of the boundaries of K481 'Country-Ag. Sunday (Serifos)' (Ministerial Decision 2401/17-7-98).
- Part of the underground transport line of Voria Milos (about 800 m long) passes through the K519 KZ area 'Gournado-Flicki (Trivasalou-Milou)' (Government Gazette, Series I, No 520/30-5-79).

5.1.2.3 RAMSAR Convention

There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.

5.1.2.4 <u>National Parks</u>

There is no National Park in the location area of the project under study.

5.1.2.5 <u>Proposed landscapes of special natural beauty (TFIK)</u>

The project under study is located within the following landscapes of particular natural beauty, in accordance with the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/):

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- Part of the underground transport line (about 1.5 km long) and the new Sierfou water body passes through the TFIK 'Serifos Island' (AT5010088), which covers the entire island.
- Part of the underground transport line (about 2 km long) and the new Folegandro bathing passes through the TFIK area 'Folangerou Island' (AT5011014), which covers the entire island.
- Part of the underground transport line (about 0.75 km long) and the new bath of Thira passes through the TFIK 'Island of Thira or Santorini' (AT5011063), which covers the entire island.

5.1.2.6 Biotopes CORINE

The project under study, and more specifically the underground section on the island of Folegandro (approximately 2 km in length) and the new Folegandros bachelor passes through the area 'Fologanros Islands, Skicinos, Alphnia, Kardiotissa and goodgers' (A00040075), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr).

5.1.2.7 Other Biotopes

The project under study, and more specifically, the underground section on the island of Naxos (approximately 530 m long) passes through *the 'Elos Agios Prokopi Naxou'* area (AB5090022), in accordance with the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr).

5.1.2.8 Wetlands

The project under study is located near the following small island wetlands (Government Gazette 229 AQA 2012¹):

- Section of an underground transport line passes to the west through the area 'Y422SER001 HeliosTsilipaki', with a surface area of 40 271 m 2 closest to 5 m.
- Section of the underground transport line of the Southern Milos passes to the west through the area 'Y422MIL004 — Olos Provasias' over an^{area} of 24.125 m², closest to about 500 m.

It follows from the above that although parts of the project are located within the boundaries of the national system of protected areas, there are no issues of incompatibility of the project with existing limitations of those areas.

5.1.3 Forests, forest land and reforestation

For the study area of the project, validated forest maps in the National Cadastre are available for the islands of Milos, Fologanro and Hunt. According to them, it is stated that:

• The area of study on the island of Milos has always been dominated by other types of land (including agricultural crops 52.7 %), while the most natural land is traditionally in the category of forest areas (14.9 %). There are also areas classified as non-forest (1.7 %), areas classified as forest (1.0 %), afforested land (0.8 %), areas classified as grassland (0.06 %) and land cleared (0.01 %), while 28.64 % of the land area of the study area is man-made land (agglomerations, infrastructure, roads, etc.). It is worth mentioning that 0.15 % of the study area is made up of afforested areas. These are two areas with a total area of 46^{147,5} m² located in the southern Milos, about 1.4 km west from the landing point, as shown in the figure below.

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¹ 'Approval of a list of small island wetlands and laying down conditions and restrictions for the protection and promotion of small coastal wetlands included therein'.

Shape Error! No text of specified style in document.-1 of afforested areas within the study area in southern Milos



- The area of study on the island of Folegandro has always been dominated by grasslands (58.3 %), while many areas have always been classified as other types of land (27.2 %). There are also areas classified as non-forest (2.6 %), areas classified as grassland (1.6 %) and landed grassland (0.5 %), while 9.7 % of the land area of the study area is man-made land (agglomerations, infrastructure, roads, etc.). There are no areas to be afforested in the study area of the island of Folegandrou.
- The area of study on the island of Thira has always been dominated by other types of land (90.9 %), while the most natural land belongs to the category of land classified as non-forest (4.8 %) and has always been grassland (0.4 %), while 4.0 % of the land area of the study area is man-made land (agglomerations, infrastructure, roads, etc.). There are no areas for reforestation in the study area of the island of Thira.

It follows from the above that there are no issues of incompatibility of the project with existing restrictions on forests, forest land and reforestation areas.

5.1.4 Social infrastructure, utilities, etc.

The table below shows the social infrastructure and public utility facilities located in the vicinity of the project under study, on the basis of the approved general urban planning plans and spatial and housing organisation plans in force in the municipal units where the project is located and the field work carried out in the project area.

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Table Error! No text of specified style in document.-3 of social infrastructure and public utility installations in the project area

Sub-part of project	Social infrastructure and utilities facilities in the project area
Underground	This is an underground G.M. which is located on the deck of existing roads which are inside
section 150 kV	or adjacent to the land of the existing Lavrio SES.
Attica in Lavrio	The Lavrio EIL is located at about 100 m north of the GM.
	At about 2 km south of the project is the Lavrio Technological Cultural Park
	• In about 3 km south of the project, there is a cemetery in the settlement of Lavrio, a Health
	Centre, the Lavrio Gymnasium, the Municipal Stage of Lavrio.
	The port of Lavrio is located to the south of the project.
Underground	There is no GPS or SchoOPO in the Municipality of Serifou.
section 150 kV	At the south-west boundary of the land of the water body is the Sierfou EYL.
Serifou G.U.	1 km to the north-west of the water is located in the open Site of Serifou
New S/S Island of	• Km south-west of the water is located in the port of Sirfou, in the agglomeration of Livadi
Serifos	Km to the north-west of the water is located in the Strait of Serifou dam
Underground	There is no GPS or SchoOPO in the Municipality of Milos.
section 150 kV B.M.	240 m to the west of the water plot is the PPC's PPC
New Island of Milos	• 150 m south-east of the Municipal Unit in the south of Milos and 0.8 km south of the water
Underground	level is situated at Milos Airport.
section 150 kV	370 m southeast of the G.M. in the N. Milos are located on the surface mines bentonite
N.Milou	2 km to the west of the GM in N. Milos is the Port of Milos in the Damada settlement
	The HM in the N. Milos runs around the campsite of Achivadolinm.
	250 m to the east of the GM in the N. Milos is a quarrying region
Underground	There is no GPS or SchoOPO in the Municipality of Folegandrou.
section 150 kV	100 m south-west from the landing point in Folegandro is the Livadi campsite.
Folegandrou	250 m from the G.M. is the port of Folegandros in the settlement of Karavostase
New body of the	
island of	
Folegandrou	
Underground	At the south-eastern boundary of the land of the new water body is the PPC Thira APS
section 150 kV	250 m south-west of Hunting is located at Thira Airport
Hunting	Km to the west of Hunting is located in the Katerida agglomeration
New Island of the	2 km to the west of the project is the Kateradou stadium
island of Thira	• Km south of the project is the waste water treatment plant for the agglomeration of
	Messaria
Underground	2 km to the east of the project is Alyni Naxos
section 150 kV	3 km to the east of the project is Naxos Airport.
Naxos	4.9 km to the east of the project is Naxos OEL

It follows from the above that there are no issues of incompatibility of the project with existing restrictions on social and public utility infrastructure.

5.1.5 Sites of archaeological interest

The tables below show the declared archaeological sites and monuments found in the Municipal Units where the project is located.

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Table Error! No text of specified style in document.-4 Declared archaeological sites and monuments in the Lavretic Regional Unit of the Municipality of Lavretica

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of the Nooriko Lavrio	Thoricon		Archaeological Positions	MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE, SERIES II, NO 265/1-10-1957 MINISTERIAL DECISION 21220/10-8-1967 (GOVERNMENT GAZETTE, SERIES II, NO 527//24-8-1967) MINISTERIAL DECISION 2717/Π-102/91/2-10-1991, GOVERNMENT GAZETTE 946/Δ/23-12-1991 MINISTERIAL DECISION YΠΠΟ/Α1/Φ02/6690/376/21-11-1994 (GOVERNMENT GAZETTE, SERIES II, NO 927/14-12-1994) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos — hill in the northern port of Pasa Lavrio	Lavronium	Hill to the north of the Port of Pasa Lavrio	Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22053/1046/7-5-1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7- 1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos — Lavrio Pontazeza	Lavronium	Pontaza Lavrio	Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22053/1046/7-5-1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7- 1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Two shipwrecks: a classical time and a roman sink, accessible to the public to carry out an underwater survey	Micromoleum	Turkolimno Thorikos bay	Sundry space	Government Gazette 2069B/21-09-2015 and 2655B/09-12-2015
Byzantine shipwreck at Cape Vrysaki	Noise	Vrysaki	Sundry space	GOVERNMENT GAZETTE, SERIES II, NO 2069/21-09- 2015
Archaeological site of Lavreticos — Ancient remains on the 'Oxygono' or 'Karaaki' Peninsula	Lavronium	On the "Oxygen" or "Karaki" peninsula	Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22052/1047/7-5-1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7- 1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Sunio archaeological site			Natural Areas, Historical Sites, Archaeological	PRESIDENTIAL DECREE 18-4-1925, GOVERNMENT GAZETTE 107/A/30-4-1925

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
			Positions, Ancient Heat, Religious Spaces	MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957 MINISTERIAL DECISION 74913/3118/15-7-1957, GOVERNMENT GAZETTE, SERIES II, NO 216/5-8- 1957 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE, SERIES II, NO 265/1-10- 1957 MINISTERIAL DECISION YPEPE/Φ02/35222/1610/23-6-1979 (GOVERNMENT GAZETTE, SERIES II, NO 767/8-9- 1979) MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YNNO/AUTHORITY/A1/D02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YNNO 1268/4-9- 2003
Archaeological site of Lavreotikos Attica: Farm with Pyrgos			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Traditional Farm and Tower			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Traditional farm			Rural Economy, Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ02/61126/3407/14-12-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Farm with acronyms of classical times			Rural Economy, Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Farm with tower of 4th BC			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Archaeological remains Architecture			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Two farms with a tower, missing buildings at classical times			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Remaining buildings, Leaves, Farm 4 BC			Rural Economy, Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Lack of Roman settlement			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Missing tracks, remains of classic buildings (classical and Greek keramics)			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003
Archaeological site of Lavreotikos: Cavity with traces of occupancy (Cermetic neolithic, archaeological and classical times)			Natural Areas, Historical Sites, Seves, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YNNO/AUTHORITY/A1/\(\Phi\)02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YNNO/DGAPK/AR/A1/\(\Phi\)02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9- 2003

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Agios Nikolaos bay			Archaeological Positions	MINISTERIAL DECISION 2258/4-2-1966, GOVERNMENT GAZETTE, SERIES II, NO 175//26-3- 1966 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Port of Pasa		59 km of Sunion Avenue Lavrios	Archaeological Positions	MINISTERIAL DECISION 4499/12-6-1964, GOVERNMENT GAZETTE, SERIES II, NO 239/30-6- 1964 MINISTERIAL DECISION YPEPE/Ф02/42292/2056/10-9-1979, GOVERNMENT GAZETTE, SERIES II, NO 1086/4-12- 1979 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Agaroleza Lavrio		Agaroleza	Historical Sites, Archaeological Positions	MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE, SERIES II, NO 265/1-10-1957 MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos — Areas: Upper and Lower Sounios, Sunio archaeological site, Megala Pefka, Agia Triada, Souriza, Spitharopousi, Haos, Elafos, etc. and the area of the E.B.O.		Upper and Lower Sounion, Mega Pineka, Agia Triada, Souriza, Spitharopousi, Haos, Elaffos	Water supply systems, rural economy, New Spaces and Monuments, Historical Sites, Crafts/Industry, Archaeological Positions	MINISTERIAL DECISION A/Φ31/17670/1328/21-6-1975 (GOVERNMENT GAZETTE, SERIES II, NO 759//23-7-1975) MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Mining complex of the French Company in Kamara Lavrio		Kamariza	Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/577/17559/28-4-1987, GOVERNMENT GAZETTE, SERIES II, NO 227//6-5- 1987
Building block 27, where foundations for a building windscreen		Lake of Passa	Archaeological Positions	MINISTERIAL DECISION A/Φ31/34082/4479/22-6- 1977 (GOVERNMENT GAZETTE, SERIES II, NO 776/17-8-1977) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Puntalza bay area (Panomos)		In spite of the Neos Sunion district	Archaeological Positions	MINISTERIAL DECISION 71561/4352/10-10-1959, GOVERNMENT GAZETTE, SERIES II, NO 384/7.11.1959 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: areas of Strefani and Merkati Hill		Areas of Strefani and Merkati Hill	Defence complexes, New Spaces and Monuments, Crafts/Industry, Towers, Mining Facilities, Archaeological Positions, Infrastructure/Production Facilities, Households, Ancient Heat, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Noise Station Building	Thoricon		Railway Stations	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Reed roasting furnace	Lavronium		Crafts/Industry	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Building Workshop Establishment	Lavronium		Crafts/Industry	
Lavrio Market Building Building	Lavronium		Trade, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Management building of the Lavrio Smelter Company	Lavronium		Urban Buildings, Management Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Evterpes building	Lavronium		Theatres/Media	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Building of the Hotel of the Hellenic Company	Lavronium		Accommodation, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Association of Philomous Building	Lavronium		Theatres/Media	NO YPEPE/DGPA/DILAP/Г/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8- 1981
Metalloplysis	Lavronium		Crafts/Industry	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Roloi	Lavronium		Clocks, urban buildings, public utility buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981,

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				GOVERNMENT GAZETTE, SERIES II, NO 455/3-8- 1981 MINISTERIAL DECISION 19229/4222/8-7-1998, GOVERNMENT GAZETTE 576 D/6-8-1998
Facilities of the former Hellenic Society of Mines of Lavrio (EEML) and the French Society of Mines of Lavrio (GEML)	Lavronium		Crafts/Industry	MINISTERIAL DECISION 74423/6390/30-11-1987, GOVERNMENT GAZETTE 1241/Δ/28-12-1987 MINISTERIAL DECISION YPAPO/DILAP/Γ/874/17644/14-4-1992, GOVERNMENT GAZETTE, SERIES II, NO 293/29.4.1992 MINISTERIAL DECISION YΠΠΟ/DILAP/Γ/1658/25228/29.3.1995 (GOVERNMENT GAZETTE, SERIES II, NO 491/1.6.1995) MINISTERIAL DECISION 28374/5984/26-9-1997, GOVERNMENT GAZETTE 884/Δ/21-10-1997 MINISTERIAL DECISION 28374/5984/26-9-1997, GOVERNMENT GAZETTE 884/Δ/21-10-1997 MINISTERIAL DECISION YΠΠΟ/DILAP/Γ/4855/4469/21-1-1999 (GOVERNMENT GAZETTE, SERIES II, NO 88/10.2.1999) MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DNSAK/7551/133/09-05-2011, GOVERNMENT GAZETTE, SERIES I, NO 245/AA/28-09-2011
Residential complexes	Lavronium		Residential Totals, Urban Buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1020/27708/6-4-1995, GOVERNMENT GAZETTE, SERIES II, NO 558/28-6- 1995
Lavrio Station Café	Lavronium		Cafés, Rail Stations, Urban Buildings	MINISTERIAL DECISION/DILAP/Г/286/4645/8-1- 1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Lavrio Station Building	Lavronium		Railway Stations	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Master's house in Lavrio	Lavronium		Railway Stations, Urban Buildings	MINISTERIAL DECISION/DILAP/Г/286/4645/8-1- 1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Staff shelters in Lavrio	Lavronium		Accommodation, Rail Stations, Urban Buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
The building allegedly owned by Ioannis Koulaxis, Ioannis and Dionysios noble, Ioannis and Leonida Apostolopoulos and Dimitrios Thomaidis, at the junction of the Nik Streets. Bulgarianides and Nik. Syrigos O.T. 26, in Neos Kyprianos Lavrios, Prefecture of Attica.	Lavronium		Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/96067/2719/1-12-2006 (GOVERNMENT GAZETTE, SERIES I, NO 198/AA/28-12-2006)
Sausage of Agia Paraskevi Lavrio	Lavronium		Sacred churches of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/B1/Φ26/103410/4330/27-10-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				2010 (GOVERNMENT GAZETTE, SERIES I, NO 500/24.11.2010)
City Hall Building	Lavronium	Lavrio Central Square	Urban Buildings, Management Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Building No 1 of the complex formerly 'Lavrio S.A.' (Déde) in the port of Lavrio	Lavronium	Port of Lavrio	Crafts/Industry	MINISTERIAL DECISION YPAPO/DIAPP/1921/46931/11-9-2001, GOVERNMENT GAZETTE, SERIES II, NO 1252/27-9-2001
Primary school building on the Sygrou and Fok streets. Negris (OT 48)	Lavronium	Sygrou and Fok Streets. Negris (OT 48)	Urban buildings, public utility buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23-6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981 MINISTERIAL DECISION 19229/4222/8-7-1998, GOVERNMENT GAZETTE 576 D/6-8-1998
Tanks of BuzimacoR Company S.A.	Lavronium	section 5 of the land zone of the Port of Lavrio	Water Supply Systems	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/389/4468/21-1-1999 (GOVERNMENT GAZETTE, SERIES II, NO 55/29.1.1999)
Release of a sea area (five areas) from Kavori to Ligraina	Ligrena		Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/25824/1060/12.5.1993 (GOVERNMENT GAZETTE, SERIES II, NO 388/28.5.1993) MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Archaeological site of Lavreotikos: Classical farm, missing walls in Greek, missing church with ancient building material	Ligrena		Rural Economy, Historical Sites, Archaeological Positions, Housing Allies, Horses of Christians, Religious Spaces	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Missing walls and marshes (Corporate 5th-4 BC)	Ligrena		Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: 'Limestone' hill, 'Kasteella' area, Soufleris hill	Ligrena		Natural Areas, Rural Economy, Defence Compacts, New Spaces and Monuments, Historical Sites, Crafts/Industry, Towers, Seves, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995)

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Remains of ancient Jerus on the Proftis Ilia hill (Corporate archaeological and classical times)	Ligrena	Prophtis Ilia Hill	Historical Sites, Archaeological Positions, Ancient Hospitals, Religious Spaces	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

Table Error! No text of specified style in document.-5 Declared archaeological sites and monuments in the municipality of Serifou

Name of the Monument	Settlement of agglomeration	Docition	Type of Monument	Government Gazette of Declaration
Archaeological site of a cave at the 'Stavracopoulos' site of Serifos		'Statyrakopoulos', between Great meadow and Kutala	Natural Spaces, Seves, Archaeological Positions, Ancient Heat, Religious Spaces	MINISTERIAL DECISION 13642/17-1-1963, GOVERNMENT GAZETTE, SERIES II, NO 29/26-1-1963
I. Timios Stavros tropos in the village of Kalličos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10- 8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Temple Agios Stefanos in Valsamo Serifou		Balsam	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Agios Ioannou Prodromos Temple of Sklavoyannis in Serifos		Near Panagioa	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Agia Irini Kutala in Serif	Koutalas		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/25206/543/31- 7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 468/28-8-1987)
I. Church of Agios Georgiou, Ncemeteros, Livadi Serifou	Livadios	Cemetery	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/31303/684/31- 7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 466/28-8-1987)
I. Monastery of Serf Brigade	Lone Brigades		Monasteries, Religious Areas	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Theotokos in Panagios Serifou	Panayia		Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Saint Anna in the village of Panayia	Panayia		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10- 8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
The ruins of the Serif Castle	Serifos		Defensive assemblies, castles/guards	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)

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	Settlement of	Position	Type of Monument	Government Gazette of Declaration
Monument	agglomeration		71	
I. Church of Country Brigadier	Serifos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10- 8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Temple of Agios Athanasios in the Upper Country of Serifou	Serifos	Upper Country	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Agios Eleftheriou in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Temple Agios loannou Theologos in the country of Serifou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Panayia in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Touros Profitos Daniel in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
House of Georgios Leuftikos in Serifos Castle	Serifos	Castle	Urban buildings	Ministerial Decision 6922/291 p.e./12-2-1972, Government Gazette, Series II, No 148//17-2-1972
I. Church of Christos in the Serif Castle	Serifos	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/31304/685/31- 7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 459/21-8-1987)
Large Leivadi Serifou. Historical location	Great Livados		Historical Sites, Housing Totals	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/2706/54922/2-9- 1983 (GOVERNMENT GAZETTE, SERIES II, NO 595/17.10.1983)
Six houses of miners' houses in Vagia Serifou		Baya	Crafts/Industry, Households, Urban Buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/828/16464/29-3-2000, GOVERNMENT GAZETTE, SERIES II, NO 520/11-4-2000
Old ladder of ore loading and unloading in Cupa Serifou	Koutalas		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/1985/2690/19-5-1997, GOVERNMENT GAZETTE, SERIES II, NO 492//13.6.1997
Mining buildings in Kutala Serifou	Koutalas		Ancillary Areas, Crafts/Industry, Mining Facilities, Infrastructure/Production Facilities	MINISTERIAL DECISION YPAPO/DILAP/Γ/3031/44328/6-8-1997, GOVERNMENT GAZETTE, SERIES II, NO 1146//24-12-1997
House in Serifou Livadi, n. Artemisia Hatziathanasiou	Livadios		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/C/1997/50558/16-9- 1980 (GOVERNMENT GAZETTE, SERIES II, NO 967//26-9-1980)
House in Serifou Livadi, n. M. Chrysolouras	Livadios	Building 49-49B in the attached topographical chart	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/3416/60753/18-11-1993, GOVERNMENT GAZETTE, SERIES II, NO 900/13-12-1993
A stewardship building together with its	Great Livados		Military Facilities, Command Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING

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Name of the	Settlement of			
Monument the	agglomeration	POSITION	Type of Monument	Government Gazette of Declaration
movable objects and the electromechanical and technical equipment of the mines in the Grand Leivadi Serifou, owned by the Seefos Spiliazzi Mining Company				AND PUBLIC WORKS/F/2389/46173/2-9-1983 (GOVERNMENT GAZETTE, SERIES II, NO 654//16-11-1983) MINISTERIAL DECISION YPAPO/DILAP/F/2740/34269/19-7-1991, GOVERNMENT GAZETTE, SERIES II, NO 647/7.8.1991
Director's book (Medals) in the Grand Livadi of Serifou	Great Livados	Within the limits of the ownership of the AA "Metalia Serifou"	Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2740/34269/19-7-1991, GOVERNMENT GAZETTE, SERIES II, NO 647/7.8.1991
Sierfou Municipal Hall Building	Serifos		Urban Buildings, Management Centres	MINISTERIAL DECISION Γ/1657/42917/12-9- 1978 (GOVERNMENT GAZETTE, SERIES II, NO 804//21-9-1978)
Country of Serifou. Place of special natural beauty and traditional settlement	Serifos		Natural Spaces, Housing Totals	PRESIDENTIAL DECREE 19-10-1978, GOVERNMENT GAZETTE 594/Δ/13-11-1978 MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/350/7324/15-4-1983 (GOVERNMENT GAZETTE, SERIES II, NO 274//24-5-1983) PRESIDENTIAL DECREE 11-5-1989, GOVERNMENT GAZETTE 345/D/2-6-1989 PRESIDENTIAL DECREE 17-9-2002, GOVERNMENT GAZETTE, SERIES I, NO 930/24-10-2002
Anemmy in the country of Serifos, n. Gerasimio Levane	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. E. Papadopoulou	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Peace Gerardis	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. loannis Kouzuni	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. N. Tantoula	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Nikolaos Chhalidas	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Light Hatzinikolaou	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Designation of marine areas for underwater	Serifos	island of Garbia to Akrotiri	Marine Spaces	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/88711/4369/22-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
activities by breathing apparatus, deep-boat or other means of seabed survey, on the island of Serif, N Cyclades.		Swordi, on the island of Serifo, N Kyclades.		10-2005, GOVERNMENT GAZETTE, SERIES II, NO 1610//22-11-2005

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

Table Error! No text of specified style in document.-6 Certified archaeological sites and monuments in the municipality of Milos

OI IVIIIOS				
Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Release of a sea area from Cape Gourgeos to Apollonia in Milos for underwater activities			Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/30229/1819/25.6.1997 (GOVERNMENT GAZETTE, SERIES II, NO 564/10-7- 1997) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/24185/1467/22-5- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 646/26.6.1998) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/36961/2194/22-7- 1998, GOVERNMENT GAZETTE, SERIES II, NO 923/27.8.1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10- 2003
Release of a sea area in the rocks of Cyclades for underwater activities		Octane rocks, NA of Cape Swordfish, in a zone with a maximum width of 50 m.	Marine Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/30229/1819/25.6.1997 (GOVERNMENT GAZETTE, SERIES II, NO 564/10-7- 1997) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/24185/1467/22-5- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 646/26.6.1998) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/36961/2194/22-7- 1998, GOVERNMENT GAZETTE, SERIES II, NO 923/27.8.1998 MINISTERIAL DECISION ΥΡΑΡΟ/DGΑΡΚ/ΑΚ/Α1/Φ41/42813/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10- 2003
An archaeological site of Cape Vani Milou (fragmental settlement). Establishment of protection zones A and B	Trivasalos	Akrotirios Vani	Defensive Compounds, Archaeological Positions, Housing Assemblies	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site of ancient town of Milos. Establishment of	Apple		Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
protection zones A and B				1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site in Ankathia Milos (Greek and Roman settlements with Roman walls). Designation of Zone B protection	Trivasalos	Cucumbers	Defensive Compounds, Archaeological Positions, Housing Assemblies	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeological site at the 'Demorgiaki' site of Milos (Postanou quarries). Designation of Area A of Exclusive Protection	Drilling driller	"Memorandum"	Mining, archaeological, infrastructure/production facilities	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION A/Φ20/5449/519/24-4- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 550/11-5-1973) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeological site at the location 'Lower Koni' Milos (Byzantine settlement and gravel). Designation of protection zones A and B		"Lower Coon"	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION ΥΠΠΟ/A1/Φ21/26587/12393/25-6-1990,
Archaeological site at the site 'Kipi' Milos (two churches and ancient Christian painter)		'Garden', to the south of the island	Monastery, Christian churches, Religious Areas	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
Archaeological site at the 'Nychia' Milos site (lack of procycladian quarries). Designation of Area A of Exclusive Protection		'Nights'	Mining, archaeological, infrastructure/production facilities	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeological site at the location 'Palaiochori' Milos (prehistorical cemetery and residential remains). Designation of Zone B protection	Drilling driller	"Palerokhori"	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site at the location of Kemma Milos. Designation of Protection Zone B		Outside the agglomeration of Embassy	Archaeological Positions, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Wondment	aggiomeration			1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site in Saint Eleni Milou. Designation of Area A of Exclusive Protection	Trivasalos	Saint Helena	Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site in Agia Sunday Milos (original port). Designation of Area A of Exclusive Protection	Drilling driller	Agia Sunday	Natural Areas, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site in the Milos gypsy (lack of Greek and Roman settlement). Designation of Zone B protection	Trivasalos	Gypsum gypsum	Archaeological Positions, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeological site in Vani (Chalegers) of Milos (prehistorical cemeteries). Designation of Area A of Exclusive Protection	Trivasalos	'Khales'	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site in Colomouni- Skinopi Milos (the cemeteries of the ancient city). Designation of Zone B protection		Clergy — Skinpi	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site in Rivari Milos (Romaic residential wastes). Designation of Zone B protection	Trivasalos	Rivari, "Fatura" and "Saint Nikolaos" posts	Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ43/42367/2642/13-10- 1997, GOVERNMENT GAZETTE, SERIES II, NO 972/3-11-1997 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site in Milos sword (protocycladic cemetery). Designation of Area A of Exclusive Protection	Drilling driller	Sword	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site at the Fyropotamos Milos (prehistorical cemetery).	Ferropotamos	Ferropotamos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Designation of Zone B protection				1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site in Agios Panteleimonas Milos (protocyclal cemetery). Designation of Area A of Exclusive Protection	Drilling driller	Agios Panteleimos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeological site in Provas Milos (Romaic and PaleoChristian remains). Designation of Zone B protection	Drilling driller	Provass	Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/Α1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site in the Milos fleets (ancient temple). Designation of Area A of Exclusive Protection	Drilling driller	Fleets	Archaeological Positions, Ancient Hera, Religious Sites	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeological site of the Milos Milos. Designation of protection zones A and B.	Prisoner		Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION 3888/21-2-1967, GOVERNMENT GAZETTE, SERIES II, NO 168/9.3.1967 MINISTERIAL DECISION ΥΡΕΡΕ/Α1/Φ21/58434/2938/16-11-1979, GOVERNMENT GAZETTE 209/B/29.2.1980 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/DGA/AUTHORITY/A1/Φ21/58772/3934/9- 10-2002, GOVERNMENT GAZETTE, SERIES II, NO 1348/17-10-2002 MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ21/58772/3934/9-10-2002 (GOVERNMENT GAZETTE, SERIES II, NO 1690/2-12-2005)
I. Monastery of Agia Marina in Milos	Ralakion Kalakos		Monasteries, Religious Areas	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Agia Triada in the Damadam of Milos	Dama		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Temple Agios Konstantinos, Pachaina Milou	Pachaina		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/1544/58/1- 2-1985, GOVERNMENT GAZETTE, SERIES II, NO 94/21.2.1985
I. Church of Agios Charalambous at Zefyria Milos	Zefyria		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936 MINISTERIAL DECISION YNTHOO/AUTHORITY/B1/Ф27/12115/382/20-9-1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10-1996
I. Tour of the Gootikos Introduction to the Milos	Apple		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Zododon Source (or Kastrini) on the prehistoric Acropolis position. Establishment of protection zones A and B		At hill top, near Zefyria	Tips, Defence Compacts, Archaeological Positions, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/26587/12393/25-6- 1990
I. Church of Zododon Source (or Kastrini) on the prehistoric Acropolis position. Establishment of protection zones A and B		At hill top, near Zefyria	Tips, Defence Compacts, Archaeological Positions, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/A1/Φ21/26587/12393/25-6-1990,
I. Church of Theotikos Commune (Portiani Panay) in Zefyria Milos	Zefyria		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/12115/382/20-9-1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10-1996
I. Church of Gootikos Commune in Milos	Apple		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Panagia Elousa at the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Panagia Thaitria in the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Panayia and Agios Charalambous in the Damadam Milos	Dama		Sacred churches of Christians, Religious Spaces	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/52874/1057 e.e./26.1.1993 (Government Gazette, Series II, No 166//17.3.1993) Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/52874/1057 e.e./26.1.1993 (Government Gazette, Series II, No 509/9.7.1993)
I. Church of Panagia Korfiotisas in Castle Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Touros Yapadis in the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Church of Christou in Zefyria Milou	Zefyria		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18429/808/13-2-1954 (GOVERNMENT GAZETTE, SERIES II, NO 60/26-3- 1954) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/12115/382/20-9-1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10- 1996
Historical site in the 'Paliorema' area of the island of Milos in the Prefecture of Cyclades.	Thin mine (I. Milos mines)		Historical Sites, Mining Facilities	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/71971/1866/3-10-2005, GOVERNMENT GAZETTE, SERIES II, NO 1442/19-10- 2005
Catholic I. Church of Panagia Rhodes (Rozoario) and L. Brast Tafis	Apple		New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Plaka Milos Castle	Apple		Defensive assemblies, castles/guards	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Tritope Milou catadamata	Drilling driller		New Spaces and Monuments, Archaeological Positions	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
Old Police Building and auxiliary buildings in Plaka Milos	Apple	At the foots of the Castle	Auxiliary Areas, Urban Buildings, Management Centres	Ministerial Decision YΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
Building in Plaka Milos (No 125), N. Community of Plakas and Association of Municipalities of Milos	Apple		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/508/7652/27-6-1986, GOVERNMENT GAZETTE, SERIES II, NO 598/19-9- 1986
Building in the port of Adamada in Milos	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Г/1475/63357/24-9-1981, GOVERNMENT GAZETTE, SERIES II, NO 675/4-11-1981
Building in Damadam Milos, n. Andreas Bambolaki	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/410/10525/20-4-1982 (GOVERNMENT GAZETTE, SERIES II, NO 270//18-5-1982)
Medieval construction in Plaka Milos (No 113), n. Evangelos Mthioudakis	Apple	No 113	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Medieval construction in Plaka Milos (No 125), n. Theodoros I. Chrysoulis	Apple	No 125	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
House (former IKA) in Plaka Milos, n. Iakovina Armeni	Apple	At the foots of the Castle	Urban buildings, public utility buildings	Ministerial Decision YΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration			
House with I. Agios Spyridon church in Plaka Milou, n. Iakovou Druga	Apple	At the foots of the Castle	Urban Buildings, Hotels of Christians, Religious Spaces	Ministerial Decision ΥΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)			
Brast House in Plaka Milou, n. M. Oikonomidou — Roka	Apple	Middle wall with house F. Druga	Urban buildings	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/51146/1110 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)			
House in Plaka Milou, n. sisters of Kaisaritis (former Tataraki)	Apple	At the foots of the Castle	Urban buildings	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)			
House in Plaka Milos, N. heirs of Philipos Oikonomou	Apple	At the foots of the Castle	Urban buildings	Ministerial Decision YΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)			
House in Plaka Milou, n. Maria Fournarakis	Apple		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Г/73369/3016/14-2-1980 (GOVERNMENT GAZETTE, SERIES II, NO 289//21.3.1980)			
Construction at road 25 March 79 and Agia Varvara in Plaka Milos, n. Floros Angelis Rafou	Apple	Road 25 March 79 and Agia Varvara	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980			
Construction in Plaka Milou, n. Stavros I. Druga	Apple		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980			
Tafiko monument and grave of the French Consular Nemetery in Milos	Apple		New Spaces and Monuments	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/1158/24756/10.5.1993 (GOVERNMENT GAZETTE, SERIES II, NO 363/20.5.1993) MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/841/21496/17.3.1995 (GOVERNMENT GAZETTE, SERIES II, NO 430/17.5.1995)			
The building located on the coastal road of the Adamada settlement on the island of Milos, which is owned by Dominik Deportterer.	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DNSAK/9533/245/8-3-2006, GOVERNMENT GAZETTE, SERIES II, NO 351//24.3.2006			

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<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

Table Error! No text of specified style in document.-**7 Declared archaeological sites** — **monuments in the municipality of Folegandrou**

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Church of Poems of Theotikos in Folegandro	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
I. Church of Panayia Theospicastis in Folegandro	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
Country Castle Folegandrou	Fologanros		Defensive Compounds, Households, Castles/Winders	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/2178/31/12-2-1988, GOVERNMENT GAZETTE, SERIES II, NO 159/22.3.1988
I. Temple Agios Aikaterini — Agios Fanouris in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Agios Antoniou in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Temple of Brigadier in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Agios Nikolaos in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9685/195/3.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5- 1988)
I. Church of Agios Savvas in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/12703/281/21.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5- 1988)
I. Church of Agios Eleftheriou in Fologanros	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9921/264/16-5-1997 (GOVERNMENT GAZETTE, SERIES II, NO 491/13.6.1997)
I. Church of Stavros in the country of Folegandrou	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9687/197/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Christos in the post 'Fira' Folegandrou	Fologanros	"Fila"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/4216/112/16-2-1996 (GOVERNMENT GAZETTE, SERIES II, NO 193/22.3.1996)
I. Church of Elefsis in Foleganros	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
I. Church of Hagia Sophia in Greece Castle Folegandrou	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9684/194/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Church of Pantanassa or Christou in Folegandro	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/3299/61/21-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 287//16-5- 1988
Country Folegandrou. Historical location and specific natural beauty	Fologanros		Physical Areas, Historical Sites	MINISTERIAL DECISION A/Φ31/5760/571/24-4- 1973, GOVERNMENT GAZETTE, SERIES II, NO 526/8-5-1973
Windmill in Folegandro, n. Sevastopos Kakaris			Rural Economy, Auxiliary Spaces, Multiples	MINISTERIAL DECISION YPAPO/DILAP/Γ/527/9401/25-4-1988, GOVERNMENT GAZETTE, SERIES II, NO 277//10-5- 1988
The agricultural complex allegedly owned by Anastasios Papaioannou in the area of Agios Savvas, the island of Folegandrou N. Cyclades.			Rural Economy	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DINESAK/74058/2090/6-10-2006, GOVERNMENT GAZETTE, SERIES I, NO 78, 26.10.2006
Windmill in Podia Folegandrou, n. Eikaterini Marinakis		Upper Mothers	Rural Economy, Myles	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/4339/5956/19-12-1995, GOVERNMENT GAZETTE, SERIES II, NO 94/16.2.1996
Windmill in Podia Folegandrou, n. P. Veniou		Upper Mothers	Rural Economy, Myles	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/4339/5956/19-12-1995, GOVERNMENT GAZETTE, SERIES II, NO 94/16.2.1996
Folegandrou Primary School Building	Fologanros		Urban buildings, public utility buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/4493/546/30-12-1991, GOVERNMENT GAZETTE, SERIES II, NO 35/27.1.1992

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

Table Error! No text of specified style in document.-8 Declared archaeological sites and monuments in the Regional Unit of Thira, Municipality of Thira

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Permit to demolish a building in Thira, Silver Chryssanthos. Declassification.	Dunes bay	-	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/52/10842/23-2-1981 (GOVERNMENT GAZETTE, SERIES II, NO 140/11.3.1981)
Anemmy in the 'strip' position of Hunt, n. Theodoros Vafidaakis	-	'Strips'	Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7- 1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
One-octight windmill. lakovos Dross	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Antonis Dros heirs in Emichios	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Antonis Dross heirs in the Taxes	Dunes bay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Heirs Artemi Drazed	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Heirs of Stavros Valvi	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Michalis Drosos, Carterida (a)	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
One-octight windmill. Michalis Dross, Carterida (b)	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
Two windmills of the same type. Michalis Drosos, Carterida	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3-8- 1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19-8-1993
Two windmills in the 'Caldera' position of Megalohori Thira, Mavrommata Peace	Megalochoron	'Caldeera'	Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/42830/2771/20- 11-1986, GOVERNMENT GAZETTE, SERIES II, NO 937/31-12-1986
Release of a sea area in Camari Thira.	Camarion	To the east of the island.	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46835 /2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16- 10-1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813 /2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10- 10-2003
Release of sea areas on the island of Newly burned Cyclades	New Kamenis	To the east of the island	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46835 /2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16- 10-1998, MINISTERIAL DECISION YΠΠΟ/DGAPK/A1/A1/Φ41/42813/ 2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10- 10-2003
Release of a sea area in Pessa Thira Cyclades	Perssa	South-east of the island	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46835 /2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16- 10-1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813

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	Settlement of			Government Gazette of
Name of the Monument	agglomeratio n	Position	Type of Monument	Declaration
				/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10- 10-2003
Akra's archaeological site of Thira. Establishment of protection zones A and B			Archaeological Positions	PRESIDENTIAL DECREE 24-8-1982, GOVERNMENT GAZETTE 529 D/29- 10-1982, PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site of ancient Thira			Archaeological Positions, Housing Clubs, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/40676 /905/20-9-1989, MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/A/A1/Φ21/77169/3858/30 -1-1980, GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980, PRESIDENTIAL DECREE 16.2.1990, GOVERNMENT GAZETTE, SERIES II, NO 139/19-3-1990
Archaeological site of Thira	Monolites		Archaeological Positions, Housing Totals	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/A/A1/Ф21/77169/3858/30-1-1980 (GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980) PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site of the Karagiorgi mines (mediocircular cemetery) at the 'Ftellos' site in Thira. Designation of archaeological zones		Fellos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46975 /1880/4-11-1988, GOVERNMENT GAZETTE, SERIES II, NO 833/16-11- 1988 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/1580/ 45/30-1-1989, GOVERNMENT GAZETTE, SERIES II, NO 79/3.2.1989 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19- 3-1990
Archaeological site at the 'Kuluba' (Kulubos) site of Thira (Greek cemetery)		Kuluba ('Kulubos')	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/40676 /905/20-9-1989, MINISTERIAL DECISION ΥΠΠΠ/A1/Φ21/74756/2459/16-12- 1981 (GOVERNMENT GAZETTE, SERIES II, NO 77/22.2.1982) PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19- 3-1990
Archaeological site at the 'Fellos' site of Mines of Ferion Thira (AGET IRAKLIS) (protocyclal cemeteries, etc.)	Dunes bay	Fellos	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46975 /1880/4-11-1988, GOVERNMENT GAZETTE, SERIES II, NO 833/16-11- 1988 PRESIDENTIAL DECREE 16-2-1990,

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				GOVERNMENT GAZETTE 139/D/19- 3-1990
Archaeological site at the location of the "Mavromati mine" "ERMI" in Thira (agglomeration of the late Mesocyclada era)		'Mavromati mines'	Archaeological Positions, Housing Totals	MINISTERIAL DECISION YNNO/AUTHORITY/A1/Ф21/46975 /1880/4-11-1988, GOVERNMENT GAZETTE, SERIES II, NO 833/16-11- 1988 MINISTERIAL DECISION YNNO/AUTHORITY/A1/Ф21/46975 /1880/4-11-1988, GOVERNMENT GAZETTE 1580/45/30.1.1989 MINISTERIAL DECISION YNNO/AUTHORITY/A1/Ф21/1580/ 45/30-1-1989, GOVERNMENT GAZETTE, SERIES II, NO 79/3.2.1989 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site in Thira		Prophis Ilias, Portetida stream	Archaeological Positions	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/A/A1/Φ21/77169/3858/30 -1-1980 (GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980)
Archaeological site in Agios Nikolaos (Marmaritis) Thira			Archaeological Positions, Ancient Hera, Horses of Christians, Religious Sites	MINISTERIAL DECISION 9763/3-11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19-11-1962 MINISTERIAL DECISION 24131/23-10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19-3-1990 MINISTERIAL DECISION 9763/3-11-1962, GOVERNMENT GAZETTE, SERIES II, NO 1014/2-8-2002
An archaeological site in the area of the Gavrolo Thira hill (basked Greek graves and ancient cemetery). Establishment of protection zones		Port of Balos, Mount Gavrilos, Cape Exomis	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION 24131/23- 10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19- 3-1990
Archaeological site on the Archangelos Thira Hill. Establishment of protection zones			Archaeological Positions	MINISTERIAL DECISION 24131/23- 10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19- 3-1990
Architect of Varvarigo in Messaria Thira	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/2168/38826/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Archoniko Sarpakis in Firir Thira, n. Sharpaki	Dunes bay		Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18-3- 1991 (GOVERNMENT GAZETTE, SERIES II, NO 234/18-4-1991)

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
Archoniko in Messaria Thira, n. Antonis Venetsanou	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2169/38827/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Archoniko in Messaria Thira, n. Happiness Venesenou	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2171/38809/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Archoniko in Messaria Thira, n. Spyrou Marezini	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2167/38812/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Commercial Hunting. Traditional settlement	Emay		Natural Spaces, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/40676 /905/20-9-1989, MINISTERIAL DECISION 10977/16- 5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967) PRESIDENTIAL DECREE 19-10-1978, GOVERNMENT GAZETTE 594/Δ/13- 11-1978 PRESIDENTIAL DECREE 11-5-1989, GOVERNMENT GAZETTE 345/D/2- 6-1989 PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19- 3-1990
Vegetable Kastelli in Akrotiri Thira	Cape Verde		Defensive assemblies, castles/guards	MINISTERIAL DECISION 11707/14-6-1966 (GOVERNMENT GAZETTE, SERIES II, NO 429/8-7-1966) MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970
Vegetable Castle at Tower of Thira	Kallistis Tower		Defensive assemblies, castles/guards	MINISTERIAL DECISION 11707/14-6-1966 (GOVERNMENT GAZETTE, SERIES II, NO 429/8-7-1966) MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970 MINISTERIAL DECISION YITHO/AUTHORITY/B1Ф27/36783/956/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 773/8-9-1995)
Vegetable Tower 'Gulas' at Emerikos Hunta	Emay		Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION 12916/27- 8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970 MINISTERIAL DECISION A/Φ31/54786/4096/10-12-1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Alcohol factory in Messia Thira, n. Antoniou Venetsanou	Messarias		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/2174/39088/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 719/30-9-1988
Plant in Messaria Thira, n. Georgios Marezini	Messarias		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/2175/39037/14-9-

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				1988, GOVERNMENT GAZETTE, SERIES II, NO 719/30-9-1988
Ruins of an anti-Christian church in Pesse Thira	Perssa		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3-11- 1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19-11-1962
Date: Traditional settlement. Designation of protection zones.	Day of November		Natural Spaces, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/40676 /905/20-9-1989, PRESIDENTIAL DECREE 17-6-1988, GOVERNMENT GAZETTE 504/Δ/14- 7-1988
I. Monastery of Agios Nikolaos in IDAVILI Thira	Day of November		Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/12888/318/5-4- 1985 (GOVERNMENT GAZETTE, SERIES II, NO 250/3-5-1985)
I. Monastery Proftis Ilias Thira		At the top of the Mountain	Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/KHP/4 4997/1811/9-10-1998 (GOVERNMENT GAZETTE, SERIES II, NO 1123/23-10-1998)
I. Church of Agia Anna in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Agia Peace at the Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Church of Agia Peace in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3-11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19-11-1962, MINISTERIAL DECISION YNTOO/AUTHORITY/B1/Ф27/1721/44/12-4-1993, GOVERNMENT GAZETTE, SERIES II, NO 310//4-5-1993
I. Church of Hagia Sophia, Francissa at the Fira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Church of Agia Triada at Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Agios Artemis at the Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/27948 /571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20- 10-1989)
I. Church of Agios Georgios in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/1721/ 44/12-4-1993 (GOVERNMENT

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	Settlement of			Government Gazette of
Name of the Monument	agglomeratio n	Position	Type of Monument	Declaration Gazette of
				GAZETTE, SERIES II, NO 310//4-5- 1993)
I. Church of Agios Georgiou at Elidis Bothona Thira	Boots	Eledi	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Agios Georgiou at Bothona Thira	Boots	At the entrance to the agglomeration	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Agios Georgiou at the Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/36784 /953/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 792/14-9- 1995)
I. Church of Agios Georgios, Xehir, at the post 'Kuluba' ('Kulubos') in Hunta		Kuluba ('Kulubos')	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ30/8076/ 239/23-4-1996, GOVERNMENT GAZETTE, SERIES II, NO 385/27.5.1996
I. Touros Agios Ioannis Theologos at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/11990 /218/3-12-1991 (GOVERNMENT GAZETTE, SERIES II, NO 1016//13- 12-1991)
I. Church of Agios Ioannou 'To Theoloakis' at Emporios Thira	Emay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/27948 /571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20- 10-1989)
I. Church of Agios Markos in Idivios Thira	Day of November	On the main road linking the Virts to the Hall	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/4164/ 70/30-5-1995 (GOVERNMENT GAZETTE, SERIES II, NO 579/30.6.1995)
I. Church of Agios Month at the Thira Father	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Temple Agios Nikolaos (father's name Kissira) at Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/36784 /953/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 792/14-9- 1995)
I. Church of Agios Spirus at Bothona Thira	Boots	To the south of the settlement	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT

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Name of the Monument	Settlement of agglomeratio	Position	Type of Monument	Government Gazette of Declaration
	n			GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Agios Prokopoi at Langadi Bothona Thira	Boots	Langadi	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Temple Agios Stylianou in Fragkos at Fira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Temple of Agioi Apostolos (together with the living quarters and the complex of the old School) at the Tower of Thira	Kallistis Tower		Urban buildings, churches of Christians, Religious Areas, Utility Buildings	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/36784 /953/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 792/14-9- 1995)
I. Church of Genele in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1721/ 44/12-4-1993 (GOVERNMENT GAZETTE, SERIES II, NO 310//4-5- 1993)
I. Dioceseal Church of the Corner of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3-11- 1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19-11-1962
I. Church of Panagia Kalou in the post 'Kuluba' ('Kulubos') in Hunta	Panayia Kalou	Kuluba ('Kulubos')	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/18142 /419/14-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 418/10-8- 1987)
I. Church of Panagia Stathianis at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/27948 /571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20- 10-1989)
I. Church of the hole or Sergaina in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Panayia Genetholin (old and young) in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/1494/ 132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3- 1999
I. Church of Panagia (father's name: Ai Georgios) at Firostefni Thira	Dunes bay	Firostefani	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948 /571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20- 10-1989)
I. Church of Christos or Transformation of Christos at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14467 /335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)

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	Settlement of			C
Name of the Monument	agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Kannava (warehouse) in Messria Thira, n. Antonis Venetsanou	Messarias		Auxiliary Areas	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/2172/39624/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Kannava (warehouse) in Messria Thira, n. Ioannis Veneriris	Messarias		Auxiliary Areas	MINISTERIAL DECISION YPAPO/DILAP/Г/2173/39625/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Kastelli at Emporios Hunta	Emay		Defensive assemblies, castles/guards	MINISTERIAL DECISION 12916/27- 8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970
Gulf of volcano (Caldera). Landscape of special natural beauty			Natural Areas	MINISTERIAL DECISION 23732/28- 9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22- 12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972)
Building A in the Tower of Thira, n. Varvara Sorotou — germ and Evangelos germ	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/174/23077/13-5- 1998, GOVERNMENT GAZETTE, SERIES II, NO 514/26-5-1998
Building B in the Tower of Thira, n. Varvara Sorotou — germ and Evangelos germ	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/174/23077/13-5- 1998, GOVERNMENT GAZETTE, SERIES II, NO 514/26-5-1998
Building and configuring the surroundings of Georgios Kovaios turkey (north) and the other south, on the northern boundary of the post-seismic settlement, in the settlement of Fryon, in the municipality of Thira, Santorini, allegedly owned by Angel and N. Dargata		potassium Georgios Kovaios	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/30398/872/21.5.200 8 (GOVERNMENT GAZETTE, SERIES I, NO 210, 3.6.2008)
Building of a Community shop of Eva Ionian Thira	Outside Angle		Urban Buildings, Management Centres	A ΥΠΠΟ/DILAP/Γ/1360/24295/5-5- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 499/6.6.1995)
Building together with its old furnishing with the old ground floor wine warehouse with all its equipment at Messria Thira, Georgios Argyrou	Messarias		Ancillary Areas, Crafts/Industry, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Г/21338/1337/24.5.1985, GOVERNMENT GAZETTE, SERIES II, NO 351/31.5.1985 MINISTERIAL DECISION YPAPO/DILAP/Г/33932/2133/14-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 784/26-10-1988
Building of a former administration	Dunes bay		Military installations, infrastructure/production facilities	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18-3- 1991 (GOVERNMENT GAZETTE, SERIES II, NO 234/18-4-1991)
Former guard building in Thira Thira	Dunes bay		Military installations, infrastructure/production facilities	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18-3- 1991 (GOVERNMENT GAZETTE, SERIES II, NO 234/18-4-1991)

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	Settlement of			Covernment Cozette of
Name of the Monument	agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Building in Messaria Thira, n. Georgios Marezini	Messarias		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2170/38810/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Building in Messaria Thira, n. Stavros Glandzi and Pantelis Konaxi (ex-Saliberou)	Messarias		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2136/33935/14-9- 1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28-9-1988
Building at Tower of Thira, n. Anna Assimis — Georgiki	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/486/8170/23-5- 1988, GOVERNMENT GAZETTE, SERIES II, NO 448/30.6.1988
Mill in Messria Thira, Psanos	Messarias		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/4506/6798/31-1- 1992, GOVERNMENT GAZETTE, SERIES II, NO 122//27.2.1992
Mill in Messria Thira, Unknown	Messarias		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/4506/6798/31-1- 1992, GOVERNMENT GAZETTE, SERIES II, NO 122//27.2.1992
Island of Aspronis. Landscape of special natural beauty	Aspronisi (island)		Natural Areas	MINISTERIAL DECISION 23732/28-9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22-12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972) MINISTERIAL DECISION ΔΑ/9389/11-9-2000, GOVERNMENT GAZETTE, SERIES II, NO 1176/22-9-2000
Small and Great Caucasus Islands. Landscapes of special natural beauty			Natural Areas	MINISTERIAL DECISION 23732/28- 9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22- 12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972)
Isle of Hunta			Natural Spaces, Archaeological Positions, Housing Totals	A 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
Isle of Hunta: Gulf of volcano after the islands of Small and Great Kalymen, Thirasia and Aspronisi. Landscape of special natural beauty and marine archaeological site			Natural Areas, Historical Sites, Water Spaces	MINISTERIAL DECISION 23732/28- 9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22- 12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972)
South of the island of Thira			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16- 5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967) MINISTERIAL DECISION 24131/23- 10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967
South-eastern part of Hunta			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16- 5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
Skiros Okroi in Hunta			Defensive Compounds, Historical Sites	MINISTERIAL DECISION A/Φ31/54786/4096/10-12-1973

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Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
				(GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Tower (Gouas) Deldenda Froosthenou Thira	Dunes bay	Firostefani	Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION A/Φ31/54786/4096/10-12-1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Tower (Gulas) at Thira Tower	Kallistis Tower		Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION A/Φ31/54786/4096/10-12-1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Part of the Gulf of Hunting			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16- 5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
The entire site of the Old Thiraian Mining located in the northeastern part of the Island of Thiras.			Crafts/Industry, Mining Facilities	MINISTERIAL DECISION OF THE MINISTRY OF DEFENCE/DNSAK/F/1998/51/26-1-2005, GOVERNMENT GAZETTE, SERIES II, NO 128/3.2.2005
'Gulas' ferry in Akrotiri Thira	Cape Verde		Defensive assemblies, castles/guards	MINISTERIAL DECISION Φ31/45090/3470/4-10-1973, GOVERNMENT GAZETTE, SERIES II, NO 1194/5-10-1973

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

List of Error! No text of specified style in document.-9 Declared archaeological sites and monuments at the Regional Unit of Naxos in the Municipality of Naxos and Micro Cyclades

Name of the	Settlement of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Declaration and demarcation as an archaeological site and demarcation of protection zones A and II in the Strip of Naxos.	Booklet		Archaeological Positions	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ21/32793/2143/28-4-2004, GOVERNMENT GAZETTE, SERIES II, NO 966, 29.6.2004
Archaeological site and demarcation of protection zones A and II in Strafida Naxos	Booklet		Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ21/32793/2143/28-4-2004 (GOVERNMENT GAZETTE, SERIES II, NO 140/4-2-2005)
I. Temple of Agios Prokopos in Agios Arsene Naxos	Agios Arsennes	"Cargadouras"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ30/KHP/49013/1935/23-12- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 26/25.1.1999)
Tower of germanium (Nappliotis and Veloni) in Argentinian	Agios Arsennes	Near I. Temple Agios Nikolaos	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)

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Transmission Sy.	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Naxos, n. E. N. Revenge and heirs of D. Veloni				
I. Church of Agia Fotinis at Alia Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Church of Agios Artemis in Shangri Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Agios Ioannou Temple at Shangri Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Agios Ioannou Temple in Shangri Naxos. Declassification			Sacred churches of Christians, Religious Spaces	Ministerial Decision 65304/7582 of 7 February 1977 (Government Gazette, Series II, No 119/19.2.1977) MINISTERIAL DECISION A1/Φ21/38852/2615/22-7-1978 (GOVERNMENT GAZETTE, SERIES II, NO 729/29.8.1978)
I. Monastery of Agios Eleftheriou in Shangri Naxos, n.			Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Potamia Naxos tower (ex- Barotchi) tower, n. Matthios N. Drylli			Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Coco tower in Potamia Naxos, n. C. Maroulis			Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Marianou Pyrgos-House in Shangri Naxou, n. Kalypsias Marianou			Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/13163/317/9-4- 1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5- 1985
'Pyrgyki' Magakis in Potamia Naxos			Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/20480/442/14-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 419/10-8-1987)
Designation of the A-A absolute protection area of the archaeological site of Kaminia Naxos			Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/8479/470/28-11-1994 (GOVERNMENT GAZETTE, SERIES II, NO 985/30-12-1994)
Archaeological site of Naxos ink (two semi-worked statues of the Kouros, remains of a prehistoric settlement and an ancient			Mining installations, archaeological positions, infrastructure/producti on facilities, residential totals	

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	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
quarry). Designation of Area A of Exclusive Protection				
I. Touros Ai — Psima in Alia Naxos		Agulias	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Temple of Agios Konstantinos in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
An archaeological site of Gyrula Sangriou, Municipality of Naxos and Micro-Cyclades, Regional Unit of Naxos, Region of South Aegean".		Roundula	Archaeological Positions, Ancient Hera, Horse Temples of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/A1/Φ21/44720/2228/15-6-2012, GOVERNMENT GAZETTE, SERIES I, NO 225/A/19-6-2012
I. Stavros Monastery (Catholic tower) in the Sangari Naxos Round. Designation of Area A of Exclusive Protection		Yourulas	Defensive complexes, monasteries, towers, Christian sails, Religious Areas	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Aikaterini and Agios Agios Athinon (Agios Aikaterini and Agios Agios Athinon) in Yourula Sangriou Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agia Anastasia in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agia Paraskevi in Gourula		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-

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Trunsmission sy.	Settlement			
Name of the				
Monument	agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Sangriou Naxos. Designation of Area A of Exclusive Protection				1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Saint Vassiliou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Georgios Latirou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple of Agios Dimitrios in Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Thomas in Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis Avlonitsa in the Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis Theologos in Gourula Sangrios Naxos on the archival temple of Dimitra or Apollon (Certificate).		Yourulas	Ancient Hera, Horses of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)

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	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Designation of Area A of Exclusive Protection				
I. Temple of Agios Ioannis Bauzi in the Roundula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis in Kaknados Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple of Agios Ioannou Theologos in Addessrou in the Sangrios Naxos Round. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Nikita and After Christ in the Round of Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple Agios Nikolaos in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965 MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Polyarpos in Gourula Sangrios Naxos. Designation of Area A of		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)

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	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Exclusive Protection				
I. Church of Transformation Stiros (Christos) in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Panagia Arkou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Panagia in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
Designation of protection zones A and B of the archaeological site of Gyrula Sangari Naxos		Yourulas	Archaeological Positions, Housing Allies, Ancient Hera, Horses of Christians, Religious Sites	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12- 1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/48748/3026/18-12-1997 (GOVERNMENT GAZETTE, SERIES II, NO 142/27.1.1998)
Tower in Kaponnes (also M. Sanoudos) with parachutes and water medal in Kampones Naxou, n. Eleonoras Dellaarkas		Bobbins	Rural Economy, Defence Complexs, Towers, Myles, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
An archaic quarry in the 'Katzilionders- Pyrgos Plakas' area on the island of Naxos.		Katsillierdes- Pyrgos Plakas on the island of Naxos.	Mining installations, infrastructure/producti on facilities	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Ф21/57734/3705/26-7-2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Ф21/57734/3705/26-7-2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004
Classic tower in the area of 'Katzilerdes- Pyrgos Plakas'		Katsiliierdes- Pyrgos Plakas on the island of Naxos.	Defence Compacts, Towers	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Ф21/57734/3705/26-7-2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004 MINISTERIAL DECISION

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Transmission Sy.	Settlement			
Name of the Monument		Position	Type of Monument	Government Gazette of Declaration
on the island of Naxos.				YPAPO/DGAPK/AR/A1/Φ21/57734/3705/26-7-2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004
Pyrgyki Katsagra in Katsagra Naxos, N. of the Catholic Metropolis of Naxos		Katsagra	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Temple Agios Andreou in Potamia Naxos		Foothills of Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Church of Agios Georgiou in Potamia Naxos		Foothills of Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
Basaios Tower — I. Timios Stavros Monastery in Shangri Naxos, n.e. of the Bajas family		To Larthon	Defensive complexes, monasteries, towers, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Church of Agia Sundays in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Church of Agios Georgiou in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
An archaeological site at the 'Tsikalaios — Upper Kastrou' site of Naxos, Region of the South Aegean.		Tsipalarium	Tips, Defence Compacts, New Spaces and Monuments, Housing Syntheses, Castles/Winds, Holy Temples of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/A1/Φ21/49087/2455/12-6-2012, GOVERNMENT GAZETTE 196/AA/13-6-2012
An archaeological site at the 'Pyrgos Himarrou' site in Naxos, South Aegean Region'.		Stream of stream	Towers	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/A/A1/Φ21/5195/247/13-2-2012 (GOVERNMENT GAZETTE 63/AAA/1-3-2012)
Agios Toal Oil Mondor in Naxos Agios Thal oil	Agios Sea oil		Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/66299/2051/8-12-1983 (GOVERNMENT GAZETTE, SERIES II, NO 86/20.2.1984)
I. Church of Agios Artemis in the Naxos Agides	Clips		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10- 1989)

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Trunsmission sy.	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Papatric Tower, between Naxos cakes and Naxos, N. Samarita and Gill families	Clips	Papatric valley between Angids and Bulles	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
St. Charanda Pyrgos House in Naxos Agidis	Clips	Koster	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/Β1/Φ27/56856/1192/20- 12-1985 (GOVERNMENT GAZETTE, SERIES II, NO 35/13.2.1986)
Tower of Marseena or Masse (former Barotchi) and Agios Antonios Pareclis in Upper Potamia Naxos, n. Popis Drylli and Manoli Drous	Upper Potamia		Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27773/728/7-8-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Agios Antonios chapeau in Upper Potamia Naxos, n. Popis Drylli and Manoli Drous	Upper Potamia	Marseena or Mansena tower (former Barochi)	Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27773/728/7-8-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Anemmy in Upper Shangri Naxos, n. D. Marakis	Upper Shangrinon		Rural Economy, Myles	MINISTERIAL DECISION/DILAP/Г/3944/63032/28-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1094/29- 12-1995)
I. Church of Agios Georgios Thalaitos in Marpisa (Tsopid) of Paros	Browsing paper		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
The windmill with In situ equipment allegedly owned by Eleni and Evangelia Skarkos, under the name 'Skaros', in the 'Tsigoura' site of the D.D., Municipality of Naxos, on the island of Naxos.	Browsing paper		Mills	MINISTERIAL DECISION ΥΠΠΟ/DINESAK/78039/2138/29.10.2008 (GOVERNMENT GAZETTE, SERIES I, NO 517/AA/18.11.2008)
Beloni tower or Polytero Tower (otherwise Sommarip) with the Agios Ioannou chap in Galanados	Galanadon		Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)

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Trunsmission sy.	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Naxos, n. Michail Marangou				
I. Cave birth in the Naxos Engineers	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Church of Panagia Monastiotissa in the Naxos Engineries	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
I. Brigades' church in the Naxos Engineers	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10-1965
Tower of Rotopoulou at Naxos Engarias	Engara kai		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower of high — I. Higher monastery or 'Tyrgos of Agegalopoulos' (also of the Kokkos family) in the Naxos Engineers, i.e. heirs of Ioannou and Sofia Angelopoulou	Engara kai		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Bridge at Naxos Engries	Engara kai		Bridges	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower of Pretoruna or Agiopetritis at the 'Langada' of Naxos Enkaras, Artos Foufopoulou	Engara kai	"Langada"	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/168/8/21.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5-1988)
House in Naxos Entities, n. Nikolaos Bulgaria	Engara kai	Instruments Neighbourhood	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower in Noskelo or Oslolo (other IEP. Konte and then Fr. Sammarip) with Agios Georgios Byzantine parachute in Kastraki Naxos, Sofia Psara and	Kastrakis	Noskelet or Oslolo	Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/1362/316/5-4-1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5-1985

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Transmission Sy	Settlement			
Name of the Monument		Position	Type of Monument	Government Gazette of Declaration
Michalis Malama				
Tower of Malatata in Lower Potamia Naxos, n. Vasiliki Maroulis	Lower Potamia		Defensive complexes, gardens/parks, towers	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/1362/316/5-4- 1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5- 1985
De LASTIC tower at Zeira Kato Potomias Naxos	Lower Potamia	Zeroa	Defence Compacts, Auxiliary Spaces, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Mari Mouss Tower or Montel Tower at Lierad Lower Potamis Naxos, families Maroulis and Skordalos	Lower Potamia	Lierida conurbation	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Dellaroka tower in Lower Shangri Naxos, n. Dimitrios Karavia	Lower Shangrinon		Rural Economy, Defence Complexs, Auxiliary Spaces, Towers, Doves	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Windmill in Lower Shangri Naxos, n. Ioannis Sofikitis	Lower Shangrinon		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Boyazoglou tower or Palaiologist tower in Lower Shangri Naxos, n. D. Antonakakis, F. Korre, K. Khatzimikhalis	Lower Shangrinon	Agios Anargyroi	Defence Compacts, Auxiliary Spaces, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Pyrgos-House Drylli in Lower Shangri Naxos, n. E. Drylli	Lower Shangrinon	Near I. Monastery of Agios Eleftheriou	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/1362/316/5-4- 1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5- 1985
Sommarip tower or Kurka tower (half-run) in Lower Shangri Naxos, n. Nikolaos Dellarokas	Lower Shangrinon	Near I. Church of Panagia, Kanakariotissa	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower Fragopoulos or Greka in Kurunorhori Naxou, n. Ioannis Dellaarkas	Kurunachorion		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)

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	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of small Villas Naxos (prehistoric settlement). Designation of protection zones A and B	Small Books (Small Viglas)		Archaeological Positions, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/2277/79/22-1-1986, GOVERNMENT GAZETTE, SERIES II, NO 94/7.3.1986 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/39110/1961/17-8-1992, GOVERNMENT GAZETTE, SERIES II, NO 554/8-9-1992 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/39110/1961/17-8-1992 (GOVERNMENT GAZETTE, SERIES II, NO 610/9.10.1992)
I. Moni Chrysostomou in Naxos	Moni Chrysostomou	On the slopes above the Grotta	Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41278/1166/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
Frangiko Fortaire Naxos	Naxos Naxos		Defensive assemblies, castles/guards	ROYAL DECREE 16-8-1937, GOVERNMENT GAZETTE 335/A/25-8-1937
Archaeological site of Grocta Naxou (the ruins of the fungal and Greek towns)	Naxos Naxos		Archaeological Positions, Housing Totals	MINISTERIAL DECISION 4897/17-4-1962, GOVERNMENT GAZETTE 149/B/28-4-1962
Naxos country	Naxos Naxos		Residential Totals	MINISTERIAL DECISION 4701/3-3-1967, GOVERNMENT GAZETTE 183/B/16-3-1967
Building squares of the Naxos country beach	Naxos Naxos		Natural Spaces, Housing Totals	Ministerial Decision 17163 p./8-4-1969, Government Gazette 86/D/2-5-1969
Archaeological site of the country of Naxos. Limits	Naxos Naxos		New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/Φ21/10720/486/10-6- 1980, GOVERNMENT GAZETTE, SERIES II, NO 608/3-7- 1980
Building block of the Naxos medieval castle	Naxos Naxos		Defensive Compounds, Households, Castles/Winders	Ministerial Decision No ΥΠΠ/ΑΧ/Β1/Φ27/46472/1723 e.e./18-10-1980 (Government Gazette, Series II, No 1148/11-11-1980)
Archaeological site of ancient town of Naxos, a prehistoric settlement of Gronta, a prehistoric cemetery of the Aplomas and the geometric/Gree k cemeteries of the kai	Naxos Naxos		New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/Φ21/70612/2431/25- 11-1982, GOVERNMENT GAZETTE, SERIES II, NO 145/5- 4-1983
The alleged house of Agios Nikodisos, Agoritos	Naxos Naxos		Urban buildings	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/2296/36/5-2-1986 (GOVERNMENT GAZETTE, SERIES II, NO 181/14-4-1986) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/32567/831/30-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 568/9-9-1986

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Trunsmission sy.	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
I. Agios Ioannou Temple in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10- 1989)
Orthodox metropolitan I. Naxos church	Naxos Naxos		Sacred churches of Christians, Religious Spaces	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/51358/1109 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
Archaeological site in the sea area of Grocta — berth — Palataki Naxos (ancient town of Naxos)	Naxos Naxos		Marine Spaces, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ43/52872/2645/25-11-1992 (GOVERNMENT GAZETTE, SERIES II, NO 722/2-12-1992)
Building in the country of Naxos, i.e. heirs of Artos Foufopoulou	Naxos Naxos		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1075/21292/15-5-1990, GOVERNMENT GAZETTE, SERIES II, NO 345/6.6.1990 MINISTERIAL DECISION YPAPO/DILAP/Γ/638/17211/29-3-1994, GOVERNMENT GAZETTE, SERIES II, NO 306//22-4-1994 MINISTERIAL DECISION YPAPO/DILAP/Γ/3136/56719/15-11-1994, GOVERNMENT GAZETTE, SERIES II, NO 913/9-12-1994
Building in Naxos, N. heirs of Loukia Papalexi	Naxos Naxos		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/1075/21292/15-5-1990, GOVERNMENT GAZETTE, SERIES II, NO 345/6.6.1990 MINISTERIAL DECISION YPAPO/DILAP/Г/638/17211/29-3-1994, GOVERNMENT GAZETTE, SERIES II, NO 306//22-4-1994 MINISTERIAL DECISION YPAPO/DILAP/Г/3136/56719/15-11-1994, GOVERNMENT GAZETTE, SERIES II, NO 913/9-12-1994
I. Touros Profitis Ilias and Agios Spyridon in the country of Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41406/1155/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9-1995)
I. Monastery of Agia Sunday (with the temple of the same name, I. Prefecture and ruins of Kapodistrian School) in the country of Naxos	Naxos Naxos		Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
I. Church of Capella (Asbestos arrest of Christ) in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41644/1195/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Church of Aghia Varvara in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41347/1141/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)

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Trunsinission sy.	Settlement			
Name of the		Docition	Time of Monument	Covernment Covette of Declaration
Monument	agglomerati on	Position	Type of Monument	Government Gazette of Declaration
I. Church of Agia Theodon and Extra-Capital Brigades and Agios Sevastianou ("Three Churches") in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
I. Temple Agios Antoniou, Ephimitis, in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
I. Church of Agios Dimitrios in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41344/1138/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Agios Ioannou Temple of the Market (of Prodromos) and Agios Stylianou church in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41315/1159/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Agios Monastery in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41320/1149/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Temple Agios Nikolaos in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41645/1196/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Agios Nikolaos Temple of the Market in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41354/1169/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
I. Temple Agios Panteleimonas in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41647/1198/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Church of Agioi Anargyroi in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41345/1139/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Church of Agios Thallios in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41272/1160/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Church of Grand Brigade in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41646/1197/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Church of Panayia of Christos ("Panagia of Christ of Plassa")	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41641/1192/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)

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,	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
and Agios Antope church in Naxos Country				
I. Church of the snow Panagia in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41353/1170/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
I. Temple Pantanassa in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41318/1147/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Temple of Funtana Brigade in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41342/1136/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Timios Stavros and grave of 1769 in the country of Naxos	Naxos Naxos		New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41346/1140/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Tour of Panapisti or Xenopoulas in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41643/1194/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Chrysopoliitsa, Agios Apostolos, Agios Spyridon and Agios Charalambous in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41348/1142/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
Parachure (dedicated to Panayia, Lourdis) former Ursulina School in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41343/1137/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Temple Agios Fanouri and Agia Paraskevi in Naxos Country	Naxos Naxos	Tinctures	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41404/1153/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
Pyrgossto house in the 'Kalanakis' location in the country of Naxos	Naxos Naxos	'Calconiums'	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
'Kastle' and 'Bourgo' districts	Naxos Naxos	'Castro' and 'Bourgos'	Residential Totals	MINISTERIAL DECISION 714/21-8-1963 (GOVERNMENT GAZETTE, SERIES II, NO 382//29-8-1963)
I. Temple of Saint- Barthélemy in the country of Naxos	Naxos Naxos	"South village"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41275/1163/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
Archaeological site of capeios	Naxos Naxos	Akrotirios Agios Georgios as far	New Spaces and Monuments,	MINISTERIAL DECISION 3888/21-2-1967, GOVERNMENT GAZETTE, SERIES II, NO 168/9.3.1967

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	Settlement			
Name of the Monument	of agglomerati on	Position	Type of Monument	Government Gazette of Declaration
Agios Georgios Naxos (original cemetery)		as the public road to Philtios	Archaeological Positions	
Archaeological site between Grocta and Metropolis Naxos	Naxos Naxos	B Metropolitan building	Archaeological Positions	MINISTERIAL DECISION 15794/19-12-1961, GOVERNMENT GAZETTE, SERIES II, NO 35/2.2.1962
Archaeological site of the island of Vakcho (old) (ancient temple)	Naxos Naxos	North of the agglomeration of Naxos	Archaeological Positions, Ancient Hera, Religious Sites	PRESIDENTIAL DECREE 18-8-1933, GOVERNMENT GAZETTE, SERIES I, NO 244//21.8.1933
Archaeological site of Grocta and Hill of Alplomas Naxos	Naxos Naxos	Northern beach of town until Aghia Friday	Archaeological Positions	MINISTERIAL DECISION 151291/6120/5-12-1957, GOVERNMENT GAZETTE 341/B/31-12-1957
I. Church of Agios Georgios, Grotta, in the country of Naxos	Naxos Naxos	Rota Routa	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41403/1152/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9-1995)
I. Church of Evangelismos 'to Fraro' (Annunciata) in the country of Naxos	Naxos Naxos	Road to Aghides	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41279/1167/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
I. Church of Agioi Theodoron in the country of Naxos	Naxos Naxos	Road to Excursions	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41405/1154/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 790/13-9-1995)
Central building of the 'former Urslin School' in Naxos, allegedly owned by the National Youth Institute	Naxos Naxos	Inside the castle	Urban buildings, public utility buildings	MINISTERIAL DECISION YPAPO/DILAP/ Γ /1389/26361/8-5-1995, GOVERNMENT GAZETTE, SERIES II, NO 538/21-6-1995 MINISTERIAL DECISION Δ A/9817/98/5-1-1999, GOVERNMENT GAZETTE 52/D/3-2-1999
I. Church of Agios Antoniou, Padua (Moni Kapotsina) in the country of Naxos		Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41642/1193/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Church of Panayia in Rodaria and Katsagra cemetery in the country of Naxos	Naxos Naxos	Katsagra	New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41351/1156/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9-1995)
'Theathologaki' Excellency in the country of Naxos	Naxos Naxos	Under I. Moni Chrysostomou	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41352/1157/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 790/13-9-1995)
I. Church of Agia Paraskevi in the country of Naxos	Naxos Naxos	Beneath Prança Square	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41317/1146/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)

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Transmission Sy	1			T
Name of the	Settlement			
Name of the Monument	agglomerati on	Position	Type of Monument	Government Gazette of Declaration
I. Church of Christos in the country of Naxos	Naxos Naxos	Near the Gymnasium	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41402/1151/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
House in Naxos Country, n. C. Hatzandreou, Charalambou Kardiolka, Evangelos Marmatakis and Michalis Islands	Naxos Naxos	Burgos	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ28/4372/104/3.3.1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4-1988
I. Church of Agia Paraskevi, Burgos in Naxos Country	Naxos Naxos	Burgos	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41402/1151/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Temple of Panagia Mydiiotissa and island in Naxos	Naxos Naxos	Islands in port	Natural Spaces, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41355/1168/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
Lascari-Cretan House at Exarchoulou Street in Naxos Country	Naxos Naxos	Akrichopoulou Street	Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41319/1148/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
Aristovou Melissinou House at Makedonomach ou Pranda Street in Naxos Country	Naxos Naxos	Makedonomach ou Prança Street	Gardens/parks, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41276/1164/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
Archoniko Magakis-Aaron at the Metrotroliteou Neofytou Street 52 in the country of Naxos, n. Loukia Papastamatou and Maria Pliatska	Naxos Naxos	Metrotolitou Neofytou Street 52	Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/16422/427/28-5-1986, GOVERNMENT GAZETTE, SERIES II, NO 440/4-7-1986
Home shell in the country of Naxos, n. Mr E. Geranitis	Naxos Naxos	Beach	Building Departments, Urban Buildings	MINISTERIAL DECISION DILAP/ Γ /3018/73394/8-2-1980, GOVERNMENT GAZETTE, SERIES II, NO 277//20.3.1980 MINISTERIAL DECISION YΠΠΟ/ Δ ΛΑΠ/ Γ /226/3476/21-1-1988, GOVERNMENT GAZETTE 65/B/4-2-1988
I. Church of Panagia of Karmoil or Salvara in the country of Naxos	Naxos Naxos	Region of Greece	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41280/1171/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
I. Church of Agios Georgios (father's name, Kavalouri) in the country of Naxos	Naxos Naxos	Meteorological Station Area	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41401/1150/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)

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Name of the Monument	agglomerati	Position	Type of Monument	Government Gazette of Declaration
The archaeological site of the ancient port project in the modern port of Apollon Naxos, Municipality of Naxos and Micro-Cyclades, Regional Unit of Naxos, Region of South Aegean.	Naxos Naxos	modern port of Apollon Naxos	Marine Spaces, Port Facilities, Archaeological Positions	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/DIPKA/TACH/Φ21/86867/20724/4511/42 18/27-8-2012 (GOVERNMENT GAZETTE 292/AAA/14-9-2012)
I. Church of Hagia Sophia in the country of Naxos	Naxos Naxos	Jewish district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41314/1158/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Theosscaptis (Genesis of Theotokos) in the country of Naxos	Naxos Naxos	Kastrou district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41350/1144/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Touristos (Metropolis Catholic) in the country of Naxos	Naxos Naxos	Kastrou district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41349/1143/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Church of Agios Ioannou (father's name: Athens Ioannou) in the country of Naxos	Naxos Naxos	Kilometre	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41277/1165/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

As regards the area of study of the project at the Regional Unit of Lavreotikos, please note the following:

- The landing point is located within the Agios Nikolaos Mountain, which has been established as an archaeological position (Ministerial Decision 2258/4-2-1966, Government Gazette, Series II, No 175//26-3-1966, Presidential Decree 17-2-1998, Government Gazette 125/D/27-2-1998).
- The land route of the line, which is located alongside the road network, passes through the boundaries of the 'A Archaeological Area of Lavrio' (Ministerial Decision 25666/984/30-5-1957, Government Gazette, Series II, No 184//8-7-1957, Ministerial Decision 25666/984/30-5-1957, GG II 265//1-10-1957, Ministerial Decision 21220/10-8-1967; Government Gazette, Series II, No 527/24-8-1967, Ministerial Decision 2717/Π-102/91/2-10-1991, GG 946/Δ/23-12-1991, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ02/6690/376/21-11-1994, Government Gazette, Series II, No 927/14-12-1994, Presidential Decree 17-2-1998, GG 125/Δ/27-2-1998)
- The submarine line passes 700 m south from the sun's archaeological site in the sea area of Cape Vrysaki Thorikos, where there is a shipwreck of Byzantine years (Government Gazette, Series II, No 2069/21-09-2015).

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• Within the study area, 1.5 km north of the project's land route and the Lavrio hotspot are located at a sunal archaeological site in the sea area of the Turmolimno Thorikos Bay, in South Evia, where two shipwrecks: a classical time and a sinking of Roman times. The A & B sections of the site are classified as open to the public for underwater surveys (Government Gazette 2069B/21-09-2015 and 2655B/09-12-2015).

As regards the planning area of the project in the municipality of Serifou, Regional Unit of Milos, please note the following:

- To the west of the new Serif and the underground transport line of Serifou, a distance of more than
 400 m lies in the settlement of Livadi where the sites 'Historical conservation monument the building
 owned by M. Chrysoloras in Livadi Serifou' (Government Gazette, Series II, No 900/13-12-1993) are
 located (Government Gazette, Series II, No 900/13-12-1993), 'An art project in need of special State
 protection for the house owned by Artemisia Hatziathanasios in Livadi Serifou' (Government Gazette,
 Series II, No 967//26-09-1980).
- To the south-west of a new Sierfou water station and the underground transport line, at a distance of approximately 1 km, the I. Agios Georgios Temple of Necetos in Livadi Serifou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31303/684/31-7-1987 (Government Gazette, Series II, No 466/28-8-1987) is located.
- The sea area from Cape V. Platotos to the bay of Psiliamos in Serifos, which has been designated as a sea area for submarine activities with breathing apparatus, deep-boat or other means of bottom surveying (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/AX/A1/Φ41/88711/4369/22-10-2005 (Government Gazette, Series II, No 1610//22-11-2005)) is located north of the new Serifs' Water Management Plan at a distance of approximately 1 km.
- The settlement of the country of Serif, which is located approximately 1.8 km north-west of the new Sierfou water body, has been reinstated as a traditional settlement and a site of special natural beauty requiring special State protection (Government Gazette $594/\Delta/13-11-1978$, 274/B/24-05-1983, $345/\Delta/02-06-1989$ and $930/\Delta-24-10-2002$).
- To the west of the new Serif and the underground transport line of Serifou, more than 1.5 km is located by I. Brigadier General of the country of Serifos (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810//20-10-1989)
- The Serif Castle is located approximately 1.8 km north-west of the new Sierfou water body. The following monuments are located within the site:
 - The ruins of the Serif Castle (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Ioannou Theologos in Chios Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Eleftheriou in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Touros Profitos Daniel in the country of Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Panagia in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Christos in the Serif Castle (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31304/685/31-7-1987, Government Gazette, Series II, No 459/21-8-1987)
 - House of Georgios Lefikos in the Serif Castle (Ministerial Decision 6922/291 e.e./12-2-1972,
 Government Gazette, Series II, No 148//17-2-1972)

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• To the north-west of a new water/Sierfou, approximately 1.7 km away, in the village of Kalličos, I. Timios Stavros Thimiou is located (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810/20-10-1989).

As regards the planning area of the project in the municipality of Milos, Regional Unit of Milos, please note the following:

- Approximately 700 m of the underground transport line of the southern Milos passes through Zone B of the Archaeological site in the Provasia Milos (Romanic and PaleoChristian remains), (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/26587/12393/25-6-1990, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG 140/B/18-2-1999).
- To the west of the landing point of southern Milos, approximately 1.1 km is the archaeological site at the 'Kipi' of Milos (two churches and an anti-Christian painter) (Royal Decree 24-7-1936, Government Gazette, Series I, No 332, 6-8-1936).
- To the east of the new Milos bath, approximately 1.3 km is the historic memorial I. Church of Christou in Zefyria Milos (Ministerial Decision 18429/808/13-2-1954, Government Gazette, Series II, No 60/26-3-1954).
- To the south-east of the new Mileium, around 1.4 km is the historic memorial of Agios Charalambous in Zefyria Milos (Government Gazette, Series I, No 332, 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series II, No 935/10-10-1996).
- To the south-east of the new Mileium, around 1.4 km is the historically preserved monument I. Theattokos Prefectural Church (Portiani) in Zefyria Milos (Government Gazette, Series I, No 332, 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series II, No 935/10-10-1996)
- To the north-east of the northern landing point on the island of Milos, the historic memorial I. Agios Konstantinos Temple in Pachaina Milos (Ministerial Decision of the Ministry of the Environment, Regional Planning and Public Works/B1/Φ27/1544/58/1-2-1985, Government Gazette, Series II, No 94/21.2.1985) is located approximately 350 m away.
- To the north-east of the northern landing point on the island of Milos, there is approximately 1.1 km of the archaeological site of the guillopi Milos, with the ruins of the ancient guillopi, its cemeteries and a monumental calorie of the classical Chronics second half of the 4th of the BCs⁽⁾ Ministry of the Environment, Fisheries and Food/A1/F21/26587/12393/25-6-1990), Ministerial Decision 3888/21-2-1967, Government Gazette 168/B/9-3-1967, Ministerial Decision YΠΠΠ/AX/A1/Φ21/58434/2938/16-11-1979, GG 209/B/29-2-1980, Ministerial Decision YΠΠΟ/AX/A1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision YΠΠΟ/DGA/AX/A1/Φ21/58772/3934/9-10-2002; Government Gazette, Series II, No 1348/17-10-2002, Ministerial Decision YPAPO/DGAPK/A1/Φ21/58772/3934/9-10-2002 (Government Gazette, Series II, No 1690/2-12-2005)
- To the east of the underground transport line of the northern Milos, approximately 600 m is located on the border of the archaeological site in the Milos gypsyna (lack of Greek and Roman settlement) (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, Government Gazette, Series II, No 1193/19-11-1998).

As regards the planning area of the project in the Municipality of Folegandrou, Regional Unit of Thira, please note the following:

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- To the north-west of a new Folegandro bachelor, approximately 1.4 km away, there is the historic memorial I. Theattokos Prefecture Temple of Foleganros (Ministerial Decision 10976/16-5-1967, Government Gazette, Series II, No 353//31-5-1967)
- Greece is located 1.7 km north-west of the new water/body and the Folegandro underground transport line. Within Greece, the following monuments are located:
 - \circ The country has a historical site and special natural beauty (Ministerial Decision A/ \oplus 31/5760/571/24-4-1973, Government Gazette, Series II, No 526/8-5-1973).
 - O Historical monument I. Temple of Brigade in Greece (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)
 - Historical monument I. Church of Agios Antoniou in the country of Folegandrou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)

As regards the project area in the Regional Unit of Thira, Municipality of Thira, Regional Unit of Thira, please note the following:

• South-east of the new Water/Shira and the underground transport line, approximately 340 m away, there is an archaeological site of Monolithos, with archaeological residues dating from prehistoric times to late seniority (Ministerial Decision No ΥΠΠ/ΑΧ/Α1/Φ21/77169/3858/30-1-1980, Government Gazette, Series II, No 300/24-3-1980, Presidential Decree 16-2-1990, Government Gazette, Series II, No 139/D/19-3-1990).

As regards the project area in the Regional Unit of Naxos, Municipality of Naxos and Micro-Kyclades, Regional Unit of Naxos, please note the following:

- The entire project on the island of Naxos falls within Zone B of the archaeological site in Strida with residues from the processing of flint during prehistoric times (cores, flakes, etc.), the foundations of a circular tower of the 4th B.P.C.^{and} the granite quarries (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/DGAPK/ARX/A1/Φ21/32793/2143/28-4-2004); GG II 966, 29.6.2004, Ministerial Decision ΥΠΠΟ/DGAPK/AX/A1/Φ21/32793/2143/28-4-2004 (Government Gazette, Series II, No 140/4-2-2005)
- To the east of the underground transport line, at a distance of approximately 300 m, there is the ancient monument I. Agios Prokopiou Temple in Agios Arsene Naxos (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ30/ΚΗΡ/49013/1935/23-12-1998, Government Gazette, Series II, No 26/25-1-1999).

The declared archaeological sites and monuments found in the study area and the location of the project under study are set**out in the Land Use and Coverage Map**(Environmental Map: Annex 15 to this study.

It follows from the above that although parts of the project are located within the boundaries of declared archaeological sites, there are no issues of incompatibility of the project with existing restrictions on these sites.

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5.2 Planning and town planning regulations in force in the area of the project

5.2.1 Forecasts and guidelines of the General, Special and Regional Framework for Spatial Planning and Sustainable Development

5.2.1.1 <u>General Framework for Spatial Planning and Sustainable Development (Government Gazette, Series I, No 128)</u>

The 'General Framework for Spatial Planning and Sustainable Development', and more specifically **Article 2 thereof**, **states** the following:

Improving access to and development of key transport, energy and communication networks.

In addition, the spatial structure of strategically important energy and communications infrastructure and services networks is mentioned in Article 6:

Connecting all the Greek residential islands to the energy transmission network of the mainland part
of the country, i.e. to the PPC's interconnected system, which will also keep their autonomous power
plants in reserve.

The project under study, which concerns the interconnection of the electricity transmission system of the Western Cyclades with the continental system, is therefore foreseen in the General Framework for Spatial Planning and Sustainable Development.

5.2.1.2 <u>Special Frameworks for Spatial Planning and Sustainable Development</u>

According to data from the Ministry of the Environment and Energy (http://www.ypeka.gr/?tabid=513), the Special Frameworks for Spatial Planning and Sustainable Development are sets of texts and/or diagrams specifying or supplementing the guidelines of the General Framework for Spatial Planning and Sustainable Development relating to the development and organisation of the national area, and in particular:

- The spatial structure of certain sectors or sectors of productive activities of national importance.
- The spatial structure of the networks and services of technical, social and administrative infrastructure
 of national interest, with the exception of telecommunications networks and services, and the spatial
 distribution of knowledge and innovation infrastructures.
- Certain specific regions of the national area, in particular coastal and island regions, mountainous and problematic areas, regions covered by international or European conventions on environmental protection, and other parts of the national area which present critical environmental, development and social problems.

The Special Frameworks are:

- Special Framework for Spatial Planning and Sustainable Development for aquaculture (Government Gazette, Series II, No 2505)
- Special Framework for Spatial Planning and Sustainable Development for Tourism and the Strategic Environmental Impact Assessment (Government Gazette, Series II, No 1138 2009)
- Amendment of the Special Framework for Spatial Planning and Sustainable Development for Tourism and the Strategic Environmental Impact Assessment (Government Gazette, Series II, No 3155 2013)

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- Specific Framework for Spatial Planning and Sustainable Development for Industry and its Strategic Environmental Impact Assessment (Government Gazette, Series I, No 151, 2009)
- Specific Framework for Spatial Planning and Sustainable Development for Renewable Energy Sources (RES) and its Strategic Environmental Impact Assessment (Government Gazette, Series II, No 2464)
- Special Framework for Spatial Planning and Sustainable Development of Detention Centres (Government Gazette, Series II, No 1575 2001).

The project under study, which concerns the interconnection of the electricity transmission system of the Western Cyclades with the continental system, has no direct link with any of the above-mentioned Special Frameworks for Spatial Planning and Sustainable Development. In any event, as the project in question is an infrastructure network, it will make a decisive contribution to strengthening all three economic sectors as it is an important factor in the security of fixed electricity supply in the Western Cyclades.

5.2.1.3 <u>Regional Framework for Spatial Planning and Sustainable Development of the South Aegean</u> Region (Government Gazette, Series II, No 1487 2003)

The approved 'Regional Framework for Spatial Planning and Sustainable Development of the South Aegean Region' provides as follows:

C. 6. Spatial structure of the core networks of other technical infrastructure

C.6.1. Energy

The South Aegean should be a space for innovative applications and a centre for exchange of experience and transfer of technology and know-how in the field of renewable energy.

Achieving energy efficiency and/or autonomy (in areas where possible) by promoting renewable energy applications, combined with conventional forms of production and saving methods, as well as reducing the environmental burden from conventional generation plants, fuel storage facilities and overhead electricity transmission networks, are priorities of programming planning at regional level. This includes the following actions:

- Giving priority to the implementation of PPC's ten-year planning for the islands, with the aim of reducing the time for completing the procedures for covering planned aids and extensions of existing plants, the construction of new plants and the implementation of interconnections with the continental system.
- Exploiting the high wind potential of the islands, within the constraints set for the conservation of the islands' natural and cultural stock
- Further support for the installation of solar power plants, especially in the smaller islands. The already installed capacity shall document he possibilities and limits of this option.
- Examine the possibilities for exploiting the geothermal fields of Milos and Nisyros in relation to the Integrated Environmental Management and Protection Plans for the adjacent Natura 2000 areas.
- Modernisation of the energy transmission system and its quality.
- Ensuring that the energy needs of future EIAs are met by informing the energy planning body in good time.
- Implementation of environmental information programmes for island residents, with a focus on new energy technologies and environmental management systems followed by PPC. Trying to prevent future reactions for environmental reasons is particularly important given the inevitable dependence on conventional forms of energy production.

Establishment of a specific framework of environmental criteria, conditions and restrictions for the aesthetic integration of energy installations (production, fuel storage, energy transmission, etc.). In particular, the drawing and technical solution of the crossing of transport lines on the land must be the subject of specific

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environmental and technical studies, where appropriate. It is proposed that the solution of underground cables should normally be chosen, with the necessary increased costs being borne by development programmes (sectoral or regional), in order to protect the sensitive physical and built environment of the islands.

In view of the above, it is considered that the project under consideration is compatible with the 'Regional Framework for Spatial Planning and Sustainable Development of the South Aegean Region', as it concerns the connection of the electricity transmission system of the Western Cyclades to the Greek system and therefore fits into the 'Implementation of interconnections with the continental system'.

5.2.2 Institutional status, in accordance with approved plans (regulatory, general town planning, town planning, ZOE, CWOO, demarcation of settlements or other land-use and building plans)

The institutional status in accordance with the approved GPS and CWOO has already been presented in paragraph 5.1.1 'Institutional boundaries of settlements and approved town planning plans' of this EIA.

5.2.3 Specific management plans (ESDA, PESDA, water management plans, etc.)

5.2.3.1 Regional Solid Waste Management Plans (PESDA)

Region of South Aegean

The 'Strategic Environmental Impact Assessment (SEPE) for the updated PESDA of the South Aegean Region' (July 2016) has been prepared and the revised/updated Regional Waste Management Plan (PEDA) of the South Aegean Region has been approved (with Joint Ministerial Decision No oik. 63083/5402 (Government Gazette, Series II, No 4317,2016) on the ratification of the decision approving the Regional Waste Management Plan of the South Aegean Region.

The South Aegean PESDA is structured along the following lines of action:

- Sorting at source by stream of recyclable materials (4 streams) and separate collection of bio-waste.
- Use of dedicated separate collection bins for large tourist units
- Green points in all municipalities, high aesthetic recycling islands in tourism and Recycling Centres for Education in Selection in Source (KAEDISP).
- Creation of biological treatment units (composting) for each municipality
- Promotion of domestic composting and the use of waste as animal feed
- Creation of units processing mixed MSW on large islands
- Coverage of the region with safe final disposal projects (landfills and transhipment stations)
- <u>Project provision also for other waste streams</u>: sludge, solid industrial waste, waste oils, vehicle and
 industrial battery waste, end-of-life vehicles, used tyres of vehicles, industrial WEEE, waste from
 health facilities, excavation, construction and demolition waste (CED), agricultural and livestock waste.

According to the proposal of the PESDA, the Region of South Aegean consists of two management units, the Cyclades and the Dodecanese. It should be noted that the region's insularity, together with the provision of the ECHR to maximise recovery through sorting systems at source and minimise the requirements for processing mixed MSW, do not leave much room for flexibility and alternative scenarios. The substance of alternative scenarios can be assessed at 2 levels:

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- 1. Explore the possibility of implementing mixed MSW processing plants (the quantities remaining after IPS actions) on large islands in order to maximise material recovery and diversion of MSR from burial and to achieve the objectives in the management of MSW during the transitional period until the objectives of sorting at source are met. These alternative scenarios (with or without a waste treatment plant) concern in principle the islands: Rhodes, Kos, Syros, Naxos
- 2. Explore the possibility of maritime transport of MSW to neighbouring islands for processing and/or disposal. These alternative scenarios concern the islands on which there are no and there are difficulties in constructing and operating a landfill site. These alternative scenarios (FYTA or maritime transport to another island) concern in principle the following islands: Sicinos, Small Cyclades, Antiparos, Kalymnos, Chalk, Psermos, Thirasia.

The safe disposal projects and the network of transhipment stations serving the Region are presented in the table below.

Table Error! No text of specified style in document.-10 Transhipment and Safe Disposal of MSW Projects

Management Module	Island	S.M.A. and XYT projects
Cyclades	Andross	One (1) Hygiene landfill (Andros HYT) with pre-treatment Mobile WAM
	Anaphis	One (1) Sanitary Landscape (Anaphi HYT) Baling of AT
	Hunting	One (1) Sanitary Landing Site (Thira HYT) Temporary storage in Thirasia
	lo	One (1) Sanitary Landfill Site (los HYT) AGGREGATE
	Skininos	One (1) Sanitary Landfill (Sicino HWT) AGGREGATE
	Fologanros	One (1) Sanitary Landfill (HYT Folegandrou) Temporary storage of AT
	Kapia	One (1) Landfill site (Kea) AGGREGATE
	Kythnos	One (1) Sanitary Landfill (Kythnos HHT) AGGREGATE
	Kimolos	One (1) Hygiene landfill (Kimlos HYTY) AGGREGATE
	Apple	One (1) Sanitary Landfill Site (MILL) AGGREGATE
	Serifos	One (1) Sanitary Landfill site (Sierfou HYT) AGGREGATE
	Sifnos	One (1) Sanitary Landfill (Sifnos HYT) AGGREGATE
	Mykonos	One (1) Sanitary Landfill (Mykonos HWT)
	Naxos Naxos	One (1) Sanitary Landscape (Naxos HYTY) 5 PMA 5
	Amorgos	One (1) Sanitary Landfill (Amorgos HYT) AGGREGATE
	Antiparos	AGGREGATE OF AN ARM
	Paros	One (1) Sanitary Landfill (Paros HYT) Flexibility for the construction of PMA
	Syrians	One (1) Syros sanitary landfill AGGREGATE
	Tinos	One (1) Sanitary Landfill Site (Tinos HYT) AGGREGATE

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Management Module	Island	S.M.A. and XYT projects
Dodecanese	Good:	One (1) Sanitary Landing Site (Agathonissi HYTY) AGGREGATE
	Astypalaia	One (1) Sanitary landfill (Astipalaia HYTY) AGGREGATE
	Kalymnos	One (1) Sanitary Landfill (HYT of Kalymnos) AGGREGATE
	Skirts	One (1) Sanitary Landfill (HWT) AGGREGATE
	Leros Leros	One (1) Sanitary Landfill Site (Leru HYT) AGGREGATE
	Patmos	One (1) Sanitary Landscape (Patmos HYT) AGGREGATE
	Carpathos	One (1) Sanitary Landfill (Karpathos HYTY) AGGREGATE
	Cassos	One (1) Landfill site (Kassos HYT) AGGREGATE
	Kos	One (1) Sanitary Landfill Site (Kos HYT) Mobile PMAs
	Nisyrs	One (1) Sanitary Landscape (Nispyros HYTY) AGGREGATE
	Maximum maximum	One (1) Hygiene landfill (Maximum HYTY) AGGREGATE
	Rhodes	Two (2) Sanitary Landfill Areas (North and Southern Rhodes HWT) Mobile PMAs
	Symi	One (1) Symi landfill AGGREGATE
	Tileos	One (1) Sanitary Landfill Site (Tileu HYTY) AGGREGATE
	Halki	Existing transhipment infrastructure

The PSEDA provided for the construction and operation of 18 landfills in the Cyclades, of which 10 and 15 landfills have been implemented in the Dodecanese, of which 9 have been implemented. In addition, landfills are at different stages of implementation (design phase, construction phase and permitting stage). The implementation of the PESDA is therefore relatively satisfactory and the remaining landfills must start operating, particularly on the major islands (e.g. Kalymnos, Thira, Naxos, etc.).

The project under consideration is not in contradiction with the provisions of the South Aegean Regional Waste Management Plan (PESDA).

Region of Attica

A study on the revision of the Regional Waste Management Plan (PESDA) of Attica has been prepared (July 2015).

Decision No 414/2016 of the Regional Council of the Attica Region approving the 2nd revision of the Regional Waste Management Plan (PESDA) of Attica has been issued (Article 35 Law 4042/2012, as amended by Article 3(2) 31 Law 4342/2015 (Government Gazette, Series I, No 143, 9.11.2015, in force).'

According to the revised PESDA of Attica, Attica is subdivided into two Management Units as follows: the 1st Regional Unit consists of the whole region of Attica except Kythira and Anticythira and the 2nd Regional Unit consists of the islands of Kythira and Anticythira.

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According to the strategic environmental impact study for 2^{the review} of the PESDA of Attica, **its general objectives** are as follows:

- 1. Stabilisation of waste generation at 2011 levels (2014 for MSW), with a decreasing trend
- 2. Preparation and implementation of local decentralised management plans by all municipalities in accordance with the provisions of the ECHR
- 3. Prioritising waste and managing waste in decentralised infrastructure.
- 4. Creation of a network of Green Points KESDP and their completion by 2020
- 5. Radically redesign the existing management infrastructure planning and Complete the necessary network in waste management infrastructure by 2020
- 6. Reducing to a minimum the total amount of recoverable waste disposed of for landfilling
- 7. Further exploitation of secondary materials (composite/type A compost) ensuring strict quality standards
- 8. Energy recovery in a complementary role when other recovery margins have been exhausted
- 9. Elimination of uncontrolled disposal of municipal waste by 2015 and other waste by 2018
- 10. Rational management of historically stored waste and rehabilitation of its storage sites by 2016
- 11. Remediation of the main contaminated waste disposal sites by 2020.

The project under consideration does not conflict with the provisions of the Regional Solid Waste Management Plan (PESDA) of the Region of Attica.

The Local Solid Waste Management Plan of the Municipality of Lavreotikos (as approved by the Municipal Council of Lyretica on 21 July 2015). The local plan concerns the way waste is managed from home, workplace, shop, etc. to the Transhipment Station (already existing in Lavretica, Keratea).

Briefly includes the following steps

- 1. Prevention
- 2. Re-use
- 3. Recycling, composting

The project under consideration does not conflict with the provisions of the Local Solid Waste Management Plan of the Municipality of Lavreotikos.

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5.2.3.2 Water management plans

The project under study does not conflict with the provisions of the approved management plans, in particular:

- Approved 1^{revision of the} River Basin Management Plan of the South Aegean Water District (GR14) (Special Secretariat for Water, 2017)
 - As regards the relationship between the location of the project and protected areas in the South Aegean Water District, please note the following:
 - In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.7 km.
 - On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1.3 km.
 - In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 3.5 km.
 - On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos — Profitis Ilias — Wider Area' over a length of approximately 700 m.
 - In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 13.5 km.
 - On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 — Western Milos, Antimilos, Polygos and Islands' over a length of approximately 7 km.
 - As regards the relationship between the location of the project and protected areas in the South Aegean Water Department that have been classified as recreational/penalty waters, please note the following:
 - 0.8 km west from the landing point of the submarine cable in the southern Milo is located near the 'Côte Provaa' (GRBW149287155), which in 2013-2018 is assessed as being of excellent quality.
 - 0.6 km west from the landing point of the submarine cable in western Naxos is located near Akti Agios Prokopios (GRBW149292181) which in 2013-2018 is assessed as being of excellent quality.
 - The project under consideration does not conflict with the actions envisaged in implementation of Community Directives proposed as measures for the South Aegean Water Department (GR14).
 - Furthermore, the project under consideration does not conflict with the additional measures provided for in the Southern Aegean River Basin Management Plan (GR14).

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- Approved 1^{revision of the} River Basin Management Plan of the Water Department of Attica (GR06) (Special Secretariat for Water, 2017)
 - The project under consideration does not conflict with the planned actions in implementation of Community Directives proposed as measures for the Water Department of Attica (GR06).
 - Furthermore, the project under consideration does not conflict with the additional measures provided for in the River Basin Management Plan for the Water of Attica (GR06).

The project under study is not related to:

- Increased abstraction of water from surface or underground water resources
- Increased production of liquid or solid waste which may affect surface or underground water resources.

5.2.4 Organised Receptors for Activities

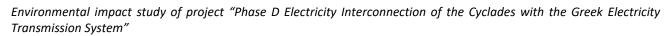
As regards the South Aegean Region, please note the following:

- In accordance with 1^{the revision} of the Management Plan for the South Aegean Water District (YD14)(2017), there are no fish farms close to the project on the islands of Serphos, Milos, Foleganros, Thira and Naxos.
- At the south-west boundary of the land of the water body is the Sierfou EYL.
- 240 m to the west of the plot of water/Milos is located by the PPC's PPC.
- 150 m south-east of the Municipal Unit in the south of Milos and 0.8 km south of the land at the water body is situated at Milos Airport.
- 370 m southeast of the G.M. in the N. Milos are located on the surface mines bentonite
- 250 m to the east of the GM in the N. Milos is a quarrying region
- On the south-eastern boundary of the land of the new water/Shunting, the PPC Thira is located
- 250 m south-west of Hunting is located at Thira Airport
- Km to the west of Hunta is located in the Katerida agglomeration and 3.2 km south of the project is located in the Messaria agglomeration of Messaria
- 3 km to the east of the project is Naxos Airport.
- 4.9 km to the east of the project is Naxos OEL

As regards the Region of Attica, please note the following:

- The project is located within or around the PPC's Lavrio Energy Centre (AES) plot
- In accordance with 1^{the revision} of the River Basin Management Plan of the Water District of Attica (GR06) (2017), fish farms are not located close to the project in the Lavretic Regional Unit.
- Around 100 m north of the project is located in the Lavrio Sil.

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• At about 2 km south of the project is the Lavrio Technological Cultural Park

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6. DETAILED DESCRIPTION OF THE PROJECT

6.1 Detailed description of the project

6.1.1 Introduction

In order to cope with the unhindered supply of the loads in the southern Cyclades (Serfos, Milos, Fologrou and Thira), due to the increasing load and to improve the supply capacity, it is planned to develop a connection to 150 kV from the Lavrio GIS to the new licensed and under construction water/system GIS Naxos, via the islands of Serofs, Milos, Fleganros and Thira. The project includes 150 kV submarine cables with a total length of **353.2** km and 150 kV underground cables with a total length of **19.6** km, from GIS Lavrio to the new GIS Naxos watercourse, as well as the new substations on the islands of Serfou, Milos, Folegandrou and Thira.

The work of this study is located in the municipality of Lavreotikos in the Region of Attica and on the islands of Serfos, Milos, Foleganro, Thira and Naxos of the municipalities of the South Aegean Region of the same name.

The design of the new cable system shall include the following:

- 1. Underground section of the 150 kV Cable section of Attica at Lavroomikos approximately 1 047 m from the terminal area of GIS Lavrio to the landing site in a space adjacent to the Lavrio SES. The route to the bottling site will be carried out on a common road or areas to be granted by the Lavrio SES.
- 2. Submarine section of the 150 kV cable G.C., length approximately 109.3 km from the bottling position in a space adjacent to the Lavrio SES to the 'Cyclaid' Serifou pitch. The submarine interconnection will be implemented by an XLPE insulation tripolar submarine cable with a power transfer capability of 200 MVA.
- 3. Underground section of the 150 kV Cable section of Sierofimikos, approximately 1.385 m from the 'Kycladi' Sierfou to the new GIS Serifou water station. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- 4. Submarine section of the cable G.M. 150 kV length of approximately 46.7 km from the 'Kyclaid' Cycloud to the 'Ag. Konstantinos' pitch in the V. Milos. . The submarine interconnection will be implemented by an XLPE insulation tripolar submarine cable with a power transfer capability of 200 MVA.
- 5. Underground section of the 150 kV Cable section of the Municipal Unit of Apple of approximately 7 500 m from the 'Ag. Konstantinos' bottling site in the V. Milos to the new GIS Milos water body. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- 6. Underground section of the 150 kV Cable section of the N.M.M., a length of approximately 6 650 m from the new water/body GIS Milos to the bottling position in the 'Prova' N. Milos area. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

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- 7. Submarine section of Cable G.U. 150 kV 55.2 km from the bottling position in the 'Provvas' area of N. Milos to the 'Libyadi' Fleangrou. The submarine interconnection will be implemented by an XLPE insulation tripolar submarine cable with a power transfer capability of 200 MVA.
- 8. Underground section of the 150 kV Folegandrou cable section of a length of approximately 1 872 m from the 'Livadi' Fleangrou to the new GIS Folegandrou bathing site. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- 9. A submarine section of the 150 kV cable G.M. with a length of approximately 59.9 km from the bottling position in the 'Libya' area of Foleangrou to the 'monolithol' Thira bottling site. The submarine interconnection will be implemented by an XLPE insulation tripolar submarine cable with a power transfer capability of 200 MVA.
- 10. Underground section of the 150 kV Cable section of Hunting, length of approximately 607 m from the 'monolithic' Hunting site to the location of the new GIS Thira water body. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.
- 11. A submarine section of the 150 kV cable G.M. with a length of approximately 82.1 km from the bottling position in the 'monolith' area of Thira to the bottling position near the 'Stalida' of Naxos. The submarine interconnection will be implemented by an XLPE insulation tripolar submarine cable with a power transfer capability of 200 MVA.
- 12. Underground section of the 150 kV Naxos cable section of a length of approximately 528 m from the landing position near Naxos 'Stalida' to the Naxos Y/Σ . The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

Description and technical characteristics of submarine and underground cables are included in paragraphs 6.1.5 and 6.1.6 of this Decision.

In addition, the project includes the construction of four 150/20kV substations on the islands of Serphos, Milos, Fologrou and Hunt. A description and technical characteristics of these substations are included in paragraph 6.1.7 of this Decision.

6.1.2 Selection of routing zones and landing positions

As part of the siting of the submarine cables, taking into account the characteristic sizes of the marine area of study (slopes, dynamometers, etc.), a routing zone with an average width of 1 500 m has been established, within which the submarine cables will be set. Their exact position will be determined following a detailed oceanographic/bathometric survey to be carried out by a contractor on behalf of ADMIE, which will provide the information on the bathymetry of the area, the geomorphology of the bottom surface (indications of the presence of rocky, rocky areas, steep slopes, etc.) and the structure of the seabed (soil formation below the bottom surface) on the whole of the submarine route. It should be noted that approximately 1 km before the vacation on each island, the routing zone is quite limited, reaching approximately 100-200 m wide.

The mooring areas of the cables, for which an application for a licence to use will be submitted for the execution of civil engineering works on the foreshore and common beach, were selected on the basis of accessibility, the least nuisance to the public and the possibility of routing the underground cables to the terminal areas.

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The surface area of the requested areas is determined by the number of underground cables and the surface required for the joints of submarine cables and the corresponding underground cables, which then run to the terminal areas.

6.1.3 Technical Description of Works

From the precipitation areas, each submarine cable, by means of suitable connectors, will be connected to three underground single-pole cables (1 underground cable per pole), which will be routed towards their termination within a canak, first within the foreshore and then on public, municipal or rural or expropriated roads.

The drum from the pitch to the transition lock for submarine cables shall have a width of approximately 1 metre for each circuit, with a minimum distance between the circuits of 5 m and a depth of 2 m.

The underground-submarine transition connectors (RO/HB) of single-pole cables are used to connect the underground section to the submarine section of the interconnection at locations close to beaches where provided for in the relevant route study of the cable line.

Again, the design of the connector shall be such as to ensure the required electrical insulation of the connection, electrical continuity of the conductor while ensuring leakproofness and anti-corrosion protection of the line and mechanical protection of the line against external stresses. The construction and materials of the connector shall be fully compatible with those of the connected cables so as to ensure the safe operation of the system in both normal and non-normal operation conditions.

The assembly of these couplings requires a well of suitable dimensions (indicatively 4×14 m and a depth of approximately 2-2.5 m). In the perimeter and at the bottom of the well, concrete substrate is made. Once the couplings have been assembled and placed on the substrate, the well shall be filled with the appropriate materials.

The connection will be 50-200 m from the coastline. Submarines are usually connected to underground cables on the beach, unless for some reason it is not possible. Such as:

in Lavrio, due to the fact that other submarine cables connected to the Lavrio water body have been bottled on the same site, while there are also other underground networks such as a gas pipeline, etc., the connection of submarine to underground will not take place on the beach. It should be noted that in this area, the existence of cables (Georgiou, Phase A Cyclades, Cyclades Phase C), and the provision for even more (Cyclades Phase D, cables by a private individual), lead to the need to design and construct nails in order to protect the cables from the anchors of the ships connecting to the PPC pier. The design is for the construction of four sailings, two on both sides of the end of the berth and two deeper.'

as a result of the winter wave and the morphology of the soil, the area of the beach in winter is permanently covered with water.

in Serfos, due to the winter wave and the morphology of the soil, the beach area in winter is permanently covered with water. Also in the bay there is a stream with waste water. For the above reasons, the landing point is adjacent to the beach, where it has a small slope. The connection between the submarine and the basement will therefore not take place on the beach but then after the slope, where a sloping is created.

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there are slopes at the landing point at the N.M.M., in which case the connection will be made at a distance from the coast.

An indicative plan is attached to Chapter 15, 'Maps and Plans', of the connector shafts Y/ Γ -H/B of Cables No TNGM — 3002. Once the joints have been assembled, the well will be filled with suitable materials (sand, gravel 3A, concrete slabs), cordlessly concrete with reinforced concrete and its surface restored with the material existing before the excavation. It will then be delimited by four concrete pens at its corners (see Figure 6-3). The axis of the cables in the foreshore and beach area will also be defined with their own pens.

The cables will be transported by a special f/F transport/laying vessel, packed in metal rotors. The following protective measures shall be taken to protect cables from the landing point and for the entire length of the interconnection against external damage or seabed movement from damage caused by fishing or anchors and, more generally, by external factors, in order to ensure that cables are tensioned and aligned at different speeds at different setting speeds in order to avoid damage to the cable (mechanical stress, skinning, etc.).

- The terrestrial parts of submarine cables shall burst at a depth of 1.6 m or more, with a width of approximately 2 m (1 m per circuit, with a minimum distance between the circuits of 5 m), unless a different design of ditches is expressly permitted for special reasons. The ground section of the submarine cables must be protected from concrete slabs in accordance with the instructions of the ADMIE Surveillance Authority.
- The initial sea segment of the submarine cables shall be placed in a pit, at least 2 m below the original seabed, with a width of approximately 2.5 m (1 m per circuit), and covered with a strong concrete layer 25 cm thick, up to and including 30 m from the coastline.
- After this, and up to a depth of 15 metres, as well as in shallow water areas (up to 15 m) along the cable route, the cables are placed in a pit of 2 m and a width of approximately 1 metre per circuit. Then, for the rest of the journey, the cable is placed in a 1 metre depth pit. In the case of a rocky seabed, this pit should be at least 1 and 0.5 m deep respectively. Where a depth of not more than 0.5 m can be achieved, cables shall be protected by the use of cement bags, pig iron covers or an equivalent method of protection, depending on the conditions.
- To carry out the work required to achieve the protection described above, jetting and trenching methods may be used, depending on the background analysis.
- Deep sea excavations are carried out using a special deep-sea (ROV) (Jetter or Trencher) machinery depending on the type of bottom substrate. The Jetter-type ROV vehicle shall be used on a soft substrate and the excavation shall be carried out by means of water shooting which achieves positioning of the cable at the desired depth and minimal disturbance of the bottom. In the case of a rocky bottom, a Trencher-type ROV vehicle is used, which opens the well and then the well is artificially or naturally coated. The depth of the canvas from the bottom surface shall be confirmed by the use of directed beam acoustic devices and/or a magnetometer fitted to the vehicle.

For information to be provided to adjacent vessels, an illuminated plaque may be fitted to the landing area, if possible.

6.1.4 Installation of underground cables

The submarine cable exits into the foreshore and moves to the connector transition well with the corresponding underground, as described in the previous paragraphs.

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Once the joints have been assembled, the underground cables shall, where appropriate, be routed in a candle in accordance with the indicative SK-51 sketch (Sheets 1 to 5 — Maps 18 to 22 of Chapter 15, Maps and Projects) on public, municipal or agricultural or expropriated roads.

In accordance with the above sketches, the container on which the cables are to be placed, once installed, is refilled with a layer of sand or, where appropriate, reinforced concrete, concrete slabs, a layer of gravel 3A and finally restored with material available before the excavation. The surface of the shaft and routing of the cables will be restored as it was before the intervention.

Since it is possible to install hygienic cables only in equal sections up to approximately 850 m, it is necessary to construct hy/C cable locks at suitable locations along the routes. The final siting of the wells along the route will be carried out by the contractor's implementation study on public, municipal, agricultural or expropriated roads or land.

The fastening well shall be 3×8 m in size and approximately 2 m deep. Please find attached an indicative plan for the Y/G Cable shaft No TKALGM-1539D in the annex to the technical plans. After the cables and fastenings have been installed, the refilling of the cannails and the manhole shall be carried out in accordance with the procedure referred to in paragraph 6.1.3 of this report.

The existence of cables can only be discerned by the installation of concrete sticks (see sketch 6-3) and suitable plates in places necessary for their easy identification.

6.1.5 Technical Characteristics of submarine AC Cables

The cables to be set shall be three-pole XLPE insulated triple extrusion polyethylene, with lead alloy cladding and single or double-armed steel or synthetic wires (depending on the depth of set).

The main electrical characteristics of the supply are:

Rated operating voltage 150 KV

Basic Insulation Level (BIL) 750 KV

Power transfer capability of the three-phase system at rated voltage: 200 MVA

The outer diameter of the cable will be approximately 230 mm and its weight is estimated at approximately 77 kg/m in the air and 49 kg/m in water (for a single weapon cable). A typical cross-section of this cable is shown in Figure 1.

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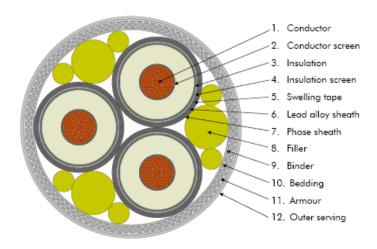


Figure 6-1. Submarine three-pole XLPE single-armed cable

6.1.6 Technical Characteristics of Underground AC Cables

The cables shall be of the XLPE type, a copper conductor with a minimum cross-section of 630 mm² or an aluminium cross-section of not less than 1 200 mm 2 monopolically insulated with triple extrusion polyethylene, with lead alloy cladding or alternatively with aluminium combined with copper wires and strips. The intersection of the cable type in question is shown in Figure 2.

The main electrical characteristics of the supply are:

Rated operating voltage 150 KV

Basic Insulation Level (BIL) 750 KV

Power transfer capability of the three-phase system at rated voltage: 200 MVA

The outer diameter of the cable is approximately 94 mm and its weight is estimated at approximately 15 kg/m (Chalkou conductor cables, 630 mm² cross-section)

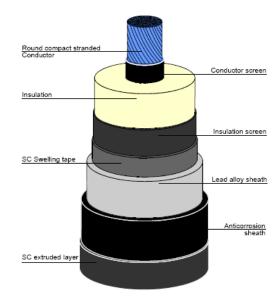


Figure 6-2. Underground AC single-pole cable, XLPE type

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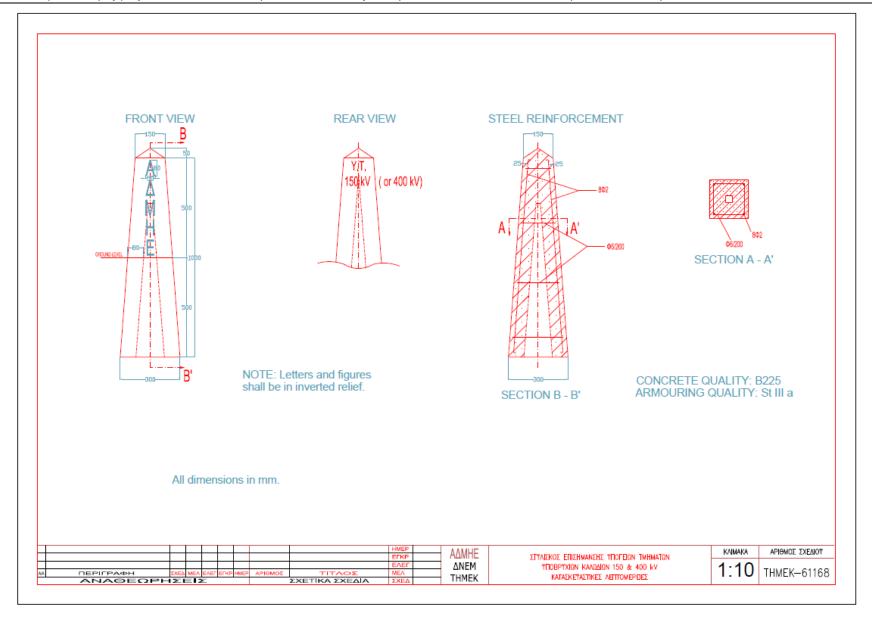


Figure 6-3. Sketch 61168 A Cement Stamps

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6.1.7 Substations (C/S) 150/20kV

6.1.7.1 Introduction

Voltage reduction substations in the transmission system are electrical installations through which medium-voltage and low-voltage consumers in each region are supplied with electricity.

They receive electricity from the 150 kV high-voltage transmission network, transform the voltage from high to average 20 kV and distribute the electricity through the distribution network to consumers in the wider region of the substation. This is why in many cases substations are also called distribution centres.

In addition, these facilities also serve the needs to interconnect other substations with the Greek interconnected electricity transmission system, thus determining the flow of electricity in the high-voltage grid and improving the reliability and stability of the system in general.

The downgrading substations shall consist, in terms of functionality, of the following sections:

- The <u>150 kV High Voltage Department:</u> It includes the 150 kV transmission line gateways, which are the functional attachment units of the 150 kV transmission lines at the substation, the 150 kV transformer gates, which are the functional units for connecting power transformers on 150 kV scales and 150 kV scales.
- <u>Power transformers</u> with the corresponding 150 kV gates to be attached to the 150 kV scales (mentioned above). Power transformers reduce electricity from 150 kV to 20 kV, are of an outdoor type and are installed on concrete bases in specially designed spaces within the substation's stadium.
- The <u>20 kV Average Voltage Department:</u> It includes the 20 kV distribution line gates which are the functional attachment units of 20 kV lines at the substation, the protection, measurement and control cells and the 20 kV scales.

All the proposed substations (Thira, Serifou, Milos and Folegandrou) will be closed-end, GIS (Gas Insulated Substation) technology, which will be connected to the 150 kV transmission system exclusively by submarine-underground cables.

Closed GIS technology substations differ from conventional substations in that most of the 150 kV outdoor equipment (excluding power transformers, inductors, etc.) is installed inside the control building. Equipment parts under high voltage (150 kV gates and balances) are enclosed within sealed metallic enclosures insulated with SF6 gas. This has the consequence of drastically reducing the required site and minimising the visual disturbance of the project to the environment.

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Figure 6-4. Typical view of 150 kV GIS balances and gates at 150 kV/MT substation

In addition, this technology significantly improves the reliability of the substation, minimises the need to maintain it, while due to the earthed enclosure in the high voltage equipment the electric field is zero.

The substation is connected to the 150 kV transmission system via two 150 kV cable lines with the nearest substations. The two (tripolar) submarine cables from the nearest substations will enter the basement of the substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.



Figure 6-5. Formal opinion of basement at 150 kV/MT substation

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The above gates shall be GIS technology equipped with power switches, disconnectors, voltage and tension measuring devices and shall be equipped with complete protective assemblies and shall be able to switch off the power switches in case of fault, thus interrupting the power supply to the substation.

Through the above gates, electricity is transferred from the 150 kV underground cables to the 150 kV scales and from there to power transformers, which reduce the voltage from 150 kV to 20 kV.

The 150 kV scales are also closed-end GIS technology, while for the better reliability of the substation they will be doubled with intersection and interconnection switches and measuring devices.

In its full development, the Substations will have two voltage reduction transformers 150/20kV 40/50MVA, with the possibility of the future addition of a third transformer when deemed necessary by the load needs of the area.

Transformers and inductors shall be installed on a deposition bench which is connected to a tank of suitable size to collect the mineral oil of the transformer and to prevent it spilling into the environment in the event of damage.

The dielectric insulating liquid used to cool down transformers is common mineral oil, self-degradable and according to specifications does not contain the toxic substances PCB's or PCT's. It is specified that these mineral oils, when required during preservation, are filtered by special equipment to remove moisture without being removed from the transformers (closed system). They are removed only in the case of replacement of the transformer where they are collected and removed from the project under the statutory procedure by authorised companies, as defined in European Directive (87/101/EEC) and Presidential Decree 82 (Government Gazette, Series I, No 64, 2 March 2004), which hold the relevant waste management licence.

The main source of noise in voltage reduction substations is the cooling fans of power transformers. Based on the specifications, the total noise level of transformers does not exceed 72 dB in the immediate surrounding area (3 m), so that the noise level at the fence limits is much lower than the maximum noise limits laid down in Presidential Decree 1180/06.10.81.

To compensate for the reactive power caused by the intrinsic capacity of the underground-submerged cables, three 150 kV inducts with a capacity of 25 MVAR will be installed, while an additional inductance of a 150 kV capacitor array may be installed in the future.

The connection of transformers, inductors and the 150 kV compensation capacitor to the 150 kV scales of the substation will be made by means of GIS 150 kV GIS gates equipped with all the equipment necessary for the operation of the above equipment.

Of the power transformers, the electricity now transformed to a voltage of 20 kV is transported via underground cables to 20 kV scales and from there to the departure gates of 20 kV Average Voltage of the Distribution to promote consumption.

The 20 kV scales and the departure gates of 20 kV Average Distribution are closed metal coated tables measuring approximately 1x2,1x2.3 m and will be installed inside the substation building. They include all control and protective power equipment for safe power supply to medium voltage distribution lines.

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Figure 6-6. Typical view of 20 kV GIS average voltage tables at 150 kV/MT substation

For the safe operation of the substation and for the safety of staff, an appropriate grounding network as required by the regulations shall be installed throughout the substation, as well as anti-eradic protection on masts suspended on reinforced concrete bases. Finally, fire safety and fire-fighting systems will be studied and installed, in accordance with the regulations in force.

The entire area of the substation shall be lit for greater safety by means of suitable luminaires and the stadium shall be fenced to prevent people and animals from gaining access to the substation space.

As mentioned above, the construction of a closed GIS (Gas Insulated Substation) substation is proposed in order to minimise the required extent of development of the project and to limit the visual nuisance it may entail.

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Figure 6-7. Typical view of substation GIS 150 kV/MT Paros

This closed type of substation was chosen mainly for optimal aesthetic presentation, as all equipment of 150 kV and 20 kV is installed in a building. In addition, the closed substation (GIS) also offers the following advantages:

- The use of SF6 gas as an insulating material significantly reduces the dimensions of the substation so that a significantly smaller space is required for its installation.
- Because the substation is developed in an enclosed space (building) its reliability is improving.
- In the substation all live elements have a metal earthed enclosure, meaning that the electric field is zero.
- Maintenance is not as frequent as for an outdoor substation.

6.1.7.2 <u>Technical Description of Water/S 150/20kV Hunting</u>

A building shall be constructed fully equipped with all the planned electromechanical installations, with dimensions of 60×20 m and a maximum height of 8 with suitably configured rooms and an underground area for cable routing of 150 kV. All GIS 150 kV power equipment, 20 kV medium-voltage tables for distribution and all auxiliary equipment for control and protection of the substation will be installed inside the building. Outside the building, the outdoor equipment of three (3+ 1^{*1}) inducts 150 kV, 25MVAr with their accessories

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¹ * Future possibility

and two $(2+1^{*2})$ transformers of 150/20kV, each with a power of 40/50MVA, with their accessories, will be developed.

GIS 150 kV equipment will include:

- Two (2) Weighs 150 kV GIS
- A 150 kV GIS gate from an underground/submarine cable to the Naxos substation with two 150 kV gates attached to it to connect two 150 kV inducts, 25 MVAr.
- A 150 kV GIS gate from an underground/submarine cable to a Folegander hydroxide with a 150 kV induction connection of 150 kV, 25 MVAr, attached to it.
- Two 150 kV connecting gates of the two power transformers 150/20kV, 40/50MVA.
- A 150 kV gate of the future connection of the third power transformer 150/20kV, 40/50MVA.
- One 150 kV SVC or STATCOM connection portal.
- A 150 kV gate of the future 150 kV fourth inductance connection, 25 MVAr.
- A 150 kV gateway for the future connection of 150 kV compensation capacitors.
- One 150 kV GIS weighing port.
- Voltage measurement transformers and 150 kV GIS speed weighers.
- A 150 kV manually operated pair of balances at the end of the 150 kV GIS equipment on the side of its future extension.
- Provision of space for the future addition of additional 150 kV GIS gates off 150 kV submarine cables and other equipment.

In addition, the following 150 kV outdoor equipment will be installed:

- Two 150/20kV reduction transformers with a capacity of 40/50MVA with the ancillary equipment (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, node grounding resistors, indoor service units, etc.) and space will be provided for future installation.
- Provision of space for the installation of an additional 150/20kV reduction converter power 40/50MVA with the ancillary equipment.
- Three inductors 150 kV, 25 MVAr with its accessories (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, aerial conductors, clamps, etc.).
- Provision of space for the installation of an additional 150 kV inductance, 25 MVAr with its accessories.

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² * Future possibility

- Provision of space for the installation of a 150 kV compensation capacitor assembly with its accessories (150 kV lighter, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, etc.).
- Installation of a compensation system of ± 100MVAR SVC or STATCOM comprising an independent 150 kV transformer and a housing or container for the installation of its control panels.

The above equipment is set out in draft 31450 of Chapter 15 'Maps and plans', with the planned development of the substation.

Please note that during the final design of the project by the contractor selected through a tender, there may be modifications to the exact locations and dimensions of the equipment.

The substation will be connected to the 150 kV transmission system via two 150 kV cable lines with the Naxos substation (existing) and the Folegandrou (new) substation. The project was sited close to the coast so that the submarine cables could enter the substation directly and avoid the development of 150 kV networks on the island.

The two (tripolar) submarine cables from the substations of Naxos and Fologanro will enter the basement of the Thira substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

6.1.7.3 <u>Technical Description of Water/S 150/20kV Milos</u>

A building shall be constructed fully equipped with all the planned electromechanical installations, with dimensions of 52×20 m and a maximum height of 8 with suitably configured rooms and an underground area for cable routing of 150 kV. All GIS 150 kV power equipment, 20 kV medium voltage switchboards and all auxiliary equipment for control and protection of the substation will be installed inside the building. Outside the building, the outdoor equipment of three $(3 + 1^{*3})$ inducts 150 kV, 25MVAr with their accessories and two $(2 + 1^{*4})$ transformers of 150/20kV, each with a power of 40/50MVA, with their accessories, will be developed.

- GIS 150 kV equipment will include:
- Two (2) Weighs 150 kV GIS
- A 150 kV GIS gate from underground/submarine cable to the Sierfou substation with a 150 kV gate attached to it to connect 150 kV inductance, 25 MVAr.
- A 150 kV GIS gate from an underground/submarine cable to a Folegander hydroxide with a 150 kV induction connection of 150 kV, 20 MVAr, attached to it.
- Two 150 kV connecting portals for power transformers 150/20kV, 40/50MVA.
- A 150 kV gate of the future connection of the third power transformer 150/20kV, 40/50MVA.
- A 150 kV gate of the future 150 kV fourth inductance connection, 25 MVAr.

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³ * Future possibility

^{4 *} Future possibility

- A 150 kV gateway for the future connection of 150 kV compensation capacitors.
- One 150 kV GIS weighing port.
- Voltage measurement transformers and 150 kV GIS speed weighers.
- A 150 kV manually operated pair of balances at the end of the 150 kV GIS equipment on the side of its future extension.
- Space will be provided for the future addition of additional 150 kV GIS gates off 150 Kv submarine cables and other equipment

In addition, the following 150 kV outdoor equipment will be installed:

- Two 150/20kV reduction transformers with a capacity of 40/50MVA with the ancillary equipment (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, node grounding resistors, indoor service units, etc.) and space will be provided for future installation.
- Provision of space for the installation of an additional 150/20kV reduction converter power 40/50MVA with the ancillary equipment.
- Three inductors 150 kV, 25 MVAr with its accessories (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, aerial conductors, clamps, etc.).
- Provision of space for the installation of an additional 150 kV inductance, 25 MVAr with its accessories.
- Provision of space for the installation of a 150 kV compensation capacitor assembly with its accessories (150 kV lighter, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, etc.).

The above equipment is set out in Plan 31457 of Chapter 15 'Maps and Projects', with the planned development of the substation.

Please note that during the final design of the project by the contractor selected through a tender, there may be modifications to the exact locations and dimensions of the equipment.

The substation is connected to the 150 kV transmission system via two 150 kV cable lines with the Serif substation and the Folegandrou substation. The two (tripolar) submarine cables from the Sierfou and Fologanrou Substations will enter the underground of the Milos substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

6.1.7.4 <u>Technical Description Y/Σ 150/20kV Folegandrou</u>

A building shall be constructed fully equipped with all the planned electromechanical installations, with dimensions of 52 x 20 m and a maximum height of 8 with suitably configured rooms and an underground area for cable routing of 150 kV. All GIS 150 kV power equipment, 20 kV medium voltage switchboards and all auxiliary equipment for control and protection of the substation will be installed inside the building. Outside the building, the outdoor equipment of three (3) 150 kV compensation inducts, 25MVAr with their accessories

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and two (2+ 1*5) transformers of 150/20kV, each with a power of 40/50MVA, with their accessories, will be developed.

The GIS 150 kV equipment will include:

- Two (2) Weighs 150 kV GIS
- A 150 kV GIS gate from an underground/submarine cable to the Milos substation with a 150 kV gate attached to it to connect 150 kV inductance, 20 MVAr.
- A 150 kV GIS gate from underground/submarine cable to water/hunting with a 150 kV induction gate attached to it, 25 MVAr.
- Two 150 kV connecting gates of the two power transformers 150/20kV, 40/50MVA.
- A 150 kV gate of the future connection of the third power transformer 150/20kV, 40/50MVA.
- A 150 kV gate of the future 150 kV third inductance connection, 25 MVAr.
- A 150 kV gateway for the future connection of 150 kV compensation capacitors.
- One 150 kV GIS weighing port.
- Voltage measurement transformers and 150 kV GIS speed weighers.
- A 150 kV manually operated pair of balances at the end of the 150 kV GIS equipment on the side of its future extension.
- Space will be provided for the future addition of additional 150 kV GIS gates off 150 kV submarine cables and other equipment

In addition, the following 150 kV outdoor equipment will be installed:

- Two 150/20kV reduction transformers with a capacity of 40/50MVA with the ancillary equipment (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, node grounding resistors, indoor service units, etc.) and space will be provided for future installation.
- Provision of space for the installation of an additional 150/20kV reduction converter power 40/50MVA with the ancillary equipment.
- Two inductances 150 kV, 25 MVAr with its accessories (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, aerial conductors, clamps, etc.).
- Provision of space for the installation of an additional 150 kV inductance, 25 MVAr with its accessories.
- Provision of space for the installation of a 150 kV compensation capacitor assembly with its accessories (150 kV lighter, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, etc.).

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⁵ * Future possibility

The above equipment is set out in Plan 31451 of Chapter 15 'Maps and Projects', with the planned development of the substation.

Please note that during the final design of the project by the contractor selected through a tender, there may be modifications to the exact locations and dimensions of the equipment.

The substation is connected to the 150 kV transmission system via two 150 kV cable lines with the Milos substation and the Thira substation. The project was sited close to the coast so that the submarine cables could enter the substation directly and avoid the development of 150 kV networks on the island.

The two (tripolar) submarine cables from the Milos and Thira substations will enter the basement of the Folegandro substation and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

6.1.7.5 <u>Technical Description of Y/B 150/20kV Serifou</u>

A building shall be constructed fully equipped with all the planned electromechanical installations, with dimensions of 52×20 m and a maximum height of 8 with suitably configured rooms and an underground area for cable routing of 150 kV. All GIS 150 kV power equipment, 20 kV medium voltage switchboards and all auxiliary equipment for control and protection of the substation will be installed inside the building. Outside the building, the outdoor equipment of three (3) 150 kV compensation inducts, 25MVAr with their accessories and two $(2+1^{*6})$ transformers of 150/20kV, each with a power of 40/50MVA, with their accessories, will be developed.

The GIS 150 kV equipment will include:

- Two (2) Weighs 150 kV GIS
- A 150 kV GIS gate from an underground/submarine cable to the Lavrio hotspot with two 150 kV gates attached to it to connect two 150 kV inducts, 25 MVAr.
- A 150 kV GIS gate from an underground/submarine cable to a water/mole system with a 150 kV induction connection of 150 kV, 25 MVAr, attached to it.
- Two 150 kV connecting gates of the two power transformers 150/20kV, 40/50MVA.
- A 150 kV gate of the future connection of the third power transformer 150/20kV, 40/50MVA.
- A 150 kV gateway for the future connection of 150 kV compensation capacitors.
- One 150 kV GIS weighing port.
- Voltage measurement transformers and 150 kV GIS speed weighers.
- A 150 kV manually operated pair of balances at the end of the 150 kV GIS equipment on the side of its future extension.

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^{6 *} Future possibility

 Space will be provided for the future addition of additional 150 kV GIS gates off 150 kV submarine cables and other equipment

In addition, the following 150 kV outdoor equipment will be installed:

- Two 150/20kV reduction transformers with a capacity of 40/50MVA with the ancillary equipment (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, node grounding resistors, indoor service units, etc.) and space will be provided for future installation.
- Provision of space for the installation of an additional 150/20kV reduction converter power 40/50MVA with the ancillary equipment.
- Three inductors 150 kV, 25 MVAr with its accessories (150 kV lighthouse, 150 kV outdoor cable tips, 150 kV cables, aerial conductors, clamps, etc.).
- Provision of space for the installation of a 150 kV compensation capacitor assembly with its accessories (150 kV lighter, 150 kV outdoor cable tips, 150 kV cables, air ducts, clamps, etc.).

The above equipment is set out in draft 31449 of Chapter 15 'Maps and Projects', with the planned development of the substation.

Please note that during the final design of the project by the contractor selected through a tender, there may be modifications to the exact locations and dimensions of the equipment.

The substation is connected to the 150 kV transmission system via two 150 kV cable lines with the Lavrio hotspot and the Milos substation. The project was sited close to the coast so that the submarine cables could enter the substation directly and avoid the development of 150 kV networks on the island.

The two (tripolar) submarine cables from the Lavrio hotspot and the Milos substation will enter the basement of the substation Serifou and will be connected to the two GIS 150 kV transmission line gates located on the ground floor.

6.1.7.6 Construction work for substations

In order to install the equipment, the following categories of construction works must be constructed on the ground of the substation, in compliance with all the planning provisions in force in the area:

- Earthworks for the development, levelling and drainage of the land of each substation.
- Construction of a GIS building of the substation of approximately 60x20 m and a maximum height of 8 m.
- Fencing of the slatted wire with metal uprights and climbs to prevent people and animals from gaining access to the substation space.
- Construction of the internal roads of the substation.
- Construction of concrete bases for installation of electromechanical equipment and construction of channels for the passage of underground cables.

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- Construction of the grounding network and the ventilating protection network of the substation.
- Construction of SVC and H/Z homes.

Perimeters of the substation and, where technically possible, afforestation with trees of high and medium growth suitable for the climate and morphology of the area.

Excess excavation products likely to arise during future extensions shall be removed outside the boundaries of the project, in areas legally located for that purpose, or in abandoned loan rooms or in areas where other projects are carried out, which have approved environmental conditions and where such materials may be used, or in inactive quarries, or through alternative management systems.

Packaging materials (roasting, paper and wood packaging) as well as the by-products of the construction (cable blocks, pipelines) will be collected, temporarily stored and promoted for recycling in accordance with the legislation.

6.2 Detailed description of main, ancillary and supporting/accompanying facilities and projects/activities

6.2.1 Detailed description of building projects

All existing and planned building projects that are the subject of this Environmental Impact Assessment have already been presented in the above paragraphs of this Chapter.

6.2.2 Connections to roads and infrastructure networks

Please note the following with regard to the connection of the individual sections of the proposed project to the existing road network:

- The substations will be accessible via the existing road network. The pitches of the Thira, Milos and Folegandrou Waters are located on paved roads and do not require interventions.
- Access to the Sirfou Water Board is carried out via a small section of earthway (approximately 50 m long). Small-scale improvement work on this section is likely to be needed.
- Finally, the underground project is built along the existing road network and therefore no access roads are required.

Before the construction of the underground project starts, the developer shall procure the plans of the existing infrastructure networks present in the construction area and take the necessary steps to ensure that the construction of the project does not affect them.

6.2.3 Parking areas

Up to five outdoor parking spaces will be provided in each of the proposed substations of Serif, Milos, Folegandrou and Thira.

6.2.4 Technical description and associated diagram of mechanical installations

The technical description of the works for the installation of the submarine and underground cables and the proposed substations has already been presented above. The relevant charts are presented in **Chapter 15** "**Maps and Plans**" of this EIA.

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6.2.5 Overall assessment of the surface area of the soil occupied, including a breakdown of the occupation by individual project

The ground occupation provided for in the individual sections of the proposed project is as follows:

- The surface area of Hunting is 21 150.67 m².
- The surface area of the Milou water body is 13 608.75 m^{2.}
- The surface area of the Folegander Water Board is 16 808.16 m².
- The surface area of the Serfu Municipal Council is 17 026.19 m 2⁻¹
- The total surface area of the underground project in the Regional Unit of Eastern Attica is estimated at $(907 \text{ m} \times 2 \text{ m} =) 1.814^{\text{m}^2}$.
- The total surface area of the underground project in the Regional Unit of Thira was estimated at (2 749.23Zm x 2 m) = 5 513.9 m 2 Of these, (2.039 m x 2 m) = 4 077.48 m 2^{are located} on the island of Fleandro and (718.21 m x 2 m) = 1 436.42 m 2 are located on the island of Hunt.
- The total surface area of the underground project in the Mios Regional Unit was estimated at (15 683.6 m x 2 m) = 31 367.2 m 2. Of these, (1.539 m x 2 m) = 3.078 m² are located on the island of Serof and (14 144.6 m x 2 m) = 28 289.2 m 2 are located on the island of Milos.
- The total surface area of the underground project in the Regional Unit of Naxos was estimated at $527.64 \text{ m} \times 2 \text{ m} = 1055.28 \text{ m} 2^{-1}$

The occupation resulting from the submarine project is as follows:

- The underground and submarine cable connector wells were estimated at 24 m² (dimensions 14 x 4 m). From a well, it will be built in Lavrio and on the islands of Serof, Fologanros, Thira and Naxos. Two wells will be built on the island of Milos.
- The total surface area of the submarine project during the construction phase for the section Lavrio-Serifos is estimated at 109.390 m² (30 m X 2.5 m X 2 + 109.240 m X 1 m)
- The total surface area of the submarine project during the construction phase for the Serifos-Milos section is estimated at 46.790 m² (30 m X 2.5 m X 2 + 46.640 m X 1 m)
- The total surface area of the submarine project during the construction phase for the Milos-Foleganros section is estimated at 55.090 m² (30 m X 2.5 m X 2 + 54.940 m X 1 m).
- The total surface area of the submarine project during the construction phase for the Foleganros-Thira section is estimated at 59.905 m² (30 m X 2.5 m X 2 + 59.840 m X 1 m).
- The total surface area of the submarine project during the construction phase for the Thira-Naxos section is estimated at 82.190 m² (30 m X 2.5 m X 2 + 82.040 m X 1 m)

The table below shows the total occupation area of the project under study.

Table Error! No text of specified style in document.-1 Total land occupation area under project study

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Sub-parts of the project	Occupation area in the construction phase (m²)	Occupation area in the operational phase (m²)
Thira substation	21.151	21.151
Milos substation	13.609	13.609
Folegandrou substation	16.808	16.808
Serifou substation	17.026	17.026
Underground project in the Regional Unit of Eastern Attica	2.102	24
Underground project in the Regional Unit of Thira	1.214	0
Underground project in the Regional Unit of Milos (including manholes)	28.429	384
Underground project in the Regional Unit of Naxos (including wells)	1.055	0
Underground project in the Regional Unit of Sirfou (including shafts)	2.787	48
Underground project in the Regional Unit of Folegandrou (including wells)	3.775	96
Transition link shafts in Lavrio	56	56
Serbian Transition Liaison shafts	112	112
Milos Transition Links shafts	112	112
Transition link shafts in Falangro	224	224
Game Transition Links wells	112	112
Connection shaft in Naxos	56	56
Submarine section of Lavrio — Serifou	109.390	0
Submarine section of Serifou-Milou	46.790	0
Underwater section of Milos- Folegandrou	55.290	0
Submarine section of Folegandrou-Thira	59.990	0
Submarine Department of Thira-Naxou	82.190	0

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Sub-parts of the project	Occupation area in the construction phase (m²)	Occupation area in the operational phase (m²)
Total total	462.28	69.82

During the period of operation, only the occupation of the bathing ground and the junction manholes of the cables located in the land sections shall be considered as occupation.

The following areas were also not included in the Table, as they do not concern additional occupation:

- Lavrio Hotspot 26 622.04 m 2⁽¹⁾ an existing project)
- H/S of Naxou 22 783.31 m 2^(this is an existing substation)

6.3 Construction phase

6.3.1 Schedule of works and stages of construction

The permits (DAEC, expropriations, permits to use the foreshore and beach, planning permission) are expected, in accordance with the timetable, to be completed in the first half of 2022.

Construction is planned to start in parts in the first half of 2021 and to be completed in the second half of 2023.

6.3.2 Individual civil engineering projects

The description of the equipment included in the proposed substations (S/S) 150 kV/MT Serifou, Milos, Florandrou and Thira and the works for the installation of submarine and underground cables has already been presented above in § 6.1 'Detailed description of the project' of this EIA.

6.3.3 Construction support facilities

In the context of the design of the project under this EIA, there is no provision for building sites in addition to those relating to the construction of the substations provided for in this study.

As regards the issues of loan rooms and depots, they are likely to be required, given that, on the basis of the soil balance referred to in paragraph 6.3 in all cases of the proposed substations, a surplus of landfills is expected, with the exception of Foleganro and Thira, where there is a need for loans.

In any event, the approach adopted is to place the surplus quantities in an environmentally licensed storage chamber in accordance with the requirements of Law 4014/2011 or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where the materials in question can be used in inactive quarries or through alternative management systems for ECDW. In the case of Folegandrou, an effort will be made to avoid the construction of a loan cell and an effort will be made to obtain the required quantities through alternative CDE management systems.

6.3.4 Necessary construction materials

The main materials to be used for the construction of the works are:

 Concrete, and armaments for the construction of building works, for covering the pitches for placing underground and submarine transport lines, and for fencing and shaping the surrounding area of the facilities.

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- Electromechanical equipment of factory construction for water bodies
- Underground and underwater pipes, cast iron, etc., for their protection.

The submarine part of the cables shall be three-pole XLPE insulated triple extrusion polyethylene, with lead alloy cladding and single or double-armed steel or synthetic wires (depending on the depth of set). More details are given above in chapter 6.1.5.

The underground part of the cables shall be XLPE-type, monopolar, insulated with triple extrusion polyethylene, with lead or aluminium alloy cladding. More details are given above in chapter 6.1.6.

The above-mentioned materials will be procured commercially.

The soil balance of the project under study is presented in section '6.3.6 Several materials — Solid waste' of this EIA.

6.3.5 Liquid waste

During the construction of the works under consideration, it is envisaged to produce the usual liquid waste generated in this type of construction, taking into account that the underground and underwater parts of the project consist of pre-constructed sections, which are not built in the project area.

Chemical toilets will be installed for the collection of urban waste water generated by the staff working on the construction of the projects. Assuming a construction site of 10-12 people, a waste water supply is estimated to be equal to:

50 lit/person/day x 10-12 individuals = 500-600 lit/day or 0.5-0.6^m3/day.

The waste water collected will be disposed of through licensed companies which will manage the waste water appropriately.

Used Lubricant Oil Waste (PFL) resulting from the machinery and construction equipment will be collected and stored in a temporary storage of liquid waste until it is delivered to approved waste water collectors.

The construction machinery is not to be washed or maintained in the construction area, as this will be done either in specialised workshops.

For the disposal of liquid waste, Health Decree No E1 β /221/1965 (GG II 138) on waste water disposal and industrial waste, as amended by Nos Γ 1/17831/07.12.1971 (GG II 986), Γ 4/1305/02.08.1974 (Government Gazette, Series II, No 801) and Δ .Y Γ 2/ Γ . Π . OIK. 133551/30.09.2008. Law 4042/2012 on criminal protection of the environment — harmonisation with Directive 2008/99/EC — Waste generation and management framework — Harmonisation with Directive 2008/98/EC — Regulation of matters relating to the Ministry of the Environment, Energy and Climate Changeis also in force.

6.3.6 Surplus Materials — Solid Waste

Urban waste from the workforce will be generated in the project phase. This waste will be collected in bins of the municipal administration, which will be evacuated at regular intervals by the municipality's vehicles. This waste is not toxic and does not pose a risk to the soil, in which it will eventually end up (the landfill). A first estimate of the volume of household waste produced during the construction phase of the project under consideration, per site, can be made on the basis of the following assumptions:

the average price of waste at the workplace is 0.4 kg/day/person;

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the estimated average number of workers/day is 10-12 in the construction phase, per site.

In conclusion, around 4-4.8 kg of municipal waste is produced, per day, per construction site. The specific weight of municipal waste is between 180 and 415 kg/m³, with a typical value of about 300 kg/m³ (Tchobanoglous, Thiesen, Vigil, 1993). Therefore, the amount of waste produced corresponds to a minimum volume of ~0.013m³/day/site. This waste will be collected in bins of the municipal authority and removed from the vehicles of the municipality.

Other wastes that may be generated during the construction phase of the works, such as damaged spare parts or materials from mobile equipment (e.g. tyres, rubber or metal pipes, etc.), will be delivered — returned to the suppliers.

Finally, waste such as: mineral oils, oil lubricants, toiletries, spare machinery, automotive batteries — batteries, trucks, consumables, trucks such as pads, oil filters, air filters, etc. will be collected in appropriate impermeable containers and removed by authorised management companies.

Table Error! No text of specified style in document.-1 Codes per EWC (European Waste Catalogue) of the waste that may be generated during the construction phase of the project under consideration

Code	Waste category
13	Waste oils and waste liquid fuels (excl. edible oils, 05 and 12)
13 02	waste heavy gear and lubricating oils
13 07	waste liquid fuel
13 07 01*	fuel oil and diesel oil
13 07 02*	petrol
17	Construction and demolition waste (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and kernels
17 01 01	concrete concrete
17 03	mixtures of bitumen and mineral tar, coal tar and tar products
17 03 01*	mixtures of bituminous mineral tar containing coal tar
20	Public waste (household waste and similar waste from commercial activities, industries and institutions), including parts of separately collected
20 01	separately collected parts (except point 15 01)
20 01 08	biocolonised kitchen and accommodation waste
20 02 01	biocollective waste
20 02 02	soils and stones
20 03 01	mixed municipal waste

<u>Source</u>: List of wastes in accordance with the Annex to Decision 2000/532/EC, as amended by Commission Decisions 2001/118/EC, 2001/119/EC and 2001/573/EC.

6.3.6.1 <u>Balance of earths under consideration for a project</u>

6.3.6.1.1 Substations (C/S) 150/20kV Serifou, Milos, Folegandrou and Thira

Y/Σ 150/20kV Serifou

The excavation volume of the site is approximately 25 000 m 3 (for a 55 m level), while the volume of infusions is approximately 4 000^{m^3} .

There will therefore be a surplus of material volume of around 21 000 m³. The surplus of materials that cannot be used in the construction of the project will be deposited in an environmentally licensed deposit chamber

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or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.

Y/Σ 150/20kV of apple

The excavation volume of the site is about 3 000 m³ (for a level of 7 m), while the volume of infusions is approximately 300 m³.

There will therefore be a surplus of material volume of around 2.700 m³. The surplus of materials that cannot be used in the construction of the project will be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.

Y/Σ 150/20kV Folegandrou

The excavation volume of the site is approximately 6 000 m³ (for a level of 55 m), while the volume of infusions is about 13 000^{m³}.

There will therefore be no surplus of materials, but there will be a need for additional infiltration of approximately 7 000^{m³}.

Y/Σ 150/20kV Hunting

The excavation volume of the site is approximately $9\,500$ (3.500+ $6\,000$)m³, while the volume of infusions is approximately $11\,300$ ($11\,000+\,300$) m³. (for an levelling level of 13.5 m in the eastern part of the substation and 20 m in the west).

Consequently, there will be no surplus of materials, but there will be a need for additional infiltration of approximately 1 800^{m³}.

6.3.6.1.2 Underground parts of the project

Please note the following with regard to the underground parts of the project:

• In the Regional Unit of Eastern Attica, the volume of excavation material was estimated at 4 000 m³-5 000 m 3, of which 25 % will be reused (i.e. 1 000 m³ -1 250 m³ material).

Surplus material of a volume of about 2.750 m 3-4 000 m³ will therefore arise

• In the Milos Regional Unit, the volume of excavation materials was estimated at⁴⁸ 000 m^{3–}52 000 m 3, of which 25 % will be reused (i.e. 12 000 m³ -13 000 m³materials).

Surplus material of a volume of around 35 000 m 3 to 40 000 m³ will therefore arise.

• In the Regional Unit of Hunting, the volume of excavation material was estimated at 8 000 m³ -9.500 m 3, of which 25 % will be reused (i.e. 2 000 m³ -2.375 m³material).

Surplus material of a volume of about 5 525 m 3-7.500 m³ will therefore arise.

• In the Regional Unit of Naxos, the volume of excavation materials was estimated at 1 500 m³ -2 000 m 3, of which 25 % will be reused (i.e. 375 m³ to 500 m³materials).

Thus, surplus material of a volume of about 1 000 m³ - 1.625 m³ will arise.

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• In the Superfou Regional Unit, the volume of excavation materials was estimated at 5^{000} m 3-7 000 m 3 of which 25 % will be reused (i.e. 1 250 m 3 materials — 1^{750} m 3).

Surplus material of a volume of around 3 750 m 3-5 250^m 3 will therefore arise.

• In the Folegandrou Regional Unit, the volume of excavation materials was estimated at 7^{000} m 3-9 000 m 3^of which 25 % will be reused (i.e. 1 750 m 3 materials — 2^{250} m 3).

Surplus material of a volume of around 5 250 m 3 to 6 750^m 3 will therefore arise.

On the basis of the above, the total quantity of excavated material from the project for re-use or removal and tipping amounts to $53.3755 \text{ m}^3 - 65.125 \text{ m}^3$.

The excess material that will arise during the construction phase and cannot be used in the construction works shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials can be used in inactive quarries or through alternative management systems.

Submarine parts of the project

Taking into account the project design, with regard to underwater excavations, please find below the estimate of the maximum volume of materials that may be obtained, if the maximum depth of pit for the deepest depths (1 m) is respected throughout the route. In particular, for the submarine parts of the project, please note the following:

- For the Lavrio-Seripos section, the volume of excavation materials was estimated at 112 000 m³
- The volume of excavation material was estimated at 49.400 m³ for the Serifos-Mile section.
- The volume of the excavation material was estimated at 56 500 m³ for the Milos-Fologrou section.
- The volume of excavation material was estimated at 61.500 m³ for the Fologandros-Thira section.
- For the Thira-Naxos section, the volume of excavation materials was estimated at 83 500 m³

Of the above quantities, a small part (~ 0.08 %) will be reused, while the rest will remain temporarily on the excavation site, from which they will be physically removed within a short period of time.

6.3.7 Pollutant emissions to air from the construction of the project

An assessment of the pollutants emitted into the atmosphere from the operation of a typical construction site, which can be used in the construction phase, is then presented.

During the construction phase of the projects under consideration, the main sources of emissions of gaseous and particulate pollutants are as follows:

- Emissions of gaseous pollutants from the various machinery (trucks, excavators, shippers, etc.)
- Dust from excavation and from work on unpaved surfaces.

The following machinery may be operated on a typical construction site:

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- Propeller
- Grader (modulator)
- Air compressor
- Dumpers of different payloads
- Loader
- Concrete mixer
- Road roller
- Bituminous concrete sleeper
- Mechanical excavator
- JCB excavator.

The following table shows the fuel type used by each of these machinery and the estimated daily fuel consumption.

Table Error! No text of specified style in document.-2 Construction machinery/vehicles, type of fuel used and estimated consumption

Machine/Vehicle	Fuel	Consumption (It/day)
Propeller	Gas oil	110
Grader (modulator)	Gas oil	112
Mechanical excavator	Gas oil	80
Air compressor	Gas oil	40
Dumpers	Gas oil	80
Loader	Gas oil	40
Road roller	Gas oil	110
Bituminous concrete sleeper	Gas oil	109
JCB excavator	Gas oil	108
Concrete mixer	Petrol	17

The main air pollutants emitted by the operation of construction machinery are:

- carbon monoxide (CO)
- hydrocarbons (VOC)
- various oxides of nitrogen (NO_x)
- miscellaneous sulphur oxides (SO_x)

The exhaust emission factors per tonne (tn) of fuel based on the literature are given in the table below.

Table Error! No text of specified style in document.-3 Exhaust emission factors (Kg pollutant/Kg fuel)

Fuel	CO	voc	NOx	SO ₂	TSP
· ac.	CO	100	HOX	302	

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Diesel	0,049	0,025	0,017	0,006	0,014
Benzine	0,590	0,021	0,052	_	_

On the basis of the above emission factors and the assumptions that the machinery on the site will not operate at the same time, the total emissions of gaseous pollutants for an adverse scenario of simultaneous operation of most machinery are shown in the table below.

Table Error! No text of specified style in document.-4 Daily fuel consumption per vehicle

Type of construction site	Number of vehicles	Type of fuel	Daily fuel consumption per vehicle (lt/d)	Daily fuel consumption per vehicle (Kg/d)
JCB excavator	2	Oil	108	86
Mechanical excavator	2	Oil	80	64
Propeller	2	Oil	110	88
Grader	2	Oil	112	90
Dumpers	8	Oil	80	64
Loader	3	Oil	40	32
Air compressor	2	Oil	40	32
Road roller	2	Oil	110	88
Bituminous valve	1	Oil	109	87
Concrete mixer	1	Petrol	17	11.9

Table Error! No text of specified style in document.-5 Pollutant Emission Factors and Emission Rate

Pollutant	СО	NOx	voc	SO2	TSP	
Pollutant emission factors (Kg pollutant/Kg fuel)						
Oil	0.049	0.017	0.025	0.006	0.014	
Petrol	0.590	0.052	0.021	_	_	
Special weight of Petroleum	(Kg/lt)	0.8				
Special weight of benzine	(Kg/lt)	0.7				
Pollutant emission rate (gr/sec)	со	NOx	voc	SO ₂	TSP	
JCB excavator	0.294	0.102	0.150	0.036	0.084	
Mechanical excavator	0.218	0.076	0.111	0.027	0.062	
Propeller	0.299	0.104	0.153	0.037	0.086	
Grader	0.305	0.106	0.156	0.037	0.087	
Dumpers	0.871	0.302	0.444	0.107	0.249	
Loader	0.163	0.057	0.083	0.020	0.047	
Air compressor	0.109	0.038	0.056	0.013	0.031	
Road roller	0.299	0.104	0.153	0.037	0.086	
Bituminous valve	0.148	0.051	0.076	0.018	0.042	
Concrete mixer	0.244	0.021	0.009	0.000	0.000	
Total total	2.151	0.746	1.097	0.263	0.614	

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6.3.8 Noise and vibration emissions from the construction works of the project

6.3.8.1 Basic principles of methodology for predicting noise levels from construction works

The provision of the sound level for the **stationary operating sources** of a construction site shall comprise the following stages:

- 1. Analysis of the composition of the construction site and determination of the L_{Aeq} level at 10 m for each individual source (machinery, installations, etc.) on the basis of the tables in Annex C to standard BS5228.
- 2. Where the distance of the controlled point from the geometric centre of the construction site is other than 10 m from the L_{Aeq} level of the previous step, the distance correction (in dB) resulting from the following relationships according to the nature of the ground surface of the area between the site and the control point shall be subtracted.

```
K_h =_{20\log 10} (R/10) for "hard surface"
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$$KS = [_{25\log 10}(R/10)] - 2 \text{ if 'soft'}$$

- 3. Reduction of L_{Aeq} level due to noise function of possible noise barriers or other barriers and reflections, for each source individually.
- 4. A combination of the L_{Aeq} indicators of each source and extrapolation to the entire operating time of the construction site.

In the method concerning **mobile sources** according to the British standard, two situations can be distinguished:

Source movement in a restricted space (e.g. within the boundaries of the construction site):

This method can be used to predict L_{Aeq} and for activities where mobile noise sources operate in the immediate vicinity of the point of interest, taking into account also the period of idling stop and operation of the source. In this case, the following steps can be distinguished:

- Analysis of the mobile sources of the construction site.
- o Select the sound power from the tables of standard BS5228.
- Calculation of the noise level at the point of interest from the sound power level and the minimum distance. Corrections due to noise barriers and reflections.
- Estimation of distance factor and time-equivalent.
- Estimate the proportion of the period during which the source is operated, correct the duration of the activity and extrapolate L_{Aeq} to the entire period of operation of the site.
- \circ A combination of the reduced L_{Aeq} of each source.
- Long-distance source movement and defined route:

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This method can be used to predict L_{Aeq} when mobile sources pass through the point of interest at a known rate per hour mainly when moving on auxiliary roads. In this case, the forecast of the sound level shall include the following steps:

- Calculation L_{Aeq} from the sound power level for mobile sources on auxiliary roads
- \circ Estimate of the percentage of the period during which the source is operated, correct the duration of the activity and extrapolate L_{Aeq} to the entire period of operation of the site
- A combination of the reduced L_{Aeq} of each source.

6.3.8.2 <u>Noise emissions in the construction phase of the project</u>

For the assessment of noise emissions in the construction phase of the project, an unfavourable construction site composition was considered, in terms of noise emissions. The $L_{Aeq(T) level was calculated}$, a combined total operation T=12 hours of a hypothetical machinery fleet composition site on a receiver 30 m and 200 m from it. The composition of the 12-hour site with a hypothetical unfavourable composition in terms of noise emissions is presented below, comprising the following machinery:

- One air compressor 17^m3/min with two spindles of 14 kg
- A self-propelled concrete press (100 kW).
- A loader of 60 KW.
- A 200 kW dozer for levelling the ground or moving bass.
- Two heavy goods vehicles (dump track) 20th with a power of 110 kW in the process of loading or unloading excavated products or embankment/road materials with idle motors or at a speed of 5-10 km/h inside the construction site.
- A 46 KW excavator (Tracked excavator).
- One bentoner 22 KW.
- One Grader 150 kW with average running speed in operation 5-10 km/h.
- A 51 KW road roller.
- An asphalt spreader, Chip spreader, road roller & Lorry system.

The following table shows the actual operating taken for the above machines.

Table Error! No text of specified style in document.-6 Times of actual operation (tc) of machinery

Type of machinery	Power — Weight	Speed	L _{WA} (dBA)	L _{Aeq} (dBA)	Operating time (hours)
Air compressor/2 airheads	17 ^m 3/min; 14 kg	_	106/114	87	1
Concrete press	100 KW		106	78	1
Heavy goods lorry	20tn/110 kW	10 km/h	102	74	8
Loader	60 KW	10 km/h	104	76	8
Land promoter	200 KW	2 km/h	104	76	8

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Type of machinery	Power — Weight	Speed	L _{WA} (dBA)	L _{Aeq} (dBA)	Operating time (hours)
Excavator machine	46 KW	5 km/h	102	74	8
Grader	150 kW	10 km/h	111	83	8
Road roller	51 kW	10 km/h	101	73	8
Asphalt layer system	90 kW-13tn	1.5 km/h	108	80	8
Bentoner	22 kW.		100	72	8

6.3.8.3 <u>Vibrations</u>

Based on the project design, no vibrations are expected either in the construction phase or in the operational phase.

6.3.9 Electromagnetic radiation emissions

The construction of the projects under consideration is not related to the production of electromagnetic radiation.

6.4 Operation phase

6.4.1 Detailed description of the operation and management of the project

During the operation of the project under consideration, there will be regular checks and maintenance of the equipment and cleaning of the project area, as well as maintenance work if required. During the operation of the projects, control and supervision will be carried out through remote control, remote supervision and remote control or on-the-spot.

6.4.2 Material, energy and water inputs during the operation of the project

In the operational phase of the project under consideration, small-scale consumption of water and electricity is foreseen for the operation of the substations (Milos/Serfou, Milos Water/S, Folegandros and Thira water). These quantities will come from the relevant municipal networks.

6.4.3 Waste water effluents — Management and Disposal

Any liquid waste arising from the maintenance of the equipment will be collected and handed over to companies licensed for its management.

A watertight tank will be constructed for the sewerage of the proposed water/Sierfos, Milos, Folegandro and Huntawater bodies, if it is not possible to connect to the relevant municipal sewage network. The watertight tank shall be evacuated at regular intervals from a special tank-vehicle to the nearest NWP in operation.

6.4.4 Solid waste effluents — Management and Disposal

During the operation of the projects, solid waste will be generated periodically from the maintenance work of the equipment of the project. Such waste, if hazardous, will be delivered to authorised companies for appropriate disposal. If they are not hazardous, they will be either recycled or recovered (e.g. metallic materials) or if they fall within the category of municipal waste they will be disposed of in landfills.

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6.4.5 Pollutant and greenhouse gas emissions to air

In the operational phase of the projects under consideration, no significant emissions of gaseous pollutants into the atmosphere are expected. The project under study concerns the transmission of electricity and not the production of electricity, which is related to emissions of gaseous and particulate pollutants.

6.4.6 Noise and vibration emissions

In the operational phase of the projects under consideration, no significant noise emissions are expected, taking into account the nature of the proposed projects (underground and submarine transport line and water/C line). In addition, no vibration is expected.

More specifically, according to the technical description of the projects, as set out above in this chapter, it should be noted that in the 150 kV/MT substations (Serfeou, Milos, Folandrou and Thira), on the basis of the specifications, the total noise level of transformers and inductors does not exceed 55 dB in the immediate surrounding area (within a radius of 4 m), with the result that the noise level at the fence limits is much lower than the maximum noise limits⁷ laid down in Presidential Decree 1180/06.10.81.

6.4.7 Electromagnetic radiation emissions

All electrical installations and appliances, and consequently high-voltage installations (lines, substations), create electric and magnetic fields in the surroundings. It is therefore important to set acceptable values of field tensions to ensure that people are protected from them.

The calculated levels are not risk limits but contain large safety factors to address the uncertainties that exist about the effect of fields on biota and to meet the requirement to prevent adverse effects. It should be noted that the relevant regulations specify the permissible levels of fields and under no circumstances set safety distances, as they appear from time to time in publications.

According to measurements by the Greek Atomic Energy Commission on electromagnetic fields generated in the area around substations, it is confirmed that the measured values of magnetic induction B and electric field E are often lower than those permitted⁸.

The comparative table with the limit values of the regulations and the actual values measured in ADMIE projects, as reported by the relevant studies, is presented below. It is estimated that during the operation of the proposed substations (C/S Serif, Milos Water/S, Folegandro and Hunta) the radiation levels that will be produced will be similar to those.

Table Error! No text of specified style in document.-7 Electromagnetic field values from measurements at ADMIE substations and regulatory cap values

STUDIES	PRICES OF MOLECULES OF	TENSION		
(HELLENIC ATOMIC ENERGY COMMISSION)	MAGNETIC INDUCTIVE B (MT)	INTENSITY OF ELECTRIC FIELD E (kV/m)		
Ceilings set by the ICNIRP and set by Joint Ministerial Decision 3060 (Government Gazette, Series II, No	100	5		

⁷ Maximum noise limits under Presidential Decree 1180/06.10.81: 70 dBA in a legislative industrial area, 65 dBA in industrial areas, 55 dBA in areas where the urban and industrial environments are equally prevalent, 50 dBA in urbandominated areas and 45 dBA in contact with residential buildings.

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⁸ According to Greek legislation, the safe exposure limits for the public are laid down in Law 4070/2012 (Article 30(9)-10, Government Gazette, Series I, No 82/10.4.2012) on 'Electronic Communications, Transport, Public Works and other provisions' and Articles 2-4 of Joint Decision No 53571/3839 (Government Gazette, Series II, No 1105//6-9-2000) of the Ministers for Development, the Environment, Spatial Planning and Public Works, Health and Welfare, Transport and Communications on 'Precaution measures for the public against the operation of antennas installed on land'.

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512)		
Y/Syros	0,13-3.96	
GIS Heraklion I	0,04-2,14	
GIS ALIBERY	0,07976-4.3976	0,012364-0.88063
Y/SECRETARIAT	0,035-0.327	0,00473-0.51087
H/S THESSALONIKI II	0,06-1.61	0,00158-0.5109
H/S OF LEACHINES	0,076-3.589	0,01326-04777
H. AGIOS VASILIOS CORFU	0,195-0.852	0,01805-03793
Y/S VOLOS I	0,019-1.648	0,022-0.524

Evidence shows that the maximum electromagnetic field values at the fencing limits of the substations are not only much lower than the maximum permissible values, but are in many cases close to zero or reach the limits of sensitivity of the measuring instrument.

In addition, based on measurements carried out in the past on underground energy transmission cables, the maximum electromagnetic field values are as follows:

Underground Heraklion I — Maximum Magnetic Induction value of 32.7 μT

Underground Line N. Makris — — Maximum Magnetic Induction value of 2.36 mT

Those prices are much lower than those in the homes and are due to household electrical appliances⁹.

Therefore, in the case of the projects under study (creation of substations of water/Serfou, moly water, water/body Folgedro and Hira) and on the corresponding underground and submarine cables, the values of magnetic induction and electrical field strength will be of the same order of magnitude as the above mentioned and much lower than the maximum permissible values.

6.5 Closure — Rehabilitation

6.5.1 Estimation of time or shut-down conditions

The project under study, by its nature, has a long lifespan, estimated to exceed 50 years. In order to ensure the safe operation of the project, the required maintenance and checking of the proper operation of the project will be carried out at regular intervals throughout the project. Supervision and control will be carried out through remote control, remote supervision and remote control or on-the-spot.

6.5.2 Deductions — Disposal

At the end of the operation of the project, the existing facilities will be removed and the site restored to its previous state. The materials resulting from the dismantling of the buildings, which may be used in the future, will be stored. The other materials shall be recycled in accordance with the legislation in force.

For materials resulting from the dismantling of buildings, the provisions of Joint Ministerial Decision No 36259/1757/E103 (Government Gazette, Series II, No 1312) on measures, conditions and programme for the alternative management of waste from excavation, construction and demolition, asamended and in force, shall apply.

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⁹ Report of the University of Patras.

6.5.3 Site restoration

The substations and the transit area of the underground project in the Regional Unit of Eastern Attica, the Regional Unit of Milos, the Regional Unit of Thira and the Regional Unit of Naxos shall be rehabilitated and reinstated in its entirety, through planting where necessary, in its previous state. The crossing area of the submarine cable will also be restored, by removing the cables and carrying out restoration works in the length where a drum is foreseen.

6.6 Exceptional circumstances and risks to the environment

Appropriate arrangements shall be made for the safe operation of the works (lighthouse ducts and earths and fencing at substations and the compensation terminal, fire-fighting and fire safety systems) throughout the project in accordance with the relevant regulations and specifications. Regular maintenance and control of the proper functioning of the project equipment will also be carried out throughout the project.

6.7 Proposal for demarcation in the case of a project where its construction affects the watercourse bed

Given that the proposed plots of land in the substations do not contain any watercourse in accordance with the definitions of Law 4258/2014, it is not proposed to delimit any watercourse within the catchment area.

It should be noted, however, that there is a stream near the proposed location of the water body, which will be in parallel with the underground cable. However, its bed is not expected to be affected under any circumstances.

For the underground cable to pass through the stream, authorisation is usually granted by the stream management department of the South Aegean Region to place the cable by crossing the stream either by air adjacent to the existing road or by piercing. No demarcation is required for these operations in accordance with the legislation.

In addition, when permits are issued for the construction of the water body, if deemed necessary by the competent stream management service of the South Aegean Region, a study will be prepared for the delimitation of the stream, which will be submitted for approval.

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7. ALTERNATIVE SOLUTIONS

7.1 Presentation of the sustainable alternatives examined

7.1.1 No solution

In line with the analysis presented in Chapter 4. The objective and feasibility of implementing the project — broader correlations", taking into account the annual rate of load growth of the islands of Serfou, Milos, Folegandrou and Thira, the great difficulty or inability to find sites and obtain permits to strengthen local plants or the development of new Directives 2010/75/EU1 on industrial emissions and (EU) 2015/21932 on the limitation of emissions of certain pollutants into the air from medium combustion plants, it was estimated that in the coming years the islands' autonomous electrical system would be highly likely to address capacity adequacy issues (including the oldness of many of the existing plants). As a result, the issue of the electricity interconnection of the islands with mainland Greece becomes "emergency".

In the case of a zero solution (non-implementation of the project), the islands of Serfos, Milos, Foleganros and Hunt will continue to be dependent on costly and environmentally unfriendly fuel oil burning to meet the ever-increasing electricity needs. Comparatively higher environmental impacts will continue to be borne by neighbouring areas of existing SPPs. As a result, the zero solution relates to both longer-term higher financial costs and the continuation of electricity production, mainly by the use of fuel oil. Use that is not environmentally friendly due to the emissions of pollutants produced.

7.1.2 Alternative substation positions

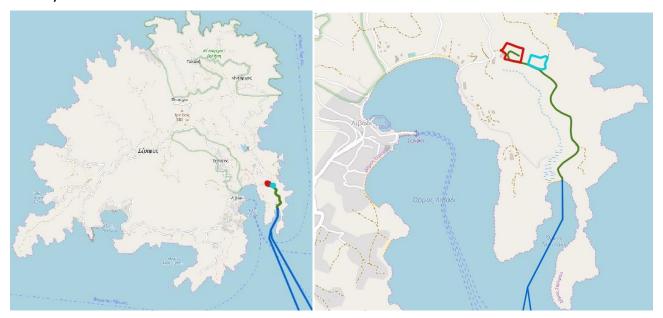
The following schemes set out the two options considered for the location of each new substation on the islands of Serphos, Milos, Fologrou and Hunt. The first alternative is presented in blue and the second alternative — proposed in red — is in red.

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 $^{^1}$ Joint Ministerial Decision No 36060/1155/E.103/aying down a framework of rules, measures and procedures for the integrated prevention and control of environmental pollution from industrial activities, in compliance with the provisions of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) of the European Parliament and of the Council of 24^{November} 2010 (Government Gazette, SeriesII, No 1450 2013).

² Directive (EU) 2015/2193 of the European Parliament and of the Council^{of} 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants.

Figure Error! No text of specified style in document.-1 Alternatives considered for the layout of the project on the island of Serof, Regional Unit of Milos (in blue the first alternative is presented and the second alternative in red — proposed solution)

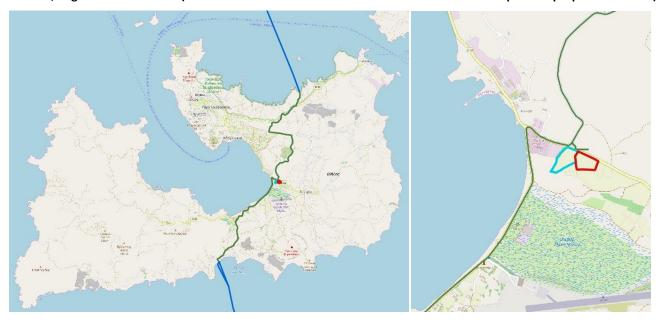


Comments:

- The locations of the proposed and alternative areas of the substation are located in the Regional Unit of Sirfou, Municipality of Serfou, Regional Unit of Milos.
- Both sites are not designed,
- They are less than 1 000 m from the settlement of Livadi and the Natura 2000 site "Coastal Zone or Islands of Serifopoulos, Pierre & Bos",
- The sites are in an area where there is no National Cadastre.
- The spaces are less than 800 m from the sea.
- The proposed location of the substation is 17 026.19 m 2^{and} the alternative is 11 820.59 m 2.

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Figure Error! No text of specified style in document.-2 Alternatives considered for the layout of the project on the island of Milos, Regional Unit of Milos (blue-coloured with first alternative and in red the second option — proposed solution)

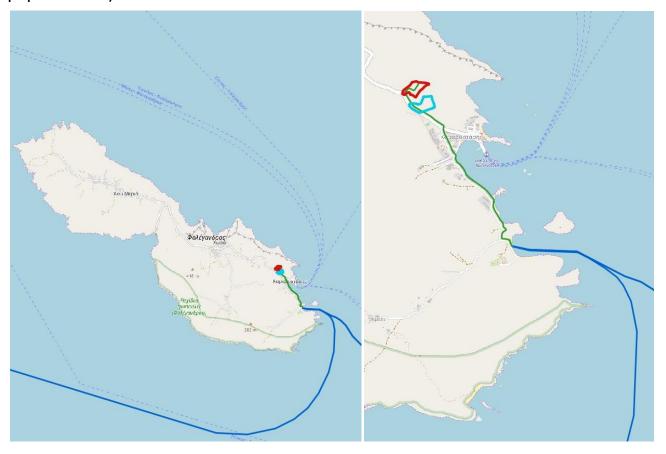


Comments:

- The locations of the proposed and alternative areas of the substation are located at the Mulos Regional Unit, Municipality of Milos, Regional Unit of Milos.
- The spaces are not designed,
- Less than 1 000 m from the settlement of Canava and the Natura 2000 site (Western Milos, Adamos, Polygos and Islands — Coastal Zone of Western Milos),
- The sites are in an area where there is a National Cadastre with KEK 280823016016 and 280823016004;
- Spaces are less than 800 m from the sea.
- The proposed location of the substation is 13 608.75 m^{2and} the alternative is 15 902.41 m 2.

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Figure Error! No text of specified style in document.-3 Alternatives considered for the layout of the project on the island of Foleganros, Regional Unit of Thira (in blue the first alternative is presented and the second alternative in red — proposed solution)

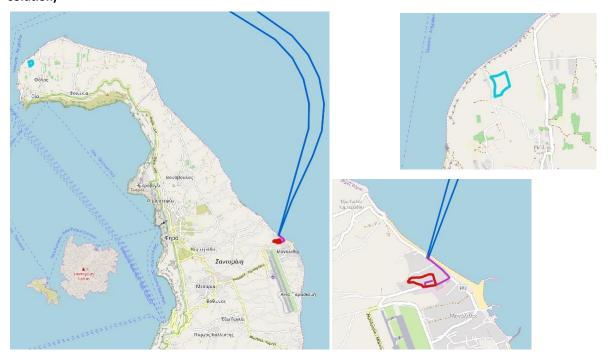


Comments:

- The locations of the proposed and alternative substations are located in the Regional Unit of Folegandrou, Municipality of Folegandrou, Regional Unit of Thira.
- The spaces are not designed,
- Less than 1 000 m from the settlement of Karavostassi and the Natura 2000 site "Folangerou East to West Sicino and Marine Zone";
- Spaces are less than 800 m from the sea.
- The proposed location of the substation is 16 806.67 m 2^{and} the alternative is 19 211.70 m 2.

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Figure Error! No text of specified style in document.-4 Alternatives considered for the layout of the project on the island of Thira, Regional Unit of Thira (blue-coloured with the first alternative and in red the second option — proposed solution)



Comments:

- The proposed location of the substation is located in the Regional Unit of Thira, Municipality of Thira, Regional Unit of Thira.
- The alternative location of the site of the substation is located at T.K., D.E. Thira, Municipality of Thira, Regional Unit of Thira,
- The spaces are not designed,
- The proposed site is within Z.O.E. (Government Gazette 139D/19-3-90 and GG 144D/30-4-12) and within the GPS of Thira (Government Gazette 932D/24-9-87);
- The alternative position is within the ZEOE (Government Gazette 139D/19-3-90 and Government Gazette 144D/30-4-12) and is more than 1 000 m from the GPS of Thira (Government Gazette, Series I, No 932 of 24.9.87) and the wildlife shelter (Faros Akrotiri-Saint);
- The proposed site is less than 1 000 m from the agglomeration of Monolithy;
- The alternative space is less than 1 000 m from the Tholo settlement,
- Spaces are less than 800 m from the sea.
- The proposed location of the substation is 21 150.67 m^{2and} the alternative is 22 134.03 m 2.

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7.1.3 Alternative underground cable route

7.1.3.1 Alternative underground cable route at the Lavretica Regional Unit, Attica

Due to the expected existence of many OKO networks, in the area of Lavretica where the submarine cable is connected to the mainland electricity system, two alternative land routes of the underground cables were considered until connection to the Lavrio hotspot, which are presented in the figure below.

Figure Error! No text of specified style in document.-5 Alternatives examined for the drawing up of the underground project in the Regional Unit of Lavreotikos, Municipality of Lavretica, Region of Attica (in blue the first alternative is presented and the second alternative in red — proposed solution)



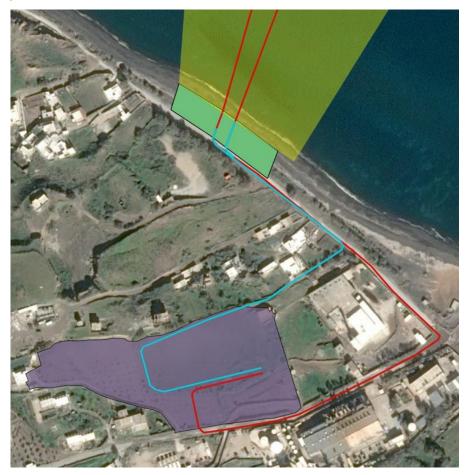
- The proposed and alternative routes of the underground transmission lines are located in the Regional Unit of Lavreotikos, Municipality of Lavretica, Region of Attica.
- The proposed and alternative routes of the underground transmission lines are more than 2 000 m from the Noise agglomeration of the Regional Unit of Lavretica;
- The length of the proposed route of the underground transmission lines is approximately 1 047 m and the alternative is approximately 730.9 m.
- The occupation of the project during the construction phase along the proposed route of the underground transmission lines is approximately 2 102 m 2 and the alternative is about 1 407.8 m 2.

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7.1.3.2 Alternative underground cable route on the island of Thira

Due to the expected existence of many OKO networks, in the area where the underground cable is routed on the island of Thira, two alternative land routes of the underground cables were examined until the connection to the new Hunting water, which is presented in the figure below.

Figure Error! No text of specified style in document.-6 Alternatives examined for drawing the underground project on the island of Thira, Regional Unit of Thira (blue-coloured with the first alternative and in red the second alternative — proposed solution)



- The proposed and alternative routes of the underground transport lines are located in the Regional Unit of Thira, Municipality of Thira, Regional Unit of Thira.
- The proposed and alternative routes of the underground transport lines are located within the agglomeration of Monolia of the Regional Unit of Thira.
- The length of the proposed route of the underground transmission lines is approximately 607.11 m and the alternative is approximately 613.1 m.
- The occupation of the project during the construction phase along the proposed route of the underground transmission lines is approximately 1 214.22 m 2 and the alternative is about 1 226.2 m 2.

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7.1.4 Alternative submarine cable route

7.1.4.1 <u>Alternative route via the islands of Syros, Sifnos and Paros</u>

According to ADMIE's Technical Note D-phase Interconnection of Cyclades, attached in Annex 1 to this study, an alternative route to the submarine cable in addition to that proposed by the project has been extensively examined. The two alternatives are analysed below:

- A. An alternative interconnection scheme by the Commission for the Economics Review of the electrification of the Non-Interconnected Islands, which includes the interconnection between Syros Sifnos, Sifnos Milos, Milos Folegandrou, Folegandrou, Thira and Thira Patros with submarine cables ER 150 kV with a capacity of 140 MVA each (the connection in Sifnos or Serifs was considered technically and economically similar).
- **B.** Proposed interconnection scheme by ADMIE, which includes the interconnection between Lavrios Serifou, Serifou Milos, Milos Folegandrou, Folegandrou Thira and Thira Naxos, with submarine cables AC 150 kV with a capacity of 200 MVA each.

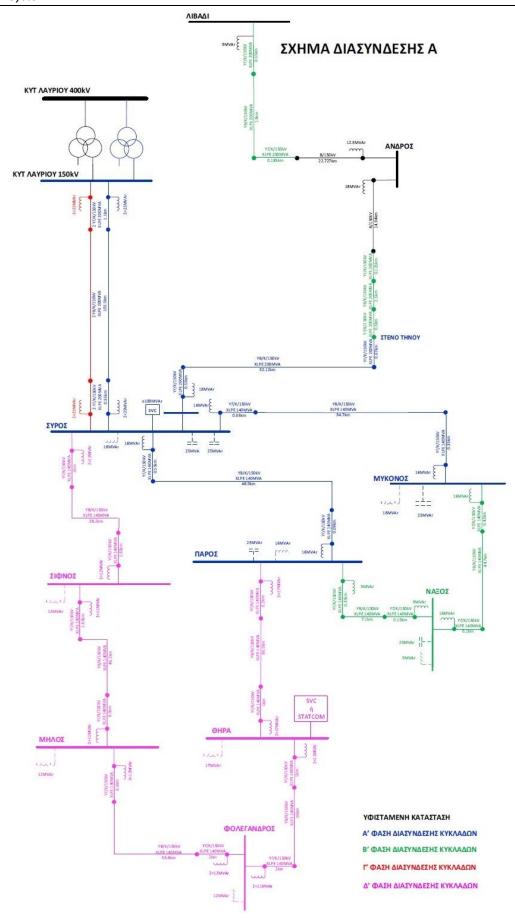
The two alternatives are presented in the following figures:

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Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

Figure Error! No text of specified style in document.-7 Alternative A considered for the route of the submarine cable (alternative solution)

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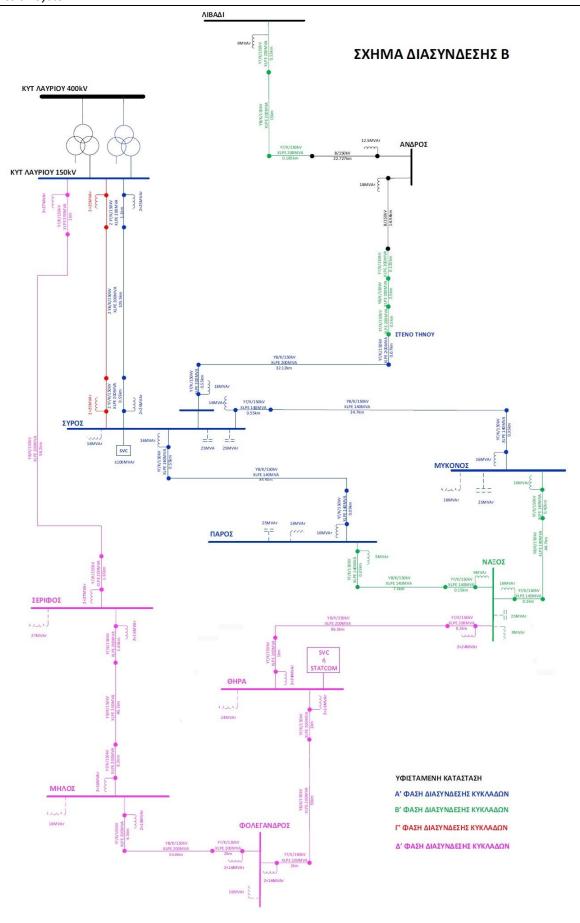


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Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

Figure Error! No text of specified style in document.-8 Alternative B considered for the route of the submarine cable (proposed solution)

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Interconnection scheme B is differentiated against A in the following points:

- <u>Connection point to the transmission system (Lavrio versus Syros)</u>: The amendment of the connection
 point to the ESMIE (instead of Syros in Lavrio) aims to create an additional powerful route for the
 supply by the ESMIE of both the Nordic and the South-Western Cyclades, the interconnection of which
 is the subject of Phase D of the Cyclades Interconnection Project.
- Connection point on the interconnected islands of the Cyclades (Naxos vs Paros): The modification of the connection point on the interconnected islands of the Cyclades (instead of Paros or Naxos) is necessary due to space constraints in the GIS Patros Health Authority and the impossibility of extending it. Moreover, as established by the preliminary investigation carried out by ADMIE as part of the formulation of its recommendation to the RAE and confirmed in the context of this analysis, the two solutions are economically equivalent, given that the distances between Thira and the two islands vary very little, and from a technical point of view, Figure B with a connection point in Naxos seems to have advantages over the flexibility it offers to supply the Mykonos-Naxos complex in N-1 conditions to the internal loop of the Cyclades (notably in the case of the loss of the interconnection between Paros and Naxos).
- Connection point on the interconnected islands (Serios v Sifnos): The amendment to the connection point on the interconnected islands (Serifos v Sifnos) was deemed necessary because of the change in the design with regard to the connection point to the ESMIE, given that, based on ADMIE's investigation, the distance of Serifou from Lavrio is less than that of Sifnos, while the distances between the Milos and the two islands vary very little. In any case, both solutions ensure the safe supply of Serifou and Sifnos, as they provide for interconnection between them under M.T.
- Transport capacity: The modification of the transmission capacity of the interconnection (200 MVA versus 140 MVA) was deemed necessary due to the change in the design with regard to the connection point to the ESMIE. The scheme proposed by the Commission envisages the creation of an internal loop with a central interconnector at the Syros HC/S with a capacity of 140 MVA, which can only cover the supply of loads to the South-Western Cyclades. On the contrary, ADMIE's design envisages the creation of an additional robust supply route by the ESMIE, which is required to have equivalent capacity to existing ones, as they aim to serve together the reliable supply of all the North and South-Western Cyclades.

As regards the need to maintain local production, account is in principle taken of the Commission's view of keeping the PAF in cold reserve, which will be put into operation only in cases of emergency (N-1). Then, on the basis of the updated demand development forecast over a 25-year horizon, it is investigated whether there is a need to maintain additional local production capacity in cold reserve and its size or whether it is possible to gradually dismantle the remaining GFCs.

As regards the penetration of RES in the interconnected islands, in line with the Commission's reasoning, no account is taken of the possibility of significantly increasing the penetration of RES following the interconnection of the islands. In particular, account has been taken of a very small increase in the penetration of RES at a rate that follows the evolution of the peak load.

7.1.4.2 Alternative routing of submarine cable in the southern Milos

Due to the intense relief of the seabed in the routing area of the submarine cable in the southern Milos, two alternative routes to the submarine cables were examined, which are presented in the figure below.

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Figure Error! No text of specified style in document.-9 Alternatives considered for scoring the route of the submarine cable in the southern Apple, Regional Unit of Milos (blue-coloured with the first alternative and in red the second alternative — proposed solution)



- The proposed and alternative routes of the submarine transport lines are located on the southern side of the island of Milos, Municipality of Milos, Regional Unit of Milos;
- The proposed and alternative routes of the submarine transmission lines are more than 1 000 m from the agglomeration of Provas in the municipality of Milos;
- The length of the proposed route of the submarine transport lines is approximately 1 410 m and the alternative is approximately 1 097.6 m.
- The occupation of the project during the construction phase along the proposed route of the underground transmission lines is about 1 455 m 2 and the alternative is about 1 142.6 m 2.

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7.2 Assessment and justification of the final selection

7.2.1 More detailed description of the viable alternatives considered

The technical characteristics of the substations, the underground and the submarine part of the project under consideration are the same for the alternatives, as the technology to be used for the transmission of electricity is not different. I.e. underground and submarine cables of the same specifications will be used and the projects of the 150 kV/MT substations are not differentiated. The alternatives presented differ in terms of the location of the substations and the route and the length of the individual sections of the transmission lines (underground, submarine). These variations have already been presented above, while the next paragraph analyses the characteristics of the range of alternatives.

7.2.2 An inventory of the current state of the environment, for each viable alternative and its development trends

7.2.2.1 Alternative locations for the substation of Serifos (P.E. Milou)

7.2.2.1.1 Statutory boundaries of agglomerations and approved plans

The two alternative locations of the substation and their relationship with approved settlement boundaries and town planning plans are presented below.

• Proposed location of the substation of Serifou:

This is an area of 17 026.19 m $2^{located}$ outside the plan on grassland. It is located approximately 1 120 m east of the border of the settlement of Livadi (Government Gazette, Series I, No 1373/ Δ /1986). It is located on an existing road network.

On the south-western boundary of the land, the EYL Serifou is located.

Alternative location of Serif substation:

This is an area of 11 820.59 m $2^{located}$ outside the project on grassland/agricultural land. It is located approximately 1 380 m east of the border of the settlement of Livadi (Government Gazette, Series I, No 1373/ Δ /1986). It is located on an existing road network.

250 m to the south-west of the land is the EYL Serifou.

7.2.2.1.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

With regard to the proposed location of the substation of Serif, the following shall apply:

- Natura 2000 sites: 420m to the east of the plot is the marine area of SPA GR4220029 "Serifos: Coastal Zone and Islands of Serifopoula, Pierri and Bos'. In addition, the area of SAC GR4220009 "South Serfos" is located at 2 250 m west of the plot.
- Important Important Bird Areas (IBAs): 420 m to the east of the plot lies the border of IBA GR150 "Serifos Island"
- Wildlife shelters: 930 m to the west of the plot is K481 KZ K481 'Country-Ag. Sunday (Serifos)' (Ministerial Decision 2401/17-7-98).
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.

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- Proposed landscapes of special natural beauty (TIFI): The plot of land is located within the landscape of special natural beauty 'Serifos Island' (AT5010088), which covers the whole island, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 520m to the south of the plot is the small island wetland 'Elos Tsipaki' (Y422SER001) with a surface area of 40 271 m 2⁽ Government Gazette 229 AQ 2012).

With regard to the alternative location of the Serif substation, the following shall apply:

- Natura 2000 sites: 280m to the east of the plot is the marine area of SPA GR4220029 "Serifos: Coastal Zone and Islands of Serifopoula, Pierri and Bos'. In addition, the area of SAC GR4220009 "South Serfos" is located at 2 500 m west of the plot.
- Important Important Bird Areas (IBAs): 280 m to the east of the plot lies the border of IBA GR150
 "Serifos Island"
- Wildlife shelters: 1 230 m west of the plot is situated in K481 'Country-Ag. Sunday (Serifos)' (Ministerial Decision 2401/17-7-98).
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The plot of land is located within the landscape of special natural beauty 'Serifos Island' (AT5010088), which covers the whole island, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 420m to the south of the plot is the small island wetland 'Elos Tsipaki' (Y422SER001) with a surface area of 40 271 m 2⁽¹⁾ Government Gazette 229 AQ 2012).

7.2.2.2 Alternative locations of the Moul substation (P.E. of Milos)

7.2.2.2.1 Statutory boundaries of agglomerations and approved plans

The two alternative locations of the substation and their relationship with approved settlement boundaries and town planning plans are presented below.

Proposed location of Milos substation:

This is an area of $13\,608.75\,\mathrm{m}$ $2^{located}$ outside the project on agricultural land. It is located approximately $1\,500\,\mathrm{m}$ to the west of the border of the agglomeration of Zephyria. It is located on an existing road network.

240 m to the west of the land is the PPC's PPC.

Alternative location of Milos substation:

This is an area of 15 902.41 m 2^{located} outside the project on agricultural land. It is located approximately 1 700 m to the west of the border of the agglomeration of Zephyria. It is located on an existing road network.

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100 m to the west of the land is the PPC's PPC.

7.2.2.2.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

With regard to the proposed location of the Milos substation, the following shall apply:

- Natura 2000 sites: 250m to the south of the plot is the area of SAC GR4220020 "island of Milos —
 Profitis Ilias Wider Area" and at the same distance is the area of SPA GR42200230 "Western Milos,
 Antimonos, Polygagos and Islands". The sea area of SAC GR4220005 'Western Milos Coastal Zone' also
 lies in the 400 m west of the plot.
- Important Important Bird Areas (IBAs): 150 m south of the plot lies the border of IBA GR152 "Western Milos, Adamos and Polygos Islands and Islands".
- Wildlife shelters: 3 km of the boron of the plot is located in the K519 KZ area 'Gournado-Flicki (Trivasalou-Milou)' (Government Gazette, Series I, No 520/30-5-79).
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no special natural beauty landscape in the location area of the project under study, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 3.5km south-west of the plot is located on the small island wetland 'Elos Provas' (Y422MIL004) with an area of 24.125 m² (Government Gazette 229 AQ 2012). Also, 3.5 km north-west of the plot is located on the small island wetland 'Adamas' (Y422MIL007) with a surface area of 10.383 m² (Government Gazette, Series I, No 229, 2012).

As regards the alternative location of the Milos substation, the following shall apply:

- Natura 2000 sites: 150m to the south of the plot is the area of SAC GR4220020 "island of Milos —
 Profitis Ilias Wider Area" and at the same distance is the area of SPA GR42200230 "Western Milos,
 Antimonos, Polygagos and Islands". The sea area of SAC GR4220005 'Western Milos Coastal Zone' is
 also located in the 200 m west of the plot.
- Important Important Bird Areas (IBAs): 35 m south of the plot lies the border of IBA area GR152 "Western Milos, Adamos and Polygos Islands and Islands".
- Wildlife shelters: 3 km of the boron of the plot is located in the K519 KZ area 'Gournado-Flicki (Trivasalou-Milou)' (Government Gazette, Series I, No 520/30-5-79).
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no special natural beauty landscape in the location area of the project under study, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 3.5km south-west of the plot is located on the small island wetland 'Elos Provas' (Y422MIL004) with an area of 24.125 m² (Government Gazette 229 AQ 2012). Also, 3.5 km north-west of the plot is located on the small island wetland 'Adamas' (Y422MIL007) with a surface area of 10.383 m² (Government Gazette, Series I, No 229, 2012).

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7.2.2.3 Alternative locations of Folegandrou substation (P.E. Thira)

7.2.2.3.1 Statutory boundaries of agglomerations and approved plans

The two alternative locations of the substation and their relationship with approved settlement boundaries and town planning plans are presented below.

• Proposed location of Folegandrou substation:

This is an area of 16 806.67^{m²} located outside the project on agricultural and arid land. It is located approximately 300 m north-west of the border of the settlement of Karavstasi (Government Gazette, Series I, No 1377/D/31-12-1986). It is located on an existing road network.

• Alternative location of Folegandrou substation:

This is an area of 19 211.70^{m²} located outside the plan on rural and arid land. It is located approximately 100 m north-west of the border of the settlement of Karavstasi (Government Gazette, Series I, No 1377/D/31-12-1986). It is located on an existing road network.

7.2.2.3.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

With regard to the proposed location of the Folegandrou substation, the following shall apply:

- *Natura 2000 sites:* 750m south-east of the plot is situated in the area of SAC-SPA GR4220004 'Folangerou East to West Sicinos and Maritime Zone'.
- Important Important Bird Areas (IBAs): the site is located within the IBA area GR157 "islands of los, Skinos and Foleganros".
- Wildlife shelters: 2 km south of the plot is situated in the K526 KZ area 'Pachides (Fleangrou)' (Government Gazette, Series I, No 410/20-6-84).
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The site is located within the landscape of special natural beauty 'Fologanros Island' (AT5011014), in accordance with the Filotis database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: The site is located within the CORINE biotope 'Fologanros Islands, Skikinos,
 Amisteria, Kardiotissa and geese' (A00040075), in accordance with the FILOTIS database (Hellenic
 Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

As regards the alternative location of the Folegandrou substation, the following shall apply:

- Natura 2000 sites: 500m south-east of the plot is situated in the area of SAC-SPA GR4220004 'Folangerou East to West Sicinos and Maritime Zone'.
- Important Important Bird Areas (IBAs): the site is located within the IBA area GR157 "islands of los, Skinos and Foleganros".
- Wildlife shelters: 2 km south of the plot is situated in the K526 KZ area 'Pachides (Fleangrou)' (Government Gazette, Series I, No 410/20-6-84).
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.

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- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The site is located within the landscape of special natural beauty 'Fologanros Island' (AT5011014), in accordance with the Filotis database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: The site is located within the CORINE biotope 'Fologanros Islands, Skikinos,
 Amisteria, Kardiotissa and geese' (A00040075), in accordance with the FILOTIS database (Hellenic
 Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

7.2.2.4 Alternative places of Thira substation (P.E. Thira)

7.2.2.4.1 <u>Statutory boundaries of agglomerations and approved plans</u>

The two alternative locations of the substation and their relationship with approved settlement boundaries and town planning plans are presented below.

• Proposed location of Thira substation:

This is an area of 21 150.67 $^{m^2}$ situated outside the plan on agricultural land within a residential fabric. It is located within the boundaries of the conurbation of monolithos (Government Gazette 351/ Δ /1989-06-06). It is located on an existing road network.

On the south-eastern boundary of the land, the PPC Thira is located.

Alternative location of Thira substation:

This is an area of 22 134.03 m 2^{located} outside the project on agricultural land. It is located approximately 500 m west of the boundary of the settlement of Tholos. It is located on an existing road network.

7.2.2.4.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

With regard to the proposed location of the Thira substation, the following shall apply:

- Natura 2000 sites: 4.5km south of the plot is situated in the SAC area GR4220003 'Santorini: New and Old Kamena — Prophis Ilias'.
- Important Important Bird Areas (IBAs): There is no IBA area in the location area of the project under study.
- Wildlife shelters: 3.5 km west of the plot is situated in K530 'Faraos Akrotiri-oia (Thia Thesis Kaderas)' (Government Gazette, Series I, No 634/22-8-94).
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The land is located within the TFIK 'Island of Thira or Santorini' (AT5011063), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: 4.5km to the south of the plot is located in the CORINE Voiotopoe, 'Profitis Ilia Region, Santorini' (A00030033), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).

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- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

As regards the alternative location of the Thira substation, the following shall apply:

- Natura 2000 sites: There is no Natura 2000 site in the site of the project under consideration.
- Important Important Bird Areas (IBAs): There is no IBA area in the location area of the project under study.
- Wildlife shelters: 1 200 m south of the plot is situated in K530 'Faraos Akrotiri-oia (Thia Thesis Kaderas)' (Government Gazette, Series I, No 634/22-8-94).
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The land is located within the TFIK 'Island of Thira
 or Santorini' (AT5011063), according to the FILOTIS database (Hellenic Nature Database,
 https://filotis.itia.ntua.gr/).
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: 3km south-west of the plot is an area of Other Viotope, 'Thirasia Island' (AB5080026), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

7.2.2.5 <u>Alternative underground cable route at the Lavretica Regional Unit, Attica</u>

7.2.2.5.1 Statutory boundaries of agglomerations and approved plans

The two alternative routes of the underground cable in the Lavretic Regional Unit and their relationship with approved settlement boundaries and town planning plans are presented below.

Proposed route of the underground cable, Regional Unit of Lavretics:

This is a route of approximately 1047 which is not planned and ends at the Lavrio hotspot. It is located more than 2 000 m from the noise settlement of the Regional Unit of Lavretica and is located on an existing road network.

The route runs along the boundary of the land of the Lavrio Energy Power Centre.

• Alternative route of the underground cable, Regional Unit of Lavretics:

This route is approximately 703.9 m long and is not planned and ends at the Lavrio hotspot. It is located more than 2 000 m from the noise settlement of the Regional Unit of Lavretica and is located on an existing road network.

The route shall move within the boundaries of the land of the Lavrio Energy Power Centre.

7.2.2.5.2 <u>Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)</u>

The following shall apply to the proposed route of the underground cable of the Lavroots Regional Unit:

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- Natura 2000 sites: 50m to the south of the proposed route is the area of SPA GR3000018 'Kanili Makronisos'. Also, 1.7 km to the west is the area of SAC GR3000005 "Sunio areas the island of Papakolou".
- Important Important Bird Areas (IBAs): 50 m to the south of the proposed route is the sea area IBA GR252 "Makronisos channel".
- Wildlife shelters: There is no KZ area in the location area of the project under study.
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no TFIK area in the area where the project is located, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: According to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/), there is no CORINE biotope in the area where the project islocated.
- Other Biotopes: 800m south-east of the proposed route is the area 'Other Viotopos' AB2080003 —
 National Forest of Sunion, according to the FILOTIS database (Hellenic Nature Database,
 https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

The following shall apply to the alternative route of the underground cable of the Lavretica Regional Unit:

- Natura 2000 sites: 50m to the south of the alternative route is the area of SPA GR3000018 'Kanili Makronisos'. Also, 1.7 km to the west is the area of SAC GR3000005 "Sunio areas the island of Papakolou".
- Important Important Bird Areas (IBAs): 50 m to the south of the alternative route is the sea area IBA GR252 "Makoniss Channel".
- Wildlife shelters: There is no KZ area in the location area of the project under study.
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no TFIK area in the area where the project is located, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: According to the FILOTIS database (Hellenic Nature Database https://filotis.itia.ntua.gr/), there is no CORINE biotope in the area where the project islocated.
- Other Biotopes: 800m south-east of the alternative route is located in the area 'Other Viotopos'
 AB2080003 Sunion National Park, according to the FILOTIS database (Hellenic Nature Database,
 https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

7.2.2.6 Alternative underground cable route on the island of Thira

7.2.2.6.1 Statutory boundaries of agglomerations and approved plans

The two alternative routes of the underground cable on the island of Thira and their relationship with approved settlement boundaries and town planning plans are presented below.

• Proposed route of the underground cable, island of Thira:

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This route is about 607.11 m long and is not planned and ends up in the new Hunting water. It is located within the agglomeration of Monolite of the Regional Unit of Thira, the Municipality of Thira, Regional Unit of Thira and is located on an existing road network.

The route runs along the boundary of the APS Thira plot.

Alternative route of the underground cable, island of Thira:

This route is about 613.1 m long and is not planned and ends up in the new Hunting water. It is located within the agglomeration of Monolite of the Regional Unit of Thira, the Municipality of Thira, Regional Unit of Thira and is located on an existing road network.

The route runs along the boundary of the APS Thira plot.

7.2.2.6.2 <u>Boundaries of areas of the national system of protected areas under Law 3937/2</u>011 (GG I 60)

As regards the proposed route of the underground cable of the island of Thira, the following shall apply:

- Natura 2000 sites: 4.5km south of the proposed route is the SAC area GR4220003 'Santorini: New and Old Kamena — Prophis Ilias'.
- Important Important Bird Areas (IBAs): There is no IBA area in the location area of the project under study.
- Wildlife shelters: 3.5 km west of the proposed route is situated in K530 'Faraos Akrotiri-oia (Thia Thesis Kaderas)' (Government Gazette, Series I, No 634/22-8-94).
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The proposed route is located within the TFIK 'Island of Thira or Santorini' (AT5011063), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: 4.5km south of the proposed route is located in the CORINE Voiotosite 'Prophetis Ilias, Santorini' (A00030033), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

As regards the alternative route of the underground cable of the island of Thira, the following shall apply:

- Natura 2000 sites: 4.5km south of the alternative route is the SAC area GR4220003 'Santorini: New and Old Kamena — Prophis Ilias'.
- Important Important Bird Areas (IBAs): There is no IBA area in the location area of the project under study.
- Wildlife shelters: 3.5 km west of the alternative route is situated in K530 'Faraos Akrotiri-oia (Thia Thesis Kaderas)' (Government Gazette, Series I, No 634/22-8-94).
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): The proposed route is located within the TFIK 'Island of Thira or Santorini' (AT5011063), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).

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- CORINE biotopes: 4.5km to the south of the alternative route is the CORINE Voiotosite 'Prophetis Ilias, Santorini' (A00030033), according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: The project under study does not pass through an area of 'Other Viotope', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

7.2.2.7 Alternative route of submarine cable through the islands of Syros, Sifnos and Paros

7.2.2.7.1 <u>Statutory boundaries of agglomerations and approved plans</u>

Since the alternative routing of the cable does not concern land-based projects at all, there are no boundaries of agglomerations and approved plans relating to this option.

7.2.2.7.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

With regard to formula A (Syros — Sifnos — Milos — Foleganros — Thira — Paros) the following applies:

- *Natura 2000 sites:* Depending on the route chosen, the submarine cable may pass through the following Natura 2000 sites:
 - > SAC-SCI area GR4220018 "Syros: Term syringe to beach' (Syros)
 - > SPA area GR4220032 "Northern Syros and Islands" (Syros)
 - > SAC region GR4220008 "Sifnos: Proftis Ilias to Western Coasts and Marine Area' (Sifnos)
 - > SAC region GR4220005 "Western Milos Coastal Zone" (Milos)
 - ➤ SAC area GR4220020 "Island of Milos Profitis Ilias Wider Area" (Milos)
 - SPA area GR42200230 'Western Milos, Antimilos, Polygos and Islands' (Molos)
 - > SAC-SPA area GR4220004 "Folangerou East to Western Sicinos and Marine Zone" (Fologanros)
 - > SAC region GR4220003 'Santorini: New and Old Kamena Profitis Ilias' (Thira)
 - > SPA area GR4220025 'Aros Islands and Southern Antiparos and Marine Area' (Parios)
- Important Important Bird Areas (IBAs): In the area where the project is located, depending on the route chosen, the submarine cable may pass through the following IBA areas:
 - ➤ GR157 "Islands of los, Skinos and Foleganros" (Fologanros)
 - ➤ GR153 "Paros Island, Antiparos Island and Islands" (Paros)
- Wildlife shelters: There are no marine areas of wild life refuge in the area where the project is located.
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): According to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/), there is no TFIK in the area where the project islocated.
- *CORINE biotopes:* There is no CORINE biotope in the location area of the project under study, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: There is no other biotope in the location area of the project under study, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

As regards alternative B (Lavrio-Serfos — Milos — Felangrou — Thira — Naxos), the following applies:

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- *Natura 2000 sites:* Depending on the route chosen, the submarine cable may pass through the following Natura 2000 sites:
 - > SPA area GR3000018 'Kanili Makronisos' (Lavrio)
 - > Area of SCI GR3000017 "Coastal and marine area of Makronos" (Lavrio)
 - Area of SPA GR4220029 'Serifos: Coastal Zone and Islands of Serifopoula, Pierri and Bos' (Serifos)
 - SAC region GR4220009 "Southern Serifs" (Serifos)
 - ➤ SAC region GR4220005 "Western Milos Coastal Zone" (Milos)
 - ➤ SAC area GR4220020 "Island of Milos Profitis Ilias Wider Area" (Milos)
 - > Area of SPA GR4220030 "Western Milos, Antimilos, Polygos and Islands" (Milos)
 - > SAC-SPA area GR4220004 "Folangerou East to Western Sicinos and Marine Zone" (Fologanros)
 - ➤ SAC region GR4220003 'Santorini: New and Old Kamena Profitis Ilias' (Thira)
 - > SAC region GR4220014 "Central and Southern Naxos: Za & Vila to Mavrovuni and the Maritime Zone (Karada-Motsuna bay)' (Naxos)
- Important Important Bird Areas (IBAs): In the area where the project is located, depending on the route chosen, the submarine cable may pass through the following IBA areas:
 - GR252 "Makronos channel" (Lavrio)
 - ➤ GR150 "Serifos Island" (Serifos)
 - ➤ GR157 "Islands of los, Skinos and Foleganros" (Fologanros)
- Wildlife shelters: There are no marine areas of wild life refuge in the area where the project is located.
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): According to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/), there is no TFIK in the area where the project islocated.
- CORINE biotopes: There is no CORINE biotope in the location area of the project under study, according
 to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Other Biotopes: There is no other biotope in the location area of the project under study, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: There is no small island wetland in the area where the project is located (Government Gazette 229 AQA 2012).

7.2.2.8 Alternative routing of submarine cable in the southern Milos

7.2.2.8.1 Statutory boundaries of agglomerations and approved plans

The two alternative routes of the submarine cable in the southern Mile and their relationship with approved settlement boundaries and town planning plans are presented below.

Proposed route of the submarine cable in the southern Apple:

This is a route with a length of approximately 1 410 m and is located in the Mount. It is located more than 1 000 m from the settlement of Provas in the municipality of Milos.

• Alternative route of the submarine cable to the southern Apple:

This route is approximately 1 097.6 m long and is located in the Mount. It is located more than 1 000 m from the settlement of Provas in the municipality of Milos.

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7.2.2.8.2 Boundaries of areas of the national system of protected areas under Law 3937/2011 (GG I 60)

As regards the proposed route of the Southern Mille submarine cable, the following applies:

- Natura 2000 sites: The proposed route is located within SAC area GR4220005 "Western Milos Coastal Zone". The route also develops on the southern boundary of SPA GR4220030 'Western Milos, Antimilos, Polygogos and Islands'.
- Important Important Bird Areas (IBAs): The proposed route is located on the southern boundary of IBA area GR152 'Western Milos, Adamos and Polygos and Islands'.
- Wildlife shelters: There is no KZ area in the location area of the project under study.
- RAMSAR*Convention:* There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no TFIK area in the area where the project is located, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: According to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/), there is no CORINE biotope in the area where the project islocated.
- Other Biotopes: There is no 'other biotope' area in the location area of the project under consideration, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 1.3km north-west of the proposed route is the area of a small island wetland Y422MIL004
 'Elos Provas' (Government Gazette, Series I, No 229, 2012).

As regards the alternative route of the Southern Mille submarine cable, the following shall apply:

- Natura 2000 sites: The alternative route is located within SAC area GR4220005 "Western Milos Coastal Zone". The route also develops on the southern boundary of SPA GR4220030 'Western Milos, Antimilos, Polygogos and Islands'.
- *Important Important Bird Areas (IBAs):* The alternative route is being developed on the southern border of IBA GR152 'Western Milos, Adamos and Polygos and Islands'.
- Wildlife shelters: There is no KZ area in the location area of the project under study.
- RAMSARConvention: There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the area where the project is located.
- National Parks: There is no National Park in the location area of the project under study.
- Proposed landscapes of special natural beauty (TIFI): There is no TFIK area in the area where the project is located, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- CORINE biotopes: According to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/), there is no CORINE biotope in the area where the project islocated.
- Other Biotopes: There is no 'other biotope' area in the location area of the project under consideration, according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/).
- Wetlands: 1.3km north-west of the alternative route is the area of a small island wetland Y422MIL004
 'Elos Provas' (Government Gazette, Series I, No 229, 2012).

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7.2.3 Assessment and assessment of significant environmental impacts for each viable alternative and justification of the main reasons for their rejection

7.2.3.1 Alternative locations for the substation of Serifos (P.E. Milou)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

In view of the above, and in view of the fact that the two places are close to each other and are essentially equivalent, the first alternative (proposed) has been chosen solely on the basis of the topography of the soil.

Due to a more favourable morphology, for the configuration of the proposed location and the installation of the substation, the soil is expected to be far less than the second alternative.

In view of the above, it is proposed that option 1 is environmentally optimal.

7.2.3.2 Alternative locations of the Moul substation (P.E. of Milos)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

In view of the above, and in view of the fact that the two places are close to each other, the first option (proposed) was chosen on the basis of the following:

- 1) Due to a more favourable morphology, the land in the proposed site has better drainage. This means that there will be no need to set up proper drainage channels and so the soil will be less when the site is configured.
- 2) The location is better protected from the sea than the other land. This will not require the construction of protective works and therefore the environmental footprint will be smaller.

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3) It is a single property and there will be no complication in the licensing procedures.

In view of the above, it is proposed that option 1^{is} environmentally optimal.

7.2.3.3 Alternative locations of Folegandrou substation (P.E. Thira)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid
 opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

In view of the above, and in view of the fact that the two places are close to each other, the first option (proposed) was chosen on the basis of the following:

- 1) The soil is relatively flat and the necessary earthworks are severely limited.
- 2) The relief of the stadium is such that the visual contact of the water body from the nearby settlement is reduced.

In view of the above, it is proposed that option 1^{is} environmentally optimal.

7.2.3.4 Alternative places of Thira substation (P.E. Thira)

The location of the substation was chosen on the basis of the following basic criteria:

- Avoid areas protected by special status
- Be close to the centre of gravity of the loads, in order to avoid the construction of long distribution lines which would harm the environment.
- Be located close to the coast in order to avoid the development of a 150 kV network on the islands.
- Be close to a suitable road to allow the transport of heavy equipment (transformers, etc.), and to avoid opening new access roads.
- The soil configuration and technical characteristics are suitable for the construction and development of the project.
- The morphology of the soil is such that it does not require major interventions on its surface;
- Cause the least visual discomfort possible.

In view of the above, the first option (proposed) was chosen on the basis of:

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- 1) The position is close to the Thira SAP and at the centre of gravity of the island's cargo. The distribution networks are concentrated in the area concerned. This option would not require the construction of an extensive network of underground transmission lines crossing the entire island.
- 2) There is no suitable coast for a landing point on the northern side of the island. All the closest coasts are steep and rocky and would require extensive earthworks to achieve a breadth on that side.

In view of the above, it is proposed that option 1^{is} environmentally optimal.

7.2.3.5 Alternative underground cable route at the Lavretica Regional Unit, Attica

In view of the above, the two solutions appear to be environmentally equivalent. In view of the technical difficulties that may arise during the construction of the project (the existence of many OKO networks on the route of the line), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

7.2.3.6 <u>Alternative underground cable route on the island of Thira</u>

In view of the above, the two solutions appear to be environmentally equivalent. In view of the technical difficulties that may arise during the construction of the project (the existence of many OKO networks on the route of the line), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

7.2.3.7 <u>Alternative route of submarine cable through the islands of Syros, Sifnos and Paros</u>

Taking into account the above (as well as the analysis contained in ADMIE's "Technical Note D — Phase D Interconnection of Cyclades", attached in Annex 1 to this study), the solutions are environmentally equivalent. Option B (proposed) was chosen on the basis of:

- 1) The proposed electrification method for the Non-Interconnected Islands (Figure A) is not sufficient to ensure the secure supply by the ESMIE of the peak load of the Northern and South-Western Cyclades complex. For this reason, the draft proposed by ADMIE (Figure B) provides for the creation of an additional strong supply route from Lavrio (Lavrio-Serfos Cable), which, due to economies of scale, serves a twofold objective:
 - i. closure of the interconnection loop of the South-Western Cyclades complex
 - ii. increase the reliability of the supply of all the Northern and South-Western Cyclades over a 25-year horizon
- 2) In the economic assessment of the two solutions, the capital costs of the Lavrio-Serfos cable of the B-shaped cable are allocated to the two Cyclades (North and South-West) units served on the basis of energy demand and account is taken of the costs corresponding to the South-Western Cyclades complexes, with the result that Figure B ultimately also outweighs economic efficiency.
- 3) As regards the need to maintain local units in emergency reserve status and its height, Figure B takes precedence over A, as the total reserve level that should be maintained for the two agglomerations of the Nordic and South-Western Cyclades is overall lower (by ~20MW), while the number of N-1 disruptions in which units may be required to be placed in service is significantly lower. If the fixed cost of maintaining the reserve of PPPs is taken into account in the economic valuation of the two options, the financial difference in favour of Scheme B is widened.

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On the basis of the above, it appears that the interconnection scheme proposed by ADMIE (Figure B) prevails significantly and is proposed as the best alternative.

7.2.3.8 <u>Alternative routing of submarine cable in the southern Milos</u>

In view of the above, the two solutions appear to be environmentally equivalent. Given the technical difficulties that may arise during the construction of the project (increased terrain), it is proposed that both solutions be allowed. Only the proposed solution will be used to assess the impact of the project, as both will not be implemented.

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All the above-mentioned statutory spatial provisions applicable to the project area are set out in Charter 4 'Map of Land Use and Coverage' of Chapter 15 hereof.

8.1.1.1 Land use

According to the 'Map of Land Use and Coverage' (Environmental Map: Annex 15 to this study states the following for the vegetation of the study area:

- the area of study of the Lavreotia Regional Unit is dominated by areas with shrubs (38.4 %), areas under agricultural crops (25.9 %) and areas with residential development (22.2 %). There are also grasslands (4.9 %) and agricultural crops with residential growth (0.4 %). Other land uses in the area include the Lavrio Energy Centre (7.8 %), biological treatment facilities (0.3 %) and photovoltaic parks (0.03 %).
- the study area of the island of Serf is dominated by grasslands (72.1 %) and residential areas (12.8 %). There are also areas with agricultural crops (9.8 %), land with agricultural crops together with residential development (3.8 %) and abandoned agricultural crops (1.5 %).
- the area of study on the island of Milos is dominated by areas with agricultural crops together with residential development (57.7 %), shrub areas (31.9 %) and grasslands (3.5 %). There are also areas with agricultural crops (1.0 %) and areas with residential development (0.5 %). Other land uses in the area include mines (4.5 %), the areas of Milos Airport (0.9 %) and photovoltaic parks (0.03 %).
- the area of study on the island of Folegandro is dominated by grassland (80.4 %), land under agricultural crops (15.1 %) and areas with residential development (2.6 %). There are also abandoned agricultural land (1.9 %).
- the study area of the island of Thira is dominated by land with agricultural crops together with residential development (72.5 %). There are also areas with residential development (13.9 %) and other land uses, such as Thira Airport (13.6 %) and the Pier of the Port of Monolithos (0.05 %).
- the study area of Naxos is dominated by areas with shrubs (34.8 %), areas with residential development (31.8 %) and areas with agricultural crops (27.1 %) and arid areas (3.5 %). There are also other land uses such as beach (1.97 %) and mines (0.9 %).

The following tables show the vegetation categories of the study area of the proposed project.

Table 8.2-1 Categories of vegetation in the location area of the project under study — section D.Lavretica Regional Unit

Vegetation categories	Area (str)	%
Shrubs	2930,49	38.37 %
Agricultural crops	1980,99	25.94 %
Agricultural crops and housing development	33,34	0.44 %
Meadows, diluted wood. Vegetation	376,48	4.93 %
Housing development	1691,56	22.15 %
Lavrio SES Energy Centre	597,46	7.82 %
Photovoltaics	2,21	0.03 %
Biological Cleaning	24,66	0.32 %
Total total	7637,18	100 %

Table 8.2-2 Categories of vegetation in the location area of the project under study — the part of the island of Serifos

Vegetation categories	Area (str)	%
Agricultural crops	692,52	9.84 %
Agricultural crops and housing development	265,96	3.78 %
Agricultural crops abandoned	103,26	1.47 %
Meadows	5074,89	72.13 %
Housing development	899,55	12.78 %
Total total	7036,18	100 %

Table 8.2-3 Categories of vegetation in the location area of the project under study — the part of the island of Milos

Vegetation categories	Area (str)	%
Shrubs	9886,81	31.89 %
Agricultural crops	313,71	1.01 %
Agricultural crops and housing development	17882,44	57.69 %
Meadows	1085,63	3.50 %
Housing development	168,22	0.54 %
Mining/quarrying regions	1386,54	4.47 %
Photovoltaics	8,39	0.03 %
Airport	268,66	0.87 %
Total total	31000,4	100 %

Table 8.2-4 Categories of vegetation in the location area of the project under study — the part of the island of Folegandrou

Vegetation categories	Area (str)	%
Agricultural crops	1426,04	15.10 %
Agricultural crops abandoned	179,13	1.90 %
Meadows	7594,44	80.43 %
Housing development	242,38	2.57 %
Total total	9442,0	100 %

Table 8.2-5 Categories of vegetation in the location area of the project under study — the part of the island of Thira

Vegetation categories	Area (str)	%
Agricultural crops and housing development	5421,42	72.50 %
Housing development	1036,26	13.86 %
Airport	1016,16	13.59 %
Jetty	3,80	0.05 %
Total total	7477,65	100 %

Table 8.2-6 Categories of vegetation in the location area of the project under study — the part of the island of Naxos

Vegetation categories	Area (str)	%
Shrubs	963,29	34.75 %
Agricultural crops	750,25	27.07 %
Arid areas	96,35	3.48 %
Housing development	882,37	31.83 %
Mining/quarrying regions	24,2	0.90 %
Beach	54,61	1.97 %
Total total	2771,79	100 %

In addition, the table below presents statistical data on existing land uses in the municipalities, where the project under study is located.

On the basis of the data in the Table, the following conclusions can be drawn:

- In the municipality of Lavretica, land uses are dominated by shrub and/or herbaceous vegetation combinations (corresponding to 37 % of total land) and pasture combined with shrub and/or herbaceous vegetation (15.8 %).
- In the Municipality of Serifs, land uses are dominated by grassland combined with shrub and/or herbaceous vegetation (54.4 %) and arable land (13.8 %).
- In the municipality of Milos, land uses are dominated by shrub and/or herbaceous vegetation combinations (corresponding to 29.5 % of total land) and pasture combined with shrub and/or herbaceous vegetation (26.1 %).
- In the municipality of Folegandro land use is dominated by pastures combined with shrub and/or herbaceous vegetation (46.2 %) and arable land (39.1 %).
- In the municipality of Thira, land uses are dominated by heterogeneous agricultural areas (corresponding to 53.3 %) and areas with sparse or no vegetation (23.2 %).
- In the municipality of Naxos, land uses are dominated by heterogeneous agricultural areas (50.1 %) and combinations of shrub and/or herbaceous vegetation (25.2 %).

Table 8.2-7 Breakdown of the area of the municipal units where the project under study is located in the main categories of use/coverage (areas in thousands of hectares)

		AGRIC	ULTUR	AL AREAS	5			SEMI-I	PHYSICA	L FOREST	rs	LAND BY W	COVI ATER	ERED	TECH	NICAL	AREAS	S	
Regions and municipalities/municipal units	Total areas	Arable land	Permanent crops	Pastures — Transitional woods/ shrublands	Pastures — Scrubland combinations and/or herbaceous vegetation	Pastures — Areas with sparse or no vegetation	Heterogeneous agricultural areas	Forests for forests	Transitional woodlands	Shrub combinations and/or or herbaceous vegetation	Areas with sparse or no vegetation	Land waters	Internal wet zones	Coastal wet zones	Urban construction	Industrial or commercial units	Transport networks	Mines, refuse dumps and construction sites	Artificial, non-agricultural green areas, sports and
TOTAL GREECE	131982.2	21181.5	7491.6	879.9	9151.5	4420.2	22011.5	22411.6	11606.6	23950.6	4509.3	1197.3	108.3	484.5	1913.1	212.7	156.4	270.3	25.4
REGION OF ATTICA	3,806.9	69.1	239.3	6.2	183.9	31.5	887.9	371.5	386.3	945.5	86.1	1.6	1.7	3.4	424.0	65.9	36.4	50.0	16.7
D. LLAVOURIST	36.1	0.0	0.7	0.0	5.7	0.0	3.7	0.0	3.4	13.5	1.5	0.0	0.0	0.0	4.3	3.1	0.4	0.0	0.0
SOUTH AEGEAN REGION	5,316.5	367.2	90.2	10.0	1,053.7	246.2	1,144.6	232.4	214.2	1,444.3	400.1	12.9	0.0	3.2	63.4	15.5	6.3	11.5	0.8
D. SERIFOS	76.3	10.5	0.0	0.0	41.5	2.6	2.7	0.0	0.0	9.6	9.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
D. MILOU	167.7	26.8	1.3	0.0	43.7	0.1	28.9	0.0	0.6	49.5	8.4	0.1	0.0	1.3	1.5	0.1	0.0	5.4	0.0
D. FOLIGANDROU	32.5	12.7	0.0	0.0	15.0	0.0	0.5	0.0	0.0	3.3	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
D. THIRA	71.1	0.0	0.0	0.0	8.1	0.0	37.9	0.0	0.5	0.0	16.5	0.0	0.0	0.0	6.7	0.0	1.4	0.0	0.0
D. NAXOU	127.1	1.2	2.6	0.0	21.7	0.0	63.7	0.0	0.0	32.0	1.2	0.1	0.0	0.9	2.5	0.3	0.0	0.9	0.0

Source: ELSTAT, 2006

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The following table shows the land uses found in the area where the project is located. It should be noted that the occupation of projects by land use category is set outin section '9.6.1 Impacts on spatial planning and landuse' of this Environmental Impact Assessment.

Table 8.2-8 Land Uses found in the location area of the project under study

Project section under study	Land uses in the area where the project is located	Labels for point uses
Underground section 150 kV Attica in Lavrio	Industrial space, shrubs and agricultural crops.	Most of the GM is located within the Lavrio Energy Centre (EES), a small section passing through shrub land and agricultural crops.
Underground section 150 kV Serifou G.U.	Meadows, sparse ligneous vegetation and agricultural crops abandoned	_
New S/S Island of Serifos	Meadows, sparse ligneous vegetation	The land of the new water is located within meadows with sparse woody vegetation. At the south-west boundary of the land of the water body is the Sierfou EYL.
Underground section 150 kV B.M.	Agricultural crops with residential land, meadows (grown woody vegetation) and shrubland.	The U.S. is located on existing roads which pass mainly through agricultural crops with residential land. 370 m southeast of the G.M. in the N. Milos are located on the surface mines of bentonite.
New Island of Milos	Agricultural crops with residential land.	The land of the new water/S is located within agricultural crops with residential land. 240 m to the west of the water plot is located in the PPC's PPC.
Underground section 150 kV N.Milou	Agricultural crops with residential land and scrubland.	The U.S. is located on existing roads which pass mainly through agricultural crops with residential land. 150 m southeast of the Southern Milos G.M. is located at Milos Airport. In addition, a quarrying region is located around the Achivadolinna campsite in the N. Milos and further southerly, 250 m to the east of the G.M. in the south of Milos.
Underground section 150 kV Folegandrou	Residential land, meadows (grown woody vegetation) and agricultural crops.	The G.M. is located on existing roads which pass through residential areas. The Livadi campsite is located 100 m from the landing point at Fologandro.
New body of the island of Folegandrou	Meadows (grown woody vegetation) and agricultural crops	_
Underground section 150 kV Hunting	Residential land.	_
New Island of the island of Thira	Residential land.	The land of the new Hunting water is located within residential areas. On the south-eastern boundaries of the land, the PPC Thira is located and 250 m south-west of Hunting is located at Thira Airport.
Underground section 150 kV Naxos	Shrublands	The GI is located on existing roads which pass through shrub areas and end up in the existing water/system of Naxos.

8.1.2 Structure and operations of the man-made environment

The following agglomerations are found in the project area:

• In the municipality of Lavreotikos:

- o 800 m to the east of the project is located in the Syri agglomeration
- \circ 2 km south of the project is located in the agglomeration of Lavrio (Government Gazette 1260/ Δ /1993, 374/ Δ /1995).
- o 2 km south-west of the project is located in the Noise agglomeration.
- o 2 km to the west of the project is located in the settlement of Paylakaraza
- o 2 km of the project is located in Panorama Microlimano

• In the municipality of Serifou

- o Approximately 0.9 km to the west of the agglomeration of Livadi (Government Gazette, Series I, No 1373/ Δ /1986-12-31)
- \circ 2 km north-west of the project is located in Serifos (Country) (Government Gazette, Series I, No 1373/ Δ /1986-12-31).

In the municipality of Milos

- o The agglomeration of Pachaina is located to the east of the bottling point of B. Milos.
- o The underground unit of V. Milos passes through the agglomeration of Mytikas.
- The agglomeration of Adamada is located in 1 km to the east of the underground metropolitan area of V. Milos.
- The settlement of Kanna is located in 250 m to the east of the underground GM of the N.
 Milos.
- The agglomeration of Zefyria is located 1.2 km east of the new Milos water/body.
- The settlement of Kipi is located at 700 m west of the landing point in the N. Milos.
- o The agglomeration of Provas is located 1 km east of the landing point in N. Milos.

• In the Municipality of Folegandrou

- The agglomeration of Karavostase (Government Gazette, Series I, No 1373, 1986-12-31) is located to the south-east of the new water.
- \circ 2 km north-west of the project is located in the agglomeration of Foleganros (Country) (Government Gazette, Series I, No 605/ Δ /1988-08-22).
- o Km to the east of the landing point is the agglomeration of Livadi.

• In the municipality of Thira

- Part of the project (Government Gazette, Series I, No 351/1989) passes through the statutory boundaries of the conurbation of monolithos (Government Gazette, Series I, No 351/1989).
- 0.9 km north-west of the project under study is located in the agglomeration of Eexo Gilo Kardterádou.
- \circ 2 km to the west of the project is the agglomeration of Kardterida (Government Gazette, Series I, No 820/ Δ /1987-08-27)
- 2 km to the north-west of the project under study is located in the agglomeration of EExo
 Giunta
- o 2 km south of the project is located in Agia Paraskevi.

• In the municipality of Naxos

- o 800 m north-east from the sub-project is the agglomeration of Strida.
- 1.5 km south-east from the sub-project is located in Agios Prokopios.

 1.9 km south-east of the project is located in the agglomeration of Agia Anna (Government Gazette, Series I, No 264/1986).

According to the data in the permanent list of declared archaeological sites and monuments of Greece by the Ministry of Culture and Sport(http://listedmonuments.culture.gr/search_declarations.php), there are five (5) agglomerations in the project area which have been declared as traditional:

- Serifos (Country) in the Municipality of Sirfo (Government Gazette, Series I, No 594/13.11.1978)
- Fologanros (Country) (Government Gazette, Series I, No 594/13.11.1978, Government Gazette, Series I, No 402/17.05.2002, Government Gazette, Series I, No 920/23.10.2002) and Karavostase (Government Gazette, Series I, No 504/14.07.1988, Government Gazette, Series I, No 920/23.10.2002), in the Municipality of Folegandrou
- Kardteridas (Government Gazette, Series I, No 504/14.07.1988) and Extra Geia (Government Gazette, Series I, No 504/14.07.1988) in the municipality of Thira

The table below shows the population of the agglomerations located at a distance in the study area of the project.

- In the Regional Unit of Lavreticos, with the exception of Lavrio (with 7 078 inhabitants), the agglomerations located within the study area are small (number of inhabitants & 250 persons).
- In the municipality of Serifou, the agglomerations found in the study area are all relatively small (number of inhabitants & 1 000 people).
- In the municipality of Milos, with the exception of Dada (with 1,347 inhabitants), the agglomerations located within the study area are small (number of inhabitants & 200 people).
- In the municipality of Folegandrou, the agglomerations found in the study area are all relatively small (number of inhabitants & 500 people).
- In the municipality of Thira, with the exception of the agglomeration of Kardteradas (with 1 238 inhabitants) and the agglomeration of Monoli (with 499 inhabitants), the agglomerations located within the study area are very small (number of inhabitants & 100 persons).
- In the municipality of Naxos, the agglomerations located within the study area are small (number of inhabitants & 200 people).

Table 8.2-9 Population in the agglomerations found in the study area of the project

Settlement of agglomeration	Permanent population (2011 census)
Municipality of Lavreotikos	
Syri	54
Lavrio	7.078
Noise	227
Palycaraiza	216

Settlement of agglomeration	Permanent population (2011 census)
Panorama Microlimano	172
Municipality of Serifou	
Serifos (Country)	364
Meadow	605
Municipality of Milos	
Pachaina	32
Zefyria	176
Kavana	86
Dama	1.347
Mytikas	25
Garden	6
Provass	27
Municipality of Folegandrou	
Karavostase	87
Lecturer (Country)	425
Meadow	1
Municipality of Thira	
Monolites	499
Outside Kardterados	55
Carderfish	1.238
Hunter's outer yoghurt	71
Agia Friday	57
Municipality of Naxos	
Booklet	157
Agios Prokopios	96
Saint Anna	176
Total total	13.277

Source: Population and Housing Census 2011, ELSTAT

8.1.3 Culturalheritage

The tables below show the declared archaeological sites and monuments found in the Municipal Units where the project is located.

Table 8.2-10 Declared archaeological sites and monuments in the Lavretic Regional Unit of the Municipality of Lavretica

Name of the	Settlement of agglomeratio n	Type of Monument	Government Gazette of Declaration
Archaeological site of the Nooriko Lavrio		-	MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957 MINISTERIAL DECISION 21220/10-8-1967 (GOVERNMENT GAZETTE, SERIES II, NO 527//24-8-1967) MINISTERIAL DECISION 2717/Π-102/91/2-10-1991, GOVERNMENT GAZETTE 946/Δ/23-12-1991 MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ02/6690/376/21-11-1994

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				(GOVERNMENT GAZETTE, SERIES II, NO 927/14- 12-1994) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos — hill in the northern port of Pasa Lavrio	Lavronium	Hill to the north of the Port of Pasa Lavrio	Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22053/1046/7-5- 1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7-1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos — Lavrio Pontazeza	Lavronium	Pontaza Lavrio	Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22053/1046/7-5- 1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7-1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Two shipwrecks: a classical time and a roman sink, accessible to the public to carry out an underwater survey	Micromoleu m	Turkolimno Thorikos bay	Sundry space	Government Gazette 2069B/21-09-2015 and 2655B/09-12-2015
Byzantine shipwreck at Cape Vrysaki	Noise	Vrysaki	Sundry space	GOVERNMENT GAZETTE, SERIES II, NO 2069/21- 09-2015
Archaeological site of Lavreticos — Ancient remains on the 'Oxygono' or 'Karaaki' Peninsula	Lavronium	On the "Oxygen" or "Karaki" peninsula	Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/22052/1047/7-5- 1996, GOVERNMENT GAZETTE, SERIES II, NO 562/11-7-1996 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Sunio archaeological site			Sites, Archaeological	PRESIDENTIAL DECREE 18-4-1925, GOVERNMENT GAZETTE 107/A/30-4-1925 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				MINISTERIAL DECISION 74913/3118/15-7-1957, GOVERNMENT GAZETTE, SERIES II, NO 216/5-8-1957 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE, SERIES II, NO 265/1-10-1957 MINISTERIAL DECISION YPEPE/Φ02/35222/1610/23-6-1979 (GOVERNMENT GAZETTE, SERIES II, NO 767/8-9-1979) MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos Attica: Farm with Pyrgos			Compacts, Historical Sites, Towers,	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Traditional Farm and Tower			Compacts, Historical Sites, Towers,	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of Lavreotikos: Traditional farm			Rural Economy, Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Farm with acronyms of classical times			Rural Economy, Historical Sites, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Farm with tower of 4th BC			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions	YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-
Archaeological site of Lavreotikos: Archaeological remains Architecture			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Two farms with a tower, missing buildings at classical times			Rural Economy, Defence Compacts, Historical Sites, Towers, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Remaining buildings, Leaves, Farm 4 BC			Rural Economy, Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Lack of Roman settlement			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Missing tracks, remains of classic buildings (classical and Greek keramics)			Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Archaeological site of Lavreotikos: Cavity with traces of occupancy (Cermetic neolithic, archaeological and classical times)			Natural Areas, Historical Sites, Seves, Archaeological Positions	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Agios Nikolaos bay			Archaeological Positions	MINISTERIAL DECISION 2258/4-2-1966, GOVERNMENT GAZETTE, SERIES II, NO 175//26- 3-1966 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Port of Pasa		59 km of Sunion Avenue Lavrios	Archaeological Positions	MINISTERIAL DECISION 4499/12-6-1964, GOVERNMENT GAZETTE, SERIES II, NO 239/30-6- 1964 MINISTERIAL DECISION YPEPE/Ф02/42292/2056/10-9-1979, GOVERNMENT GAZETTE, SERIES II, NO 1086/4- 12-1979 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Agaroleza Lavrio		Agaroleza	Historical Sites, Archaeological Positions	MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE 184/B/8-7-1957 MINISTERIAL DECISION 25666/984/30-5-1957, GOVERNMENT GAZETTE, SERIES II, NO 265/1-10-1957 MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of Lavreotikos — Areas: Upper and Lower Sounios, Sunio archaeological site, Megala Pefka, Agia Triada, Souriza, Spitharopousi, Haos, Elafos, etc. and the area of the E.B.O.		Upper and Lower Sounion, Mega Pineka, Agia Triada, Souriza, Spitharopous i, Haos, Elaffos	Water supply systems, rural economy, New Spaces and Monuments, Historical Sites, Crafts/Industry, Archaeological Positions	MINISTERIAL DECISION A/Φ31/17670/1328/21-6-1975 (GOVERNMENT GAZETTE, SERIES II, NO 759//23-7-1975) MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Mining complex of the French Company in Kamara Lavrio		Kamariza	Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/577/17559/28-4-1987, GOVERNMENT GAZETTE, SERIES II, NO 227//6-5- 1987
Building block 27, where foundations for a building windscreen		Lake of Passa	Archaeological Positions	MINISTERIAL DECISION A/Φ31/34082/4479/22-6-1977 (GOVERNMENT GAZETTE, SERIES II, NO 776/17-8-1977) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Puntalza bay area (Panomos)		In spite of the Neos Sunion district	Archaeological Positions	MINISTERIAL DECISION 71561/4352/10-10-1959, GOVERNMENT GAZETTE, SERIES II, NO 384/7.11.1959 PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: areas of Strefani and Merkati Hill		Areas of Strefani and Merkati Hill	Defence complexes, New Spaces and Monuments, Crafts/Industry, Towers, Mining Facilities, Archaeological Positions, Infrastructure/Producti on Facilities, Households, Ancient Heat, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ02/46740/3246/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1268/4-9-2003
Noise Station Building	Thoricon		Railway Stations	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Reed roasting furnace	Lavronium		Crafts/Industry	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/F/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Building Workshop Establishment	Lavronium		Crafts/Industry	
Lavrio Market Building Building	Lavronium		Trade, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Management building of the Lavrio Smelter Company	Lavronium		Urban Buildings, Management Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/F/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Evterpes building	Lavronium		Theatres/Media	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/F/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Building of the Hotel of the Hellenic Company	Lavronium		Accommodation, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Association of Philomous Building	Lavronium		Theatres/Media	NO YPEPE/DGPA/DILAP/Γ/1217/45500/23-6- 1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Metalloplysis	Lavronium		Crafts/Industry	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Roloi	Lavronium		Clocks, urban buildings, public utility buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/F/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981 MINISTERIAL DECISION 19229/4222/8-7-1998, GOVERNMENT GAZETTE 576 D/6-8-1998
Facilities of the former Hellenic Society of Mines of Lavrio (EEML) and the French Society of Mines of Lavrio (GEML)	Lavronium		Crafts/Industry	MINISTERIAL DECISION 74423/6390/30-11-1987, GOVERNMENT GAZETTE 1241/Δ/28-12-1987 MINISTERIAL DECISION YPAPO/DILAP/Γ/874/17644/14-4-1992, GOVERNMENT GAZETTE, SERIES II, NO 293/29.4.1992 MINISTERIAL DECISION YΠΠΟ/DILAP/Γ/1658/25228/29.3.1995 (GOVERNMENT GAZETTE, SERIES II, NO 491/1.6.1995) MINISTERIAL DECISION 28374/5984/26-9-1997, GOVERNMENT GAZETTE 884/Δ/21-10-1997 MINISTERIAL DECISION YΠΠΟ/DILAP/Γ/4855/4469/21-1-1999

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				(GOVERNMENT GAZETTE, SERIES II, NO 88/10.2.1999) MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DNSAK/7551/133/09-05-2011, GOVERNMENT GAZETTE, SERIES I, NO 245/AA/28-09-2011
Residential complexes	Lavronium		Residential Totals, Urban Buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1020/27708/6-4-1995, GOVERNMENT GAZETTE, SERIES II, NO 558/28-6- 1995
Lavrio Station Café	Lavronium		Cafés, Rail Stations, Urban Buildings	MINISTERIAL DECISION/DILAP/Γ/286/4645/8-1- 1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Lavrio Station Building	Lavronium		Railway Stations	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Master's house in Lavrio	Lavronium		Railway Stations, Urban Buildings	MINISTERIAL DECISION/DILAP/Γ/286/4645/8-1- 1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
Staff shelters in Lavrio	Lavronium		Accommodation, Rail Stations, Urban Buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/286/4645/8-1-1996, GOVERNMENT GAZETTE, SERIES II, NO 85/12.2.1996
The building allegedly owned by loannis Koulaxis, loannis and Dionysios noble, loannis and Leonida Apostolopoulo s and Dimitrios Thomaidis, at the junction of the Nik Streets. Bulgarianides and Nik. Syrigos O.T. 26, in Neos Kyprianos Lavrios, Prefecture of Attica.	Lavronium		Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/96067/2719/1-12-2006 (GOVERNMENT GAZETTE, SERIES I, NO 198/AA/28-12-2006)
Sausage of Agia Paraskevi Lavrio	Lavronium		Sacred churches of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/B1/Φ26/103410/4330/27-10-

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				2010 (GOVERNMENT GAZETTE, SERIES I, NO 500/24.11.2010)
City Hall Building	Lavronium	Lavrio Central Square	Urban Buildings, Management Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981
Building No 1 of the complex formerly 'Lavrio S.A.' (Déde) in the port of Lavrio	Lavronium	Port of Lavrio	Crafts/Industry	MINISTERIAL DECISION YPAPO/DIAPP/1921/46931/11-9-2001, GOVERNMENT GAZETTE, SERIES II, NO 1252/27- 9-2001
Primary school building on the Sygrou and Fok streets. Negris (OT 48)	Lavronium	Sygrou and Fok Streets. Negris (OT 48)	Urban buildings, public utility buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/DGPA/DILAP/Γ/1217/45500/23- 6-1981, GOVERNMENT GAZETTE, SERIES II, NO 455/3-8-1981 MINISTERIAL DECISION 19229/4222/8-7-1998, GOVERNMENT GAZETTE 576 D/6-8-1998
Tanks of BuzimacoR Company S.A.	Lavronium	section 5 of the land zone of the Port of Lavrio	Water Supply Systems	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/389/4468/21-1-1999 (GOVERNMENT GAZETTE, SERIES II, NO 55/29.1.1999)
Release of a sea area (five areas) from Kavori to Ligraina	Ligrena		Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/25824/1060/12.5.1 993 (GOVERNMENT GAZETTE, SERIES II, NO 388/28.5.1993) MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813/2830/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Archaeological site of Lavreotikos: Classical farm, missing walls in Greek, missing church with ancient building material	Ligrena		Rural Economy, Historical Sites, Archaeological Positions, Housing Allies, Horses of Christians, Religious Spaces	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Missing walls and marshes (Corporate 5th-4 BC)	Ligrena		Historical Sites, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9-1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of Lavreotikos: 'Limestone' hill, 'Kasteella' area, Soufleris hill	Ligrena	'limestone' hill, 'Kasteella' area, Soufleris hill	Seves, Archaeological	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998
Archaeological site of Lavreotikos: Remains of ancient Jerus on the Proftis Ilia hill (Corporate archaeological and classical times)	Ligrena	Prophtis Ilia Hill	Historical Sites, Archaeological Positions, Ancient Hospitals, Religious Spaces	MINISTERIAL DECISION YPEPE/A1/F02/30896/1243/11-7-1980, GOVERNMENT GAZETTE, SERIES II, NO 852, 3-9- 1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ02/61126/3407/14-12- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1070//29-12-1995) PRESIDENTIAL DECREE 17-2-1998, GOVERNMENT GAZETTE 125/D/27.2.1998

Table 8.2-11 Declared archaeological sites and monuments in the municipality of Serifou

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of a cave at the 'Stavracopoulos' site of Serifos		'Statyrakopoulos ', between Great meadow and Kutala	Natural Spaces, Seves, Archaeological Positions, Ancient Heat, Religious Spaces	MINISTERIAL DECISION 13642/17-1-1963, GOVERNMENT GAZETTE, SERIES II, NO 29/26-1-1963
I. Timios Stavros tropos in the village of Kalličos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/1 0-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Temple Agios Stefanos in Valsamo Serifou		Balsam	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2- 1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Agios Ioannou Prodromos Temple of Sklavoyannis in Serifos		Near Panagioa	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Agia Irini Kutala in Serif	Koutalas		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/25206/543/3 1-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 468/28-8-1987)

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
I. Church of Agios Georgiou, Ncemeteros, Livadi Serifou	Livadios	Cemetery	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/31303/684/3 1-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 466/28-8-1987)
I. Monastery of Serf Brigade	Lone Brigades		Monasteries, Religious Areas	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Theotokos in Panagios Serifou	Panayia		Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Saint Anna in the village of Panayia	Panayia		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/1 0-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
The ruins of the Serif Castle	Serifos		Defensive assemblies, castles/guards	Ministerial Decision 6505/293 p.e./2-2- 1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Country Brigadier	Serifos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/1 0-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Temple of Agios Athanasios in the Upper Country of Serifou	Serifos	Upper Country	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Agios Eleftheriou in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2- 1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Temple Agios loannou Theologos in the country of Serifou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Church of Panayia in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
I. Touros Profitos Daniel in the country of Sirfou	Serifos	Inside the Castle	Sacred churches of Christians, Religious Spaces	Ministerial Decision 6505/293 p.e./2-2-1972 (Government Gazette, Series II, No 126/11.2.1972)
House of Georgios Leuftikos in Serifos Castle	Serifos	Castle	Urban buildings	Ministerial Decision 6922/291 p.e./12-2-1972, Government Gazette, Series II, No 148//17-2-1972
I. Church of Christos in the Serif Castle	Serifos	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/31304/685/3 1-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 459/21-8-1987)
Large Leivadi Serifou.	Great Livados		Historical Sites, Housing Totals	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Historical location				WORKS/F/2706/54922/2-9-1983 (GOVERNMENT GAZETTE, SERIES II, NO 595/17.10.1983)
Six houses of miners' houses in Vagia Serifou		Baya	Crafts/Industry, Households, Urban Buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/828/16464/29-3-2000, GOVERNMENT GAZETTE, SERIES II, NO 520/11-4-2000
Old ladder of ore loading and unloading in Cupa Serifou	Koutalas		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Г/1985/2690/19-5-1997, GOVERNMENT GAZETTE, SERIES II, NO 492//13.6.1997
Mining buildings in Kutala Serifou	Koutalas		Ancillary Areas, Crafts/Industry, Mining Facilities, Infrastructure/Productio n Facilities	MINISTERIAL DECISION YPAPO/DILAP/Г/3031/44328/6-8-1997, GOVERNMENT GAZETTE, SERIES II, NO 1146//24-12-1997
House in Serifou Livadi, n. Artemisia Hatziathanasiou	Livadios		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/C/1997/50558/16-9-1980 (GOVERNMENT GAZETTE, SERIES II, NO 967//26-9-1980)
House in Serifou Livadi, n. M. Chrysolouras	Livadios	Building 49-49B in the attached topographical chart	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/3416/60753/18-11-1993, GOVERNMENT GAZETTE, SERIES II, NO 900/13-12-1993
A stewardship building together with its movable objects and the electromechanic al and technical equipment of the mines in the Grand Leivadi Serifou, owned by the Seefos Spiliazzi Mining Company	Great Livados		Military Facilities, Command Centres	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Г/2389/46173/2-9-1983 (GOVERNMENT GAZETTE, SERIES II, NO 654//16-11-1983) MINISTERIAL DECISION YPAPO/DILAP/Г/2740/34269/19-7-1991, GOVERNMENT GAZETTE, SERIES II, NO 647/7.8.1991
Director's book (Medals) in the Grand Livadi of Serifou	Great Livados	Within the limits of the ownership of the AA "Metalia Serifou"	Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/2740/34269/19-7-1991, GOVERNMENT GAZETTE, SERIES II, NO 647/7.8.1991
Sierfou Municipal Hall Building	Serifos		Urban Buildings, Management Centres	MINISTERIAL DECISION Γ/1657/42917/12- 9-1978 (GOVERNMENT GAZETTE, SERIES II, NO 804//21-9-1978)
Country of Serifou. Place of special natural beauty and	Serifos		Natural Spaces, Housing Totals	PRESIDENTIAL DECREE 19-10-1978, GOVERNMENT GAZETTE 594/Δ/13-11- 1978 MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
traditional settlement				PLANNING AND PUBLIC WORKS/Г/350/7324/15-4-1983 (GOVERNMENT GAZETTE, SERIES II, NO 274//24-5-1983) PRESIDENTIAL DECREE 11-5-1989, GOVERNMENT GAZETTE 345/D/2-6-1989 PRESIDENTIAL DECREE 17-9-2002, GOVERNMENT GAZETTE, SERIES I, NO 930/24-10-2002
Anemmy in the country of Serifos, n. Gerasimio Levane	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. E. Papadopoulou	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Peace Gerardis	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. loannis Kouzuni	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. N. Tantoula	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Nikolaos Chhalidas	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Anemmy in the country of Serifos, n. Light Hatzinikolaou	Serifos		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Designation of marine areas for underwater activities by breathing apparatus, deepboat or other means of seabed survey, on the		island of Garbia to Akrotiri Swordi, on the		MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/88711/4369/
island of Serif, N Cyclades.	Serifos	island of Serifo, N Kyclades.	Marine Spaces	22-10-2005, GOVERNMENT GAZETTE, SERIES II, NO 1610//22-11-2005

Table 8.2-12 Certified archaeological sites and monuments in the municipality of Milos

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
Release of a sea area from Cape Gourgeos to Apollonia in Milos for underwater activities			Marine Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/30229/1819/25.6.1 997 (GOVERNMENT GAZETTE, SERIES II, NO 564/10-7-1997) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/24185/1467/22-5- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 646/26.6.1998) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ41/36961/2194/22-7- 1998, GOVERNMENT GAZETTE, SERIES II, NO 923/27.8.1998 MINISTERIAL DECISION ΥΡΑΡΟ/DGΑΡΚ/ΑR/A1/Φ41/42813/2830/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Release of a sea area in the rocks of Cyclades for underwater activities		Octane rocks, NA of Cape Swordfish, in a zone with a maximum width of 50 m.	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/30229/1819/25.6.1 997 (GOVERNMENT GAZETTE, SERIES II, NO 564/10-7-1997) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/24185/1467/22-5- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 646/26.6.1998) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/36961/2194/22-7- 1998, GOVERNMENT GAZETTE, SERIES II, NO 923/27.8.1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42813/2830/2-9- 2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
An archaeologica I site of Cape Vani Milou (fragmental settlement). Establishmen t of protection zones A and B	Trivasalos	Akrotirios Vani	Defensive Compounds, Archaeological Positions, Housing Assemblies	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site of ancient town of Milos. Establishmen t of	Apple		Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998

Name of the	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
protection zones A and B				MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site in Ankathia Milos (Greek and Roman settlements with Roman walls). Designation of Zone B protection	Trivasalos	Cucumbers	Defensive Compounds, Archaeological Positions, Housing Assemblies	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeologica I site at the 'Demorgiaki' site of Milos (Postanou quarries). Designation of Area A of Exclusive Protection	Drilling driller	"Memorandum"	Mining, archaeological, infrastructure/producti on facilities	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION A/Φ20/5449/519/24-4- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 550/11-5-1973) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeologica I site at the location 'Lower Koni' Milos (Byzantine settlement and gravel). Designation of protection zones A and B		"Lower Coon"	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990,
Archaeologic al site at the site 'Kipi' Milos (two churches and ancient Christian painter)		'Garden', to the south of the island	Monastery, Christian churches, Religious Areas	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
Archaeologic al site at the 'Nychia' Milos site (lack of procycladian		'Nights'	Mining, archaeological, infrastructure/producti on facilities	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Α1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
quarries). Designation of Area A of Exclusive Protection				
An archaeologica I site at the location 'Palaiochori' Milos (prehistorical cemetery and residential remains). Designation of Zone B protection	Drilling driller	"Palerokhori"	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION ΥΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site at the location of Kemma Milos. Designation of Protection Zone B		Outside the agglomeration of Embassy	Archaeological Positions, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site in Saint Eleni Milou. Designation of Area A of Exclusive Protection	Trivasalos	Saint Helena	Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site in Agia Sunday Milos (original port). Designation of Area A of Exclusive Protection	Drilling driller	Agia Sunday	Natural Areas, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site in the Milos gypsy (lack of Greek and Roman settlement). Designation of Zone B protection	Trivasalos	Gypsum gypsum	Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
An archaeologica	Trivasalos	'Khales'	New Spaces and Monuments,	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9-

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
I site in Vani (Chalegers) of Milos (prehistorical cemeteries). Designation of Area A of Exclusive Protection			Archaeological Positions	1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site in Colomouni-Skinopi Milos (the cemeteries of the ancient city). Designation of Zone B protection	Drilling driller	Clergy — Skinpi	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site in Rivari Milos (Romaic residential wastes). Designation of Zone B protection	Trivasalos	Rivari, "Fatura" and "Saint Nikolaos" posts	Positions, Housing	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ43/42367/2642/13-10- 1997, GOVERNMENT GAZETTE, SERIES II, NO 972/3-11-1997 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site in Milos sword (protocycladi c cemetery). Designation of Area A of Exclusive Protection	Drilling driller	Sword	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998
Archaeologic al site at the Fyropotamos Milos (prehistorical cemetery). Designation of Zone B protection	Ferropotamo s	Ferropotamos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/Α1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site in Agios Panteleimona	Drilling driller	Agios Panteleimos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
s Milos (protocyclal cemetery). Designation of Area A of Exclusive Protection				
Archaeologic al site in Provas Milos (Romaic and PaleoChristia n remains). Designation of Zone B protection	Drilling driller	Provass	Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site in the Milos fleets (ancient temple). Designation of Area A of Exclusive Protection	Drilling driller	Fleets	Archaeological Positions, Ancient Hera, Religious Sites	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998 (GOVERNMENT GAZETTE, SERIES II, NO 140/18.2.1999)
Archaeologic al site of the Milos Milos. Designation of protection zones A and B.	Prisoner		Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/A1/Φ21/26587/12393/25-6-1990, MINISTERIAL DECISION 3888/21-2-1967, GOVERNMENT GAZETTE, SERIES II, NO 168/9.3.1967 MINISTERIAL DECISION YPEPE/A1/Φ21/58434/2938/16-11-1979, GOVERNMENT GAZETTE 209/B/29.2.1980 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46840/2155/29-9- 1998, GOVERNMENT GAZETTE, SERIES II, NO 1193/19-11-1998 MINISTERIAL DECISION YΠΠΟ/DGA/AUTHORITY/A1/Φ21/58772/3934/9-10-2002, GOVERNMENT GAZETTE, SERIES II, NO 1348/17-10-2002 MINISTERIAL DECISION YΠΠΟ/DGAPK/AR/A1/Φ21/58772/3934/9-10-2002 (GOVERNMENT GAZETTE, SERIES II, NO 1690/2-12-2005)
I. Monastery of Agia Marina in Milos	Ralakion Kalakos		Monasteries, Religious Areas	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Agia Triada in the	Dama		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
Damadam of Milos				
I. Temple Agios Konstantinos, Pachaina Milou	Pachaina		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/1544/58/1-2-1985, GOVERNMENT GAZETTE, SERIES II, NO 94/21.2.1985
I. Church of Agios Charalambou s at Zefyria Milos	Zefyria		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/12115/382/20-9- 1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10-1996
I. Tour of the Gootikos Introduction to the Milos	Apple		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Zododon Source (or Kastrini) on the prehistoric Acropolis position. Establishmen t of protection zones A and B		At hill top, near Zefyria	Tips, Defence Compacts, Archaeological Positions, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/26587/12393/25-6- 1990
I. Church of Zododon Source (or Kastrini) on the prehistoric Acropolis position. Establishmen t of protection zones A and B		At hill top, near Zefyria	Tips, Defence Compacts, Archaeological Positions, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/Α1/Φ21/26587/12393/25-6-1990,
I. Church of Theotikos Commune (Portiani Panay) in Zefyria Milos	Zefyria		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/12115/382/20-9- 1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10-1996
I. Church of Gootikos Commune in Milos	Apple		Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
I. Church of Panagia Elousa at the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Panagia Thaitria in the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Panayia and Agios Charalambou s in the Damadam Milos	Dama		Sacred churches of Christians, Religious Spaces	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/52874/1057 e.e./26.1.1993 (Government Gazette, Series II, No 166//17.3.1993) Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/52874/1057 e.e./26.1.1993 (Government Gazette, Series II, No 509/9.7.1993)
I. Church of Panagia Korfiotisas in Castle Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Touros Yapadis in the Castle of Milos	Apple	Castle	Sacred churches of Christians, Religious Spaces	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
I. Church of Christou in Zefyria Milou	Zefyria		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18429/808/13-2-1954 (GOVERNMENT GAZETTE, SERIES II, NO 60/26-3-1954) MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/Β1/Φ27/12115/382/20-9-1996, GOVERNMENT GAZETTE, SERIES II, NO 935/10-10-1996
Historical site in the 'Paliorema' area of the island of Milos in the Prefecture of Cyclades.	Thin mine (I. Milos mines)		Historical Sites, Mining Facilities	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/71971/1866/3-10-2005, GOVERNMENT GAZETTE, SERIES II, NO 1442/19- 10-2005
Catholic I. Church of Panagia Rhodes (Rozoario) and L. Brast Tafis	Apple		New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3- 1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Plaka Milos Castle	Apple		Defensive assemblies, castles/guards	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3-

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
				1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Tritope Milou catadamata	Drilling driller		New Spaces and Monuments, Archaeological Positions	ROYAL DECREE 24-7-1936, GOVERNMENT GAZETTE 332/A/6-8-1936
Old Police Building and auxiliary buildings in Plaka Milos	Apple	At the foots of the Castle	Auxiliary Areas, Urban Buildings, Management Centres	Ministerial Decision YΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
Building in Plaka Milos (No 125), N. Community of Plakas and Association of Municipalitie s of Milos	Apple		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/508/7652/27-6-1986, GOVERNMENT GAZETTE, SERIES II, NO 598/19- 9-1986
Building in the port of Adamada in Milos	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/1475/63357/24-9-1981, GOVERNMENT GAZETTE, SERIES II, NO 675/4- 11-1981
Building in Damadam Milos, n. Andreas Bambolaki	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/410/10525/20-4-1982 (GOVERNMENT GAZETTE, SERIES II, NO 270//18-5-1982)
Medieval construction in Plaka Milos (No 113), n. Evangelos Mthioudakis	Apple	No 113	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/6074/153/29-3- 1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Medieval construction in Plaka Milos (No 125), n. Theodoros I. Chrysoulis	Apple	No 125	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Ф27/6074/153/29-3- 1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
House (former IKA) in Plaka Milos, n. lakovina Armeni	Apple	At the foots of the Castle	Urban buildings, public utility buildings	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
House with I. Agios Spyridon church in	Apple	At the foots of the Castle	Urban Buildings, Hotels of Christians, Religious Spaces	Ministerial Decision YΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)

Name of the Monument	Settlement of agglomeration		Type of Monument	Government Gazette of Declaration
Plaka Milou, n. lakovou Druga				
Brast House in Plaka Milou, n. M. Oikonomidou — Roka	Apple	Middle wall with house F. Druga	Urban buildings	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/51146/1110 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
House in Plaka Milou, n. sisters of Kaisaritis (former Tataraki)	Apple	At the foots of the Castle	Urban buildings	Ministerial Decision ΥΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
House in Plaka Milos, N. heirs of Philipos Oikonomou	Apple	At the foots of the Castle	Urban buildings	Ministerial Decision ΥΠΠΟ/AX/B1/52175/1144 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
House in Plaka Milou, n. Maria Fournarakis	Apple		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Г/73369/3016/14-2-1980 (GOVERNMENT GAZETTE, SERIES II, NO 289//21.3.1980)
Construction at road 25 March 79 and Agia Varvara in Plaka Milos, n. Floros Angelis Rafou		Road 25 March 79 and Agia Varvara	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Ф27/6074/153/29-3- 1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Construction in Plaka Milou, n. Stavros I. Druga	Apple		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Ф27/6074/153/29-3- 1980, GOVERNMENT GAZETTE, SERIES II, NO 378//16-4-1980
Tafiko monument and grave of the French Consular Nemetery in Milos	Apple		New Spaces and Monuments	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/1158/24756/10.5.1993 (GOVERNMENT GAZETTE, SERIES II, NO 363/20.5.1993) MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/841/21496/17.3.1995 (GOVERNMENT GAZETTE, SERIES II, NO 430/17.5.1995)
The building located on the coastal road of the Adamada settlement	Dama		Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DNSAK/9533/245/8-3-2006, GOVERNMENT GAZETTE, SERIES II, NO 351//24.3.2006

Name of the Monument	Settlement of agglomeratio n	Type of Monument	Government Gazette of Declaration
on the island of Milos, which is owned by Dominik Deportterer.			

Table 8.2-13 Declared archaeological sites — monuments in the municipality of Folegandrou

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Church of Poems of Theotikos in Folegandro	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
I. Church of Panayia Theospicastis in Folegandro	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
Country Castle Folegandrou	Fologanros		Defensive Compounds, Households, Castles/Winders	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/2178/31/12-2-1988, GOVERNMENT GAZETTE, SERIES II, NO 159/22.3.1988
I. Temple Agios Aikaterini — Agios Fanouris in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Agios Antoniou in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Temple of Brigadier in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9686/196/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Agios Nikolaos in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9685/195/3.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5- 1988)
I. Church of Agios Savvas in the country of Folegandrou	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/12703/281/21.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5- 1988)
I. Church of Agios Eleftheriou in Fologanros	Fologanros		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9921/264/16-5-1997 (GOVERNMENT GAZETTE, SERIES II, NO 491/13.6.1997)

Name of the Monument	Settlement of agglomeration	Position	Type of Monument	Government Gazette of Declaration
I. Church of Stavros in the country of Folegandrou	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9687/197/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Christos in the post 'Fira' Folegandrou	Fologanros	"Fila"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/4216/112/16-2-1996 (GOVERNMENT GAZETTE, SERIES II, NO 193/22.3.1996)
I. Church of Elefsis in Foleganros	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 10976/16-5-1967, GOVERNMENT GAZETTE, SERIES II, NO 353//31-5- 1967
I. Church of Hagia Sophia in Greece Castle Folegandrou	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/9684/194/3-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Pantanassa or Christou in Folegandro	Fologanros	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/3299/61/21-3-1988, GOVERNMENT GAZETTE, SERIES II, NO 287//16-5- 1988
Country Folegandrou. Historical location and specific natural beauty	Fologanros		Physical Areas, Historical Sites	MINISTERIAL DECISION A/Φ31/5760/571/24-4- 1973, GOVERNMENT GAZETTE, SERIES II, NO 526/8-5-1973
Windmill in Folegandro, n. Sevastopos Kakaris			Rural Economy, Auxiliary Spaces, Multiples	MINISTERIAL DECISION YPAPO/DILAP/Γ/527/9401/25-4-1988, GOVERNMENT GAZETTE, SERIES II, NO 277//10-5- 1988
The agricultural complex allegedly owned by Anastasios Papaioannou in the area of Agios Savvas, the island of Folegandrou N. Cyclades.			Rural Economy	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DINESAK/74058/2090/6-10-2006, GOVERNMENT GAZETTE, SERIES I, NO 78, 26.10.2006
Windmill in Podia Folegandrou, n. Eikaterini Marinakis		Upper Mothers	Rural Economy, Myles	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/4339/5956/19-12-1995, GOVERNMENT GAZETTE, SERIES II, NO 94/16.2.1996
Windmill in Podia Folegandrou, n. P. Veniou		Upper Mothers	Rural Economy, Myles	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/4339/5956/19-12-1995, GOVERNMENT GAZETTE, SERIES II, NO 94/16.2.1996
Folegandrou Primary School Building	Fologanros		Urban buildings, public utility buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/4493/546/30-12-1991, GOVERNMENT GAZETTE, SERIES II, NO 35/27.1.1992

Table 8.2-14 Declared archaeological sites and monuments in the Regional Unit of Thira, Municipality of Thira

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Permit to demolish a building in Thira, Silver Chryssanthos. Declassification.	Dunes bay	-	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/52/10842/23-2-1981 (GOVERNMENT GAZETTE, SERIES II, NO 140/11.3.1981)
Anemmy in the 'strip' position of Hunt, n. Theodoros Vafidaakis	-	'Strips'	Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/2 1-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
One-octight windmill. lakovos Dross	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Antonis Dros heirs in Emichios	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Antonis Dross heirs in the Taxes	Dunes bay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Heirs Artemi Drazed	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Heirs of Stavros Valvi	Emay		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Michalis Drosos, Carterida (a)	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
One-octight windmill. Michalis Dross, Carterida (b)	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Two windmills of the same type. Michalis Drosos, Carterida	Carderfish		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/1525/40568/3- 8-1993, GOVERNMENT GAZETTE, SERIES II, NO 636/19- 8-1993
Two windmills in the 'Caldera' position of Megalohori Thira, Mavrommata Peace	Megalochoron	'Caldeera'	Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/42830/2771/2 0-11-1986, GOVERNMENT GAZETTE, SERIES II, NO 937/31- 12-1986
Release of a sea area in Camari Thira.	Camarion	To the east of the island.	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46 835/2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16-10-1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42 813/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Release of sea areas on the island of Newly burned Cyclades	New Kamenis	To the east of the island	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46 835/2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16-10-1998, MINISTERIAL DECISION YΠΠΟ/DGAPK/A1/A1/Φ41/428 13/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Release of a sea area in Pessa Thira Cyclades	Perssa	South-east of the island	Marine Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ41/46 835/2750/29-9-1998, GOVERNMENT GAZETTE, SERIES II, NO 1083/16-10-1998 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ41/42 813/2830/2-9-2003, GOVERNMENT GAZETTE, SERIES II, NO 1498/10-10-2003
Akra's archaeological site of Thira. Establishment of protection zones A and B			Archaeological Positions	PRESIDENTIAL DECREE 24-8- 1982, GOVERNMENT GAZETTE 529 D/29-10-1982, PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site of ancient Thira			Archaeological Positions, Housing Clubs, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/40 676/905/20-9-1989, MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				WORKS/A/A1/Ф21/77169/385 8/30-1-1980, GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980, PRESIDENTIAL DECREE 16.2.1990, GOVERNMENT GAZETTE, SERIES II, NO 139/19-3-1990
Archaeological site of Thira	Monolites		Archaeological Positions, Housing Totals	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/A/A1/Ф21/77169/385 8/30-1-1980 (GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980) PRESIDENTIAL DECREE 16-2-1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site of the Karagiorgi mines (mediocircular cemetery) at the 'Ftellos' site in Thira. Designation of archaeological zones		Fellos	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46 975/1880/4-11-1988, GOVERNMENT GAZETTE, SERIES II, NO 833/16-11-1988 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/15 80/45/30-1-1989, GOVERNMENT GAZETTE, SERIES II, NO 79/3.2.1989 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site at the 'Kuluba' (Kulubos) site of Thira (Greek cemetery)		Kuluba ('Kulubos')	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/40 676/905/20-9-1989, MINISTERIAL DECISION YΠΠΠ/A1/Φ21/74756/2459/16 -12-1981 (GOVERNMENT GAZETTE, SERIES II, NO 77/22.2.1982) PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site at the 'Fellos' site of Mines of Ferion Thira (AGET IRAKLIS) (protocyclal cemeteries, etc.)	Dunes bay	Fellos	New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46 975/1880/4-11-1988, GOVERNMENT GAZETTE, SERIES II, NO 833/16-11-1988 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site at the location of the "Mavromati mine" "ERMI" in Thira		'Mavromati mines'	Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/46 975/1880/4-11-1988,

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
(agglomeration of the late Mesocyclada era)				GOVERNMENT GAZETTE, SERIES II, NO 833/16-11-1988 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/46 975/1880/4-11-1988, GOVERNMENT GAZETTE 1580/45/30.1.1989 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/15 80/45/30-1-1989, GOVERNMENT GAZETTE, SERIES II, NO 79/3.2.1989 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site in Thira		Prophis Ilias, Portetida stream	Archaeological Positions	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/A/A1/Φ21/77169/385 8/30-1-1980 (GOVERNMENT GAZETTE, SERIES II, NO 300/24.3.1980)
Archaeological site in Agios Nikolaos (Marmaritis) Thira			Archaeological Positions, Ancient Hera, Horses of Christians, Religious Sites	MINISTERIAL DECISION 9763/3- 11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19- 11-1962 MINISTERIAL DECISION 24131/23-10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990 MINISTERIAL DECISION 9763/3- 11-1962, GOVERNMENT GAZETTE, SERIES II, NO 1014/2- 8-2002
An archaeological site in the area of the Gavrolo Thira hill (basked Greek graves and ancient cemetery). Establishment of protection zones		Port of Balos, Mount Gavrilos, Cape Exomis	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION 24131/23-10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Archaeological site on the Archangelos Thira Hill. Establishment of protection zones			Archaeological Positions	MINISTERIAL DECISION 24131/23-10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990

Name of the Monument	Settlement of agglomeratio	Position	Type of Monument	Government Gazette of Declaration
Architect of Varvarigo in Messaria Thira	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2168/38826/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Archoniko Sarpakis in Firir Thira, n. Sharpaki	Dunes bay		Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18- 3-1991 (GOVERNMENT GAZETTE, SERIES II, NO 234/18- 4-1991)
Archoniko in Messaria Thira, n. Antonis Venetsanou	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2169/38827/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Archoniko in Messaria Thira, n. Happiness Venesenou	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2171/38809/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Archoniko in Messaria Thira, n. Spyrou Marezini	Messarias		Archaeontics, urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2167/38812/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Commercial Hunting. Traditional settlement	Emay		Natural Spaces, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/40 676/905/20-9-1989, MINISTERIAL DECISION 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967) PRESIDENTIAL DECREE 19-10- 1978, GOVERNMENT GAZETTE 594/Δ/13-11-1978 PRESIDENTIAL DECREE 11-5- 1989, GOVERNMENT GAZETTE 345/D/2-6-1989 PRESIDENTIAL DECREE 16-2- 1990, GOVERNMENT GAZETTE 139/D/19-3-1990
Vegetable Kastelli in Akrotiri Thira	Cape Verde		Defensive assemblies, castles/guards	MINISTERIAL DECISION 11707/14-6-1966 (GOVERNMENT GAZETTE, SERIES II, NO 429/8-7-1966) MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970
Vegetable Castle at Tower of Thira	Kallistis Tower		Defensive assemblies, castles/guards	MINISTERIAL DECISION 11707/14-6-1966 (GOVERNMENT GAZETTE, SERIES II, NO 429/8-7-1966)

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970 MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1Φ27/367 83/956/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 773/8-9-1995)
Vegetable Tower 'Gulas' at Emerikos Hunta	Emay		Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970 MINISTERIAL DECISION A/Ф31/54786/4096/10-12- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Alcohol factory in Messia Thira, n. Antoniou Venetsanou	Messarias		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/2174/39088/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 719/30- 9-1988
Plant in Messaria Thira, n. Georgios Marezini	Messarias		Crafts/Industry	MINISTERIAL DECISION YPAPO/DILAP/Γ/2175/39037/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 719/30- 9-1988
Ruins of an anti-Christian church in Pesse Thira	Perssa		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3- 11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19- 11-1962
Date: Traditional settlement. Designation of protection zones.	Day of November		Natural Spaces, Housing Totals	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/40 676/905/20-9-1989, PRESIDENTIAL DECREE 17-6- 1988, GOVERNMENT GAZETTE 504/Δ/14-7-1988
I. Monastery of Agios Nikolaos in IDAVILI Thira	Day of November		Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/12888/318/5-4- 1985 (GOVERNMENT GAZETTE, SERIES II, NO 250/3-5-1985)
I. Monastery Proftis Ilias Thira		At the top of the Mountain	Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/KH P/44997/1811/9-10-1998 (GOVERNMENT GAZETTE, SERIES II, NO 1123/23-10-1998)
I. Church of Agia Anna in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
I. Church of Agia Peace at the Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Church of Agia Peace in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3- 11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19- 11-1962, MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/17 21/44/12-4-1993, GOVERNMENT GAZETTE, SERIES II, NO 310//4-5-1993
I. Church of Hagia Sophia, Francissa at the Fira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Church of Agia Triada at Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Agios Artemis at the Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27 948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Church of Agios Georgios in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/17 21/44/12-4-1993 (GOVERNMENT GAZETTE, SERIES II, NO 310//4-5-1993)
I. Church of Agios Georgiou at Elidis Bothona Thira	Boots	Eledi	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Agios Georgiou at Bothona Thira	Boots	At the entrance to the agglomeration	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Agios Georgiou at the Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/36 784/953/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 792/14-9-1995)
I. Church of Agios Georgios, Xehir, at the post 'Kuluba' ('Kulubos') in Hunta		Kuluba ('Kulubos')	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ30/80 76/239/23-4-1996,

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				GOVERNMENT GAZETTE, SERIES II, NO 385/27.5.1996
I. Touros Agios Ioannis Theologos at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/11 990/218/3-12-1991 (GOVERNMENT GAZETTE, SERIES II, NO 1016//13-12-1991)
I. Church of Agios Ioannou 'To Theoloakis' at Emporios Thira	Emay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27 948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Church of Agios Markos in Idivios Thira	Day of November	On the main road linking the Virts to the Hall	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41 64/70/30-5-1995 (GOVERNMENT GAZETTE, SERIES II, NO 579/30.6.1995)
I. Church of Agios Month at the Thira Father	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Temple Agios Nikolaos (father's name Kissira) at Tower of Thira	Kallistis Tower		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/36 784/953/29-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 792/14-9-1995)
I. Church of Agios Spirus at Bothona Thira	Boots	To the south of the settlement	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Agios Prokopoi at Langadi Bothona Thira	Boots	Langadi	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Temple Agios Stylianou in Fragkos at Fira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
I. Temple of Agioi Apostolos (together with the living quarters and the complex of	Kallistis Tower		Urban buildings, churches of Christians, Religious Areas, Utility Buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/36 784/953/29-8-1995

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
the old School) at the Tower of Thira				(GOVERNMENT GAZETTE, SERIES II, NO 792/14-9-1995)
I. Church of Genele in the Bishop of Angle of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/17 21/44/12-4-1993 (GOVERNMENT GAZETTE, SERIES II, NO 310//4-5-1993)
I. Dioceseal Church of the Corner of Thira	Corner Visit		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 9763/3- 11-1962, GOVERNMENT GAZETTE, SERIES II, NO 415/19- 11-1962
I. Church of Panagia Kalou in the post 'Kuluba' ('Kulubos') in Hunta	Panayia Kalou	Kuluba ('Kulubos')	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/18 142/419/14-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 418/10-8-1987)
I. Church of Panagia Stathianis at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27 948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Church of the hole or Sergaina in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Panayia Genetholin (old and young) in Bothona Thira	Boots		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 94/132/15-2-1999, GOVERNMENT GAZETTE, SERIES II, NO 222//15-3-1999
I. Church of Panagia (father's name: Ai Georgios) at Firostefni Thira	Dunes bay	Firostefani	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/27 948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10-1989)
I. Church of Christos or Transformation of Christos at Thira Thira	Dunes bay		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/B1/Φ27/14 467/335/23-8-1990 (GOVERNMENT GAZETTE, SERIES II, NO 679/26.10.1990)
Kannava (warehouse) in Messria Thira, n. Antonis Venetsanou	Messarias		Auxiliary Areas	MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/2172/39624/14- 9-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4- 10-1988
Kannava (warehouse) in Messria Thira, n. Ioannis Veneriris	Messarias		Auxiliary Areas	MINISTERIAL DECISION YPAPO/DILAP/Γ/2173/39625/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4- 10-1988

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
Kastelli at Emporios Hunta	Emay		Defensive assemblies, castles/guards	MINISTERIAL DECISION 12916/27-8-1970, GOVERNMENT GAZETTE, SERIES II, NO 669/25-9-1970
Gulf of volcano (Caldera). Landscape of special natural beauty			Natural Areas	MINISTERIAL DECISION 23732/28-9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22-12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972)
Building A in the Tower of Thira, n. Varvara Sorotou — germ and Evangelos germ	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/174/23077/13- 5-1998, GOVERNMENT GAZETTE, SERIES II, NO 514/26- 5-1998
Building B in the Tower of Thira, n. Varvara Sorotou — germ and Evangelos germ	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/174/23077/13- 5-1998, GOVERNMENT GAZETTE, SERIES II, NO 514/26- 5-1998
Building and configuring the surroundings of Georgios Kovaios turkey (north) and the other south, on the northern boundary of the post-seismic settlement, in the settlement of Fryon, in the municipality of Thira, Santorini, allegedly owned by Angel and N. Dargata		potassium Georgios Kovaios	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/ΔΝΣΑΚ/30398/872/21.5. 2008 (GOVERNMENT GAZETTE, SERIES I, NO 210, 3.6.2008)
Building of a Community shop of Eva Ionian Thira	Outside Angle		Urban Buildings, Management Centres	A ΥΠΠΟ/DILAP/Γ/1360/24295/5- 5-1995 (GOVERNMENT GAZETTE, SERIES II, NO 499/6.6.1995)
Building together with its old furnishing with the old ground floor wine warehouse with all its equipment at Messria Thira, Georgios Argyrou	Messarias		Ancillary Areas, Crafts/Industry, Urban Buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/Γ/21338/1337/24.5.19 85, GOVERNMENT GAZETTE, SERIES II, NO 351/31.5.1985 MINISTERIAL DECISION YPAPO/DILAP/Γ/33932/2133/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 784/26-10-1988
Building of a former administration	Dunes bay		Military installations, infrastructure/producti on facilities	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18- 3-1991 (GOVERNMENT

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				GAZETTE, SERIES II, NO 234/18- 4-1991)
Former guard building in Thira Thira	Dunes bay		Military installations, infrastructure/producti on facilities	MINISTERIAL DECISION ΥΠΠΟ/DILAP/Γ/810/13640/18- 3-1991 (GOVERNMENT GAZETTE, SERIES II, NO 234/18- 4-1991)
Building in Messaria Thira, n. Georgios Marezini	Messarias		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/2170/38810/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Building in Messaria Thira, n. Stavros Glandzi and Pantelis Konaxi (ex-Saliberou)	Messarias		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/2136/33935/1 4-9-1988, GOVERNMENT GAZETTE, SERIES II, NO 715/28- 9-1988
Building at Tower of Thira, n. Anna Assimis — Georgiki	Kallistis Tower		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Г/486/8170/23- 5-1988, GOVERNMENT GAZETTE, SERIES II, NO 448/30.6.1988
Mill in Messria Thira, Psanos	Messarias		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/4506/6798/31- 1-1992, GOVERNMENT GAZETTE, SERIES II, NO 122//27.2.1992
Mill in Messria Thira, Unknown	Messarias		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Г/4506/6798/31- 1-1992, GOVERNMENT GAZETTE, SERIES II, NO 122//27.2.1992
Island of Aspronis. Landscape of special natural beauty	Aspronisi (island)		Natural Areas	MINISTERIAL DECISION 23732/28-9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22-12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12- 1972) MINISTERIAL DECISION ΔΑ/9389/11-9-2000, GOVERNMENT GAZETTE, SERIES II, NO 1176/22-9-2000
Small and Great Caucasus Islands. Landscapes of special natural beauty			Natural Areas	MINISTERIAL DECISION 23732/28-9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22-12-1972 (GOVERNMENT GAZETTE,

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				SERIES II, NO 1127//23-12- 1972)
Isle of Hunta			Natural Spaces, Archaeological Positions, Housing Totals	A 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
Isle of Hunta: Gulf of volcano after the islands of Small and Great Kalymen, Thirasia and Aspronisi. Landscape of special natural beauty and marine archaeological site			Natural Areas, Historical Sites, Water Spaces	MINISTERIAL DECISION 23732/28-9-1972 (GOVERNMENT GAZETTE, SERIES II, NO 820/7-10-1972) MINISTERIAL DECISION 23732/22-12-1972 (GOVERNMENT GAZETTE, SERIES II, NO 1127//23-12-1972)
South of the island of Thira			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967) MINISTERIAL DECISION 24131/23-10-1967, GOVERNMENT GAZETTE 651/B/31-10-1967
South-eastern part of Hunta			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
Skiros Okroi in Hunta			Defensive Compounds, Historical Sites	MINISTERIAL DECISION A/Φ31/54786/4096/10-12- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Tower (Gouas) Deldenda Froosthenou Thira	Dunes bay	Firostefani	Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION A/Φ31/54786/4096/10-12- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Tower (Gulas) at Thira Tower	Kallistis Tower		Defensive Compacts, Historical Sites, Towers	MINISTERIAL DECISION A/Φ31/54786/4096/10-12- 1973 (GOVERNMENT GAZETTE, SERIES II, NO 1456/13-12-1973)
Part of the Gulf of Hunting			Natural Areas, Archaeological Positions	MINISTERIAL DECISION 10977/16-5-1967 (GOVERNMENT GAZETTE, SERIES II, NO 352/31.5.1967)
The entire site of the Old Thiraian Mining located in the north-eastern part of the Island of Thiras.			Crafts/Industry, Mining Facilities	MINISTERIAL DECISION OF THE MINISTRY OF DEFENCE/DNSAK/F/1998/51/26 -1-2005, GOVERNMENT GAZETTE, SERIES II, NO 128/3.2.2005
'Gulas' ferry in Akrotiri Thira	Cape Verde		Defensive assemblies, castles/guards	MINISTERIAL DECISION Φ31/45090/3470/4-10-1973,

Name of the Monument	Settlement of agglomeratio n	Position	Type of Monument	Government Gazette of Declaration
				GOVERNMENT GAZETTE, SERIES II, NO 1194/5-10-1973

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

List of 8.2-15 Declared archaeological sites and monuments at the Regional Unit of Naxos in the Municipality of Naxos and Micro Cyclades

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Declaration and demarcation as an archaeological site and demarcation of protection zones A and II in the Strip of Naxos.	Booklet		Archaeological Positions	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ21/32793/2143/28-4- 2004, GOVERNMENT GAZETTE, SERIES II, NO 966, 29.6.2004
Archaeological site and demarcation of protection zones A and II in Strafida Naxos	Booklet		Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/DGAPK/AR/A1/Φ21/32793/2143/28-4-2004 (GOVERNMENT GAZETTE, SERIES II, NO 140/4-2- 2005)
I. Temple of Agios Prokopos in Agios Arsene Naxos		"Cargadouras"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ30/KHP/49013/1935/23- 12-1998 (GOVERNMENT GAZETTE, SERIES II, NO 26/25.1.1999)
Tower of germanium (Nappliotis and Veloni) in Argentinian Naxos, n. E. N. Revenge and heirs of D. Veloni	Agios Arsennes	Near I. Temple Agios Nikolaos	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Church of Agia Fotinis at Alia Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Church of Agios Artemis in Shangri Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
I. Agios Ioannou Temple at Shangri Naxos			Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Agios Ioannou Temple in Shangri Naxos. Declassificatio n			Sacred churches of Christians, Religious Spaces	Ministerial Decision 65304/7582 of 7 February 1977 (Government Gazette, Series II, No 119/19.2.1977) MINISTERIAL DECISION A1/Φ21/38852/2615/22-7- 1978 (GOVERNMENT GAZETTE, SERIES II, NO 729/29.8.1978)
I. Monastery of Agios Eleftheriou in Shangri Naxos, n.			Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Potamia Naxos tower (ex- Barotchi) tower, n. Matthios N. Drylli			Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Coco tower in Potamia Naxos, n. C. Maroulis			Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Marianou Pyrgos-House in Shangri Naxou, n. Kalypsias Marianou			Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/13163/317/9-4-1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5- 1985
'Pyrgyki' Magakis in Potamia Naxos			Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/20480/442/14-7-1987 (GOVERNMENT GAZETTE, SERIES II, NO 419/10-8- 1987)
Designation of the A-A absolute protection area of the archaeological site of Kaminia Naxos			Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/8479/470/28-11-1994 (GOVERNMENT GAZETTE, SERIES II, NO 985/30-12-1994)
Archaeological site of Naxos ink (two semi-worked statues of the Kouros, remains of a prehistoric			Mining installations, archaeological positions, infrastructure/production facilities, residential totals	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/35445/2151/21-7- 1997 (GOVERNMENT GAZETTE, SERIES II, NO 751/27.8.1997)

Name of the Monument settlement and an ancient quarry). Designation of Area A of	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Exclusive Protection I. Touros Ai — Psima in Alia Naxos		Agulias	Sacred churches of Christians, Religious	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Temple of Agios Konstantinos in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Spaces Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
An archaeological site of Gyrula Sangriou, Municipality of Naxos and Micro-Cyclades, Regional Unit of Naxos, Region of South Aegean".		Roundula	Archaeological Positions, Ancient Hera, Horse Temples of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/A1/Φ21/44720/2228/15-6-2012, GOVERNMENT GAZETTE, SERIES I, NO 225/A/19-6- 2012
I. Stavros Monastery (Catholic tower) in the Sangari Naxos Round. Designation of Area A of Exclusive Protection		Yourulas	Defensive complexes, monasteries, towers, Christian sails, Religious Areas	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Aikaterini and Agios Agios Athinon (Agios Aikaterini and Agios Agios Athinon) in Yourula Sangriou Naxos. Designation of Area A of		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Exclusive Protection				
I. Church of Agia Anastasia in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agia Paraskevi in Gourula Sangriou Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Saint Vassiliou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Georgios Latirou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas		MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple of Agios Dimitrios in Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Thomas in Yourula Sangrios		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Naxos. Designation of Area A of Exclusive Protection				MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis Avlonitsa in the Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis Theologos in Gourula Sangrios Naxos on the archival temple of Dimitra or Apollon (Certificate). Designation of Area A of Exclusive Protection		Yourulas	Ancient Hera, Horses of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple of Agios Ioannis Bauzi in the Roundula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Ioannis in Kaknados Yourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION YΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple of Agios Ioannou Theologos in		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Addessrou in the Sangrios Naxos Round. Designation of Area A of Exclusive Protection				1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Nikita and After Christ in the Round of Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Temple Agios Nikolaos in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Agios Polyarpos in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Transformatio n Stiros (Christos) in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
I. Church of Panagia Arkou in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
I. Church of Panagia in Gourula Sangrios Naxos. Designation of Area A of Exclusive Protection		Yourulas	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996)
Designation of protection zones A and B of the archaeological site of Gyrula Sangari Naxos		Yourulas	Archaeological Positions, Housing Allies, Ancient Hera, Horses of Christians, Religious Sites	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 1036/14-12-1995) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/59271/3340/30-11- 1995 (GOVERNMENT GAZETTE, SERIES II, NO 49/19-1-1996) MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/48748/3026/18-12- 1997 (GOVERNMENT GAZETTE, SERIES II, NO 142/27.1.1998)
Tower in Kaponnes (also M. Sanoudos) with parachutes and water medal in Kampones Naxou, n. Eleonoras Dellaarkas		Bobbins	Rural Economy, Defence Complexs, Towers, Myles, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
An archaic quarry in the 'Katzilionders- Pyrgos Plakas' area on the island of Naxos.		Katsiliierdes- Pyrgos Plakas on the island of Naxos.	Mining installations, infrastructure/production facilities	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ21/57734/3705/26-7- 2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ21/57734/3705/26-7- 2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004
Classic tower in the area of 'Katzilerdes-		Katsiliierdes- Pyrgos Plakas	Defence Compacts, Towers	MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Φ21/57734/3705/26-7- 2004, GOVERNMENT GAZETTE, SERIES II, NO

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Pyrgos Plakas' on the island of Naxos.		on the island of Naxos.		1211/6.8.2004 MINISTERIAL DECISION YPAPO/DGAPK/AR/A1/Ф21/57734/3705/26-7- 2004, GOVERNMENT GAZETTE, SERIES II, NO 1211/6.8.2004
Pyrgyki Katsagra in Katsagra Naxos, N. of the Catholic Metropolis of Naxos		Katsagra	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Temple Agios Andreou in Potamia Naxos		Foothills of Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Church of Agios Georgiou in Potamia Naxos		Foothills of Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
Basaios Tower — I. Timios Stavros Monastery in Shangri Naxos, n.e. of the Bajas family		To Larthon	Defensive complexes, monasteries, towers, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Church of Agia Sundays in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Church of Agios Georgiou in Tompakata — Stavrotis Naxos		Tombada — Stavrifuger	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
An archaeological site at the 'Tsikalaios — Upper Kastrou' site of Naxos, Region of the South Aegean.		Tsipalarium	Tips, Defence Compacts, New Spaces and Monuments, Housing Syntheses, Castles/Winds, Holy Temples of Christians	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/AR/A1/Φ21/49087/2455/12-6-2012, GOVERNMENT GAZETTE 196/AA/13-6-2012
An archaeological site at the 'Pyrgos Himarrou' site in Naxos,		Stream of stream	Towers	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/A/A1/Ф21/5195/247/13-2-2012 (GOVERNMENT GAZETTE 63/AAA/1-3-2012)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
South Aegean Region'.				
Agios Toal Oil Mondor in Naxos Agios Thal oil	Agios Sea oil		Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/66299/2051/8-12-1983 (GOVERNMENT GAZETTE, SERIES II, NO 86/20.2.1984)
I. Church of Agios Artemis in the Naxos Agides	Clips		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10- 1989)
Papatric Tower, between Naxos cakes and Naxos, N. Samarita and Gill families	Clips	Papatric valley between Angids and Bulles	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
St. Charanda Pyrgos House in Naxos Agidis	Clips	Koster	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/Β1/Φ27/56856/1192/20-12-1985 (GOVERNMENT GAZETTE, SERIES II, NO 35/13.2.1986)
Tower of Marseena or Masse (former Barotchi) and Agios Antonios Pareclis in Upper Potamia Naxos, n. Popis Drylli and Manoli Drous	Upper Potamia		Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/B1/Φ27/27773/728/7-8-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Agios Antonios chapeau in Upper Potamia Naxos, n. Popis Drylli and Manoli Drous	Potamia	Marseena or Mansena tower (former Barochi)	Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/B1/Φ27/27773/728/7-8-1988, GOVERNMENT GAZETTE, SERIES II, NO 726/4-10-1988
Anemmy in Upper Shangri Naxos, n. D. Marakis	Upper Shangrinon		Rural Economy, Myles	MINISTERIAL DECISION/DILAP/Γ/3944/63032/28- 11-1995 (GOVERNMENT GAZETTE, SERIES II, NO 1094/29-12-1995)
I. Church of Agios Georgios Thalaitos in Marpisa (Tsopid) of Paros	Browsing paper		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
The windmill with In situ equipment allegedly owned by Eleni and Evangelia Skarkos, under the name 'Skaros', in the 'Tsigoura' site of the D.D., Municipality of Naxos, on the island of Naxos.	Browsing paper		Mills	MINISTERIAL DECISION YΠΠΟ/DINESAK/78039/2138/29.10.2008 (GOVERNMENT GAZETTE, SERIES I, NO 517/AA/18.11.2008)
Beloni tower or Polytero Tower (otherwise Sommarip) with the Agios Ioannou chap in Galanados Naxos, n. Michail Marangou	Galanadon		Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
I. Cave birth in the Naxos Engineers	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Church of Panagia Monastiotissa in the Naxos Engineries	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
I. Brigades' church in the Naxos Engineers	Engara kai		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION 18136/64/23-9-1965, GOVERNMENT GAZETTE, SERIES II, NO 652/5-10- 1965
Tower of Rotopoulou at Naxos Engarias	Engara kai		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower of high — I. Higher monastery or 'Tyrgos of Agegalopoulos' (also of the Kokkos family) in the Naxos Engineers, i.e.	Engara kai		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
heirs of loannou and Sofia Angelopoulou	75%			
Bridge at Naxos Engries	Engara kai		Bridges	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower of Pretoruna or Agiopetritis at the 'Langada' of Naxos Enkaras, Artos Foufopoulou	Engara kai	"Langada"	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/168/8/21.3.1988 (GOVERNMENT GAZETTE, SERIES II, NO 267/4-5-1988)
House in Naxos Entities, n. Nikolaos Bulgaria	Engara kai	Instruments Neighbourhoo d	Urban buildings	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower in Noskelo or Oslolo (other IEP. Konte and then Fr. Sammarip) with Agios Georgios Byzantine parachute in Kastraki Naxos, Sofia Psara and Michalis Malama	Kastrakis	Noskelet or Oslolo	Defensive Complexs, Towers, Horses of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/1362/316/5-4-1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5-1985
Tower of Malatata in Lower Potamia Naxos, n. Vasiliki Maroulis	Lower Potamia		Defensive complexes, gardens/parks, towers	MINISTERIAL DECISION ΥΠΠΠ/B1/Φ27/1362/316/5-4-1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5-1985
De LASTIC tower at Zeira Kato Potomias Naxos	Lower Potamia	Zeroa	Defence Compacts, Auxiliary Spaces, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Mari Mouss Tower or Montel Tower at Lierad Lower Potamis Naxos, families	Lower Potamia	Lierida conurbation	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Maroulis and Skordalos				
Dellaroka tower in Lower Shangri Naxos, n. Dimitrios Karavia	Lower Shangrinon		Rural Economy, Defence Complexs, Auxiliary Spaces, Towers, Doves	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Windmill in Lower Shangri Naxos, n. Ioannis Sofikitis	Lower Shangrinon		Rural Economy, Myles	MINISTERIAL DECISION YPAPO/DILAP/Γ/28080/1922/21-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 769/31.10.1986
Boyazoglou tower or Palaiologist tower in Lower Shangri Naxos, n. D. Antonakakis, F. Korre, K. Khatzimikhalis	Lower Shangrinon	Agios Anargyroi	Defence Compacts, Auxiliary Spaces, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Pyrgos-House Drylli in Lower Shangri Naxos, n. E. Drylli	Lower Shangrinon	Near I. Monastery of Agios Eleftheriou	Defence Compacts, Towers	MINISTERIAL DECISION ΥΠΠΠ/Β1/Φ27/1362/316/5-4-1985, GOVERNMENT GAZETTE, SERIES II, NO 285//15-5-1985
Sommarip tower or Kurka tower (half- run) in Lower Shangri Naxos, n. Nikolaos Dellarokas	Lower Shangrinon	Near I. Church of Panagia, Kanakariotissa	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Tower Fragopoulos or Greka in Kurunorhori Naxou, n. Ioannis Dellaarkas	Kurunachor ion		Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
Archaeological site of small Villas Naxos (prehistoric settlement). Designation of protection zones A and B	Small Books (Small Viglas)		Archaeological Positions, Housing Totals	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/2277/79/22-1-1986, GOVERNMENT GAZETTE, SERIES II, NO 94/7.3.1986 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/39110/1961/17-8- 1992, GOVERNMENT GAZETTE, SERIES II, NO 554/8- 9-1992 MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ21/39110/1961/17-8- 1992 (GOVERNMENT GAZETTE, SERIES II, NO 610/9.10.1992)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
I. Moni Chrysostomou in Naxos	Moni Chrysostom ou	On the slopes above the Grotta	Monasteries, Religious Areas	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983) MINISTERIAL DECISION ΥΠΠΟ/ΑUTHORITY/B1/Φ27/41278/1166/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9-1995)
Frangiko Fortaire Naxos	Naxos Naxos		Defensive assemblies, castles/guards	ROYAL DECREE 16-8-1937, GOVERNMENT GAZETTE 335/A/25-8-1937
Archaeological site of Grocta Naxou (the ruins of the fungal and Greek towns)	Naxos Naxos		Archaeological Positions, Housing Totals	MINISTERIAL DECISION 4897/17-4-1962, GOVERNMENT GAZETTE 149/B/28-4-1962
Naxos country	Naxos Naxos		Residential Totals	MINISTERIAL DECISION 4701/3-3-1967, GOVERNMENT GAZETTE 183/B/16-3-1967
Building squares of the Naxos country beach	Naxos Naxos		Natural Spaces, Housing Totals	Ministerial Decision 17163 p./8-4-1969, Government Gazette 86/D/2-5-1969
Archaeological site of the country of Naxos. Limits	Naxos Naxos		New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/Ф21/10720/486/10-6-1980, GOVERNMENT GAZETTE, SERIES II, NO 608/3-7- 1980
Building block of the Naxos medieval castle	Naxos Naxos		Defensive Compounds, Households, Castles/Winders	Ministerial Decision No ΥΠΠ/ΑΧ/Β1/Φ27/46472/1723 e.e./18-10-1980 (Government Gazette, Series II, No 1148/11-11- 1980)
Archaeological site of ancient town of Naxos, a prehistoric settlement of Gronta, a prehistoric cemetery of the Aplomas and the geometric/Greek cemeteries of the kai	Naxos Naxos		New Spaces and Monuments, Archaeological Positions, Housing Allies	MINISTERIAL DECISION YPEPE/A1/Ф21/70612/2431/25-11-1982, GOVERNMENT GAZETTE, SERIES II, NO 145/5-4- 1983
The alleged house of Agios Nikodisos, Agoritos	Naxos Naxos		Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/2296/36/5-2-1986 (GOVERNMENT GAZETTE, SERIES II, NO 181/14-4- 1986) MINISTERIAL DECISION

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
				ΥΠΠΟ/AUTHORITY/B1/Φ27/32567/831/30-7-1986, GOVERNMENT GAZETTE, SERIES II, NO 568/9-9- 1986
I. Agios Ioannou Temple in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/27948/571/10-8-1989 (GOVERNMENT GAZETTE, SERIES II, NO 810//20-10- 1989)
Orthodox metropolitan I. Naxos church	Naxos Naxos		Sacred churches of Christians, Religious Spaces	Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/51358/1109 e.e./29.3.1990 (Government Gazette, Series II, No 413/5.7.1990)
Archaeological site in the sea area of Grocta — berth — Palataki Naxos (ancient town of Naxos)	Naxos Naxos		Marine Spaces, Archaeological Positions	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/A1/Φ43/52872/2645/25-11- 1992 (GOVERNMENT GAZETTE, SERIES II, NO 722/2-12-1992)
Building in the country of Naxos, i.e. heirs of Artos Foufopoulou	Naxos Naxos		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1075/21292/15-5-1990, GOVERNMENT GAZETTE, SERIES II, NO 345/6.6.1990 MINISTERIAL DECISION YPAPO/DILAP/Γ/638/17211/29-3-1994, GOVERNMENT GAZETTE, SERIES II, NO 306//22-4-1994 MINISTERIAL DECISION YPAPO/DILAP/Γ/3136/56719/15-11-1994, GOVERNMENT GAZETTE, SERIES II, NO 913/9-12-1994
Building in Naxos, N. heirs of Loukia Papalexi	Naxos Naxos		Urban buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1075/21292/15-5-1990, GOVERNMENT GAZETTE, SERIES II, NO 345/6.6.1990 MINISTERIAL DECISION YPAPO/DILAP/Γ/638/17211/29-3-1994, GOVERNMENT GAZETTE, SERIES II, NO 306//22-4-1994 MINISTERIAL DECISION YPAPO/DILAP/Γ/3136/56719/15-11-1994, GOVERNMENT GAZETTE, SERIES II, NO 913/9-12-1994
I. Touros Profitis Ilias and Agios Spyridon in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41406/1155/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9- 1995)
I. Monastery of Agia Sunday (with the temple of the same name, I.	Naxos Naxos		Monasteries, Religious Areas	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9- 1995)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Prefecture and ruins of Kapodistrian School) in the country of Naxos				
I. Church of Capella (Asbestos arrest of Christ) in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41644/1195/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Church of Aghia Varvara in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41347/1141/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)
I. Church of Agia Theodon and Extra- Capital Brigades and Agios Sevastianou ("Three Churches") in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
I. Temple Agios Antoniou, Ephimitis, in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41356/1172/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9- 1995)
I. Church of Agios Dimitrios in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41344/1138/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)
I. Agios Ioannou Temple of the Market (of Prodromos) and Agios Stylianou church in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41315/1159/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Agios Monastery in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41320/1149/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
I. Temple Agios Nikolaos in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41645/1196/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)
I. Agios Nikolaos Temple of the Market in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41354/1169/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)
I. Temple Agios Panteleimonas in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41647/1198/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)
I. Church of Agioi Anargyroi in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41345/1139/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)
I. Church of Agios Thallios in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41272/1160/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Church of Grand Brigade in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41646/1197/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)
I. Church of Panayia of Christos ("Panagia of Christ of Plassa") and Agios Antope church in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41641/1192/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9-1995)
I. Church of the snow Panagia in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41353/1170/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)
I. Temple Pantanassa in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41318/1147/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Temple of Funtana Brigade in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41342/1136/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)
I. Timios Stavros and grave of 1769 in the country of Naxos	Naxos Naxos		New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41346/1140/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 793/14-9- 1995)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
I. Tour of Panapisti or Xenopoulas in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41643/1194/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Chrysopoliitsa, Agios Apostolos, Agios Spyridon and Agios Charalambous in Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41348/1142/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)
Parachure (dedicated to Panayia, Lourdis) former Ursulina School in Naxos Country	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41343/1137/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9-1995)
I. Temple Agios Fanouri and Agia Paraskevi in Naxos Country	Naxos Naxos	Tinctures	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41404/1153/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
Pyrgossto house in the 'Kalanakis' location in the country of Naxos	Naxos Naxos	'Calconiums'	Defence Compacts, Towers	MINISTERIAL DECISION OF THE MINISTRY OF THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS/AUTHORITY/B1/Φ27/63118/1414/9-11-1982 (GOVERNMENT GAZETTE, SERIES II, NO 3/11-1-1983)
'Kastle' and 'Bourgo' districts	Naxos Naxos	'Castro' and 'Bourgos'	Residential Totals	MINISTERIAL DECISION 714/21-8-1963 (GOVERNMENT GAZETTE, SERIES II, NO 382//29-8- 1963)
I. Temple of Saint- Barthélemy in the country of Naxos	Naxos Naxos	"South village"	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41275/1163/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9- 1995)
Archaeological site of capeios Agios Georgios Naxos (original cemetery)	Naxos Naxos	Akrotirios Agios Georgios as far as the public road to Philtios	New Spaces and Monuments, Archaeological Positions	MINISTERIAL DECISION 3888/21-2-1967, GOVERNMENT GAZETTE, SERIES II, NO 168/9.3.1967
Archaeological site between Grocta and Metropolis Naxos	Naxos Naxos	B Metropolitan building	Archaeological Positions	MINISTERIAL DECISION 15794/19-12-1961, GOVERNMENT GAZETTE, SERIES II, NO 35/2.2.1962

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
Archaeological site of the island of Vakcho (old) (ancient temple)	Naxos Naxos	North of the agglomeration of Naxos	Archaeological Positions, Ancient Hera, Religious Sites	PRESIDENTIAL DECREE 18-8-1933, GOVERNMENT GAZETTE, SERIES I, NO 244//21.8.1933
Archaeological site of Grocta and Hill of Alplomas Naxos	Naxos Naxos	Northern beach of town until Aghia Friday	Archaeological Positions	MINISTERIAL DECISION 151291/6120/5-12-1957, GOVERNMENT GAZETTE 341/B/31-12-1957
I. Church of Agios Georgios, Grotta, in the country of Naxos	Naxos Naxos	Rota Routa	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41403/1152/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9- 1995)
I. Church of Evangelismos 'to Fraro' (Annunciata) in the country of Naxos	Naxos Naxos	Road to Aghides	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41279/1167/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)
I. Church of Agioi Theodoron in the country of Naxos	Naxos Naxos	Road to Excursions	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41405/1154/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 790/13-9- 1995)
Central building of the 'former Urslin School' in Naxos, allegedly owned by the National Youth Institute	Naxos Naxos	Inside the castle	Urban buildings, public utility buildings	MINISTERIAL DECISION YPAPO/DILAP/Γ/1389/26361/8-5-1995, GOVERNMENT GAZETTE, SERIES II, NO 538/21-6- 1995 MINISTERIAL DECISION ΔΑ/9817/98/5-1-1999, GOVERNMENT GAZETTE 52/D/3-2-1999
I. Church of Agios Antoniou, Padua (Moni Kapotsina) in the country of Naxos	Naxos Naxos	Castle	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41642/1193/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Church of Panayia in Rodaria and Katsagra cemetery in the country of Naxos	Naxos Naxos	Katsagra	New Spaces and Monuments, Hospitals of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41351/1156/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/13-9- 1995)

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
'Theathologaki' Excellency in the country of Naxos	Naxos Naxos		Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41352/1157/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 790/13-9-1995)
I. Church of Agia Paraskevi in the country of Naxos	Naxos Naxos	Beneath Prança Square	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41317/1146/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
I. Church of Christos in the country of Naxos	Naxos Naxos	Near the Gymnasium	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41402/1151/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
House in Naxos Country, n. C. Hatzandreou, Charalambou Kardiolka, Evangelos Marmatakis and Michalis Islands	Naxos Naxos	Burgos	Urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ28/4372/104/3.3.1988, GOVERNMENT GAZETTE, SERIES II, NO 219//22-4- 1988
I. Church of Agia Paraskevi, Burgos in Naxos Country	Naxos Naxos	Burgos	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41402/1151/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9-1995)
I. Temple of Panagia Mydiiotissa and island in Naxos	Naxos Naxos	Islands in port	Natural Spaces, Hotels of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41355/1168/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)
Lascari-Cretan House at Exarchoulou Street in Naxos Country	Naxos Naxos	Akrichopoulou Street	Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41319/1148/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)
Aristovou Melissinou House at Makedonomac hou Pranda Street in Naxos Country	Naxos Naxos	Makedonomac hou Prança Street	Gardens/parks, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41276/1164/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 800/14-9-1995)
Archoniko Magakis-Aaron at the Metrotroliteou Neofytou Street 52 in the country of Naxos, n. Loukia		Metrotolitou Neofytou Street 52	Archaeontics, urban buildings	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/16422/427/28-5-1986, GOVERNMENT GAZETTE, SERIES II, NO 440/4-7- 1986

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration	
Papastamatou and Maria Pliatska					
Home shell in the country of Naxos, n. Mr E. Geranitis	Naxos Naxos	Beach	Building Departments, Urban Buildings	MINISTERIAL DECISION DILAP/Γ/3018/73394/8-2-1980, GOVERNMENT GAZETTE, SERIES II, NO 277//20.3.1980 MINISTERIAL DECISION ΥΠΠΟ/ΔΛΑΠ/Γ/226/3476/21-1-1988, GOVERNMENT GAZETTE 65/B/4-2-1988	
I. Church of Panagia of Karmoil or Salvara in the country of Naxos	Naxos Naxos	Region of Greece	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41280/1171/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)	
I. Church of Agios Georgios (father's name, Kavalouri) in the country of Naxos	Naxos Naxos	Meteorological Station Area	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41401/1150/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 798/14-9- 1995)	
The archaeological site of the ancient port project in the modern port of Apollon Naxos, Municipality of Naxos and Micro-Cyclades, Regional Unit of Naxos, Region of South Aegean.	Naxos Naxos	-	Marine Spaces, Port Facilities, Archaeological Positions	MINISTERIAL DECISION OF THE MINISTRY OF RURAL DEVELOPMENT AND FOOD/DGAPK/DIPKA/TACH/Φ21/86867/20724/45 11/4218/27-8-2012 (GOVERNMENT GAZETTE 292/AAA/14-9-2012)	
I. Church of Hagia Sophia in the country of Naxos	Naxos Naxos	Jewish district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41314/1158/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)	
I. Theosscaptis (Genesis of Theotokos) in the country of Naxos	Naxos Naxos	Kastrou district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41350/1144/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)	
I. Touristos (Metropolis Catholic) in the country of Naxos	Naxos Naxos	Kastrou district	Sacred churches of Christians, Religious Spaces	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41349/1143/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 794/14-9- 1995)	

Name of the Monument	Settlement of agglomerat ion	Position	Type of Monument	Government Gazette of Declaration
		Kilometre	Christians, Religious	MINISTERIAL DECISION ΥΠΠΟ/AUTHORITY/B1/Φ27/41277/1165/8-8-1995 (GOVERNMENT GAZETTE, SERIES II, NO 779/14-9- 1995)

<u>Source</u>: Permanent List of Declared Archaeological Sites and Monuments of Greece of the Ministry of Culture and Sport (http://listedmonuments.culture.gr/search_declarations.php)

As regards the area of study of the project at the Regional Unit of Lavreotikos, please note the following:

- The landing point is located within the Agios Nikolaos Mountain, which has been established as an archaeological position (Ministerial Decision 2258/4-2-1966, Government Gazette, Series II, No 175//26-3-1966, Presidential Decree 17-2-1998, Government Gazette 125/D/27-2-1998).
- The land route of the line, which is located alongside the road network, passes through the boundaries of the 'A Archaeological Area of Lavrio' (Ministerial Decision 25666/984/30-5-1957, Government Gazette, Series II, No 184//8-7-1957, Ministerial Decision 25666/984/30-5-1957, Government Gazette, Series II, No 265//1-10-1957); Ministerial Decision 21220/10-8-1967, Government Gazette 527/B/24-8-1967, Ministerial Decision 2717/Π-102/91/2-10-1991, GG 946/Δ/23-12-1991, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ02/6690/376/21-11-1994, GG II 927//14-12-1994, Presidential Decree 17-2-1998, GG 125/Δ/27-2-1998)
- The submarine line passes 700 m south from the sun's archaeological site in the sea area of Cape Vrysaki Thorikos, where there is a shipwreck of Byzantine years (Government Gazette, Series II, No 2069/21-09-2015).
- Within the study area, 1.5 km north of the project's land route and the Lavrio hotspot are located at
 a sunal archaeological site in the sea area of the Turmolimno Thorikos Bay, in South Evia, where two
 shipwrecks: a classical time and a sinking of Roman times. The A & B sections of the site are classified
 as open to the public for underwater surveys (Government Gazette 2069B/21-09-2015 and 2655B/0912-2015).

As regards the planning area of the project in the municipality of Serifou, Regional Unit of Milos, please note the following:

- To the west of the new Serif and the underground transport line of Serifou, a distance of more than 400 m lies in the settlement of Livadi where the sites 'Historical conservation monument the building owned by M. Chrysoloras in Livadi Serifou' (Government Gazette, Series II, No 900/13-12-1993) are located (Government Gazette, Series II, No 900/13-12-1993), 'An art project in need of special State protection for the house owned by Artemisia Hatziathanasios in Livadi Serifou' (Government Gazette, Series II, No 967//26-09-1980).
- To the south-west of a new Sierfou water station and the underground transport line, at a distance of approximately 1 km, the I. Agios Georgios Temple of Necetos in Livadi Serifou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31303/684/31-7-1987 (Government Gazette, Series II, No 466/28-8-1987) is located.
- The sea area from Cape V. Platotos to the bay of Psiliamos in Serifos, which has been designated as a

sea area for submarine activities with breathing apparatus, deep-boat or other means of bottom surveying (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/AX/A1/ Φ 41/88711/4369/22-10-2005 (Government Gazette, Series II, No 1610//22-11-2005)) is located north of the new Serifs' Water Management Plan at a distance of approximately 1 km.

- The settlement of the country of Serif, which is located approximately 1.8 km north-west of the new Sierfou water body, has been reinstated as a traditional settlement and a site of special natural beauty requiring special State protection (Government Gazette $594/\Delta/13-11-1978$, 274/B/24-05-1983, $345/\Delta/02-06-1989$ and $930/\Delta-24-10-2002$).
- To the west of the new Serif and the underground transport line of Serifou, more than 1.5 km is located by I. Brigadier General of the country of Serifos (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810//20-10-1989)
- The Serif Castle is located approximately 1.8 km north-west of the new Sierfou water body. The following monuments are located within the site:
 - The ruins of the Serif Castle (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Ioannou Theologos in Chios Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Eleftheriou in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Touros Profitos Daniel in the country of Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Panagia in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Christos in the Serif Castle (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31304/685/31-7-1987, Government Gazette, Series II, No 459/21-8-1987)
 - House of Georgios Lefikos in the Serif Castle (Ministerial Decision 6922/291 e.e./12-2-1972, Government Gazette, Series II, No 148//17-2-1972)
- To the north-west of a new water/Sierfou, approximately 1.7 km away, in the village of Kalličos, I. Timios Stavros Thimiou is located (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810/20-10-1989).

As regards the planning area of the project in the municipality of Milos, Regional Unit of Milos, please note the following:

- Approximately 700 m of the underground transport line of the southern Milos passes through Zone B of the Archaeological site in the Provasia Milos (Romanic and PaleoChristian remains), (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/26587/12393/25-6-1990, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG 140/B/18-2-1999).
- To the west of the landing point of southern Milos, approximately 1.1 km is the archaeological site at the 'Kipi' of Milos (two churches and an anti-Christian painter) (Royal Decree 24-7-1936, Government Gazette, Series I, No 332, 6-8-1936).

- To the east of the new Milos bath, approximately 1.3 km is the historic memorial I. Church of Christou in Zefyria Milos (Ministerial Decision 18429/808/13-2-1954, Government Gazette, Series II, No 60/26-3-1954).
- To the south-east of the new Mileium, around 1.4 km is the historic memorial of Agios Charalambous in Zefyria Milos (Government Gazette, Series I, No 332, 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series II, No 935/10-10-1996).
- To the south-east of the new Mileium, around 1.4 km is the historically preserved monument I. Theattokos Prefectural Church (Portiani) in Zefyria Milos (Government Gazette, Series I, No 332, 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series II, No 935/10-10-1996)
- To the north-east of the northern landing point on the island of Milos, the historic memorial I. Agios Konstantinos Temple in Pachaina Milos (Ministerial Decision of the Ministry of the Environment, Regional Planning and Public Works/B1/Φ27/1544/58/1-2-1985, Government Gazette, Series II, No 94/21.2.1985) is located approximately 350 m away.
- To the north-east of the northern landing point on the island of Milos, there is approximately 1.1 km of the archaeological site of the guillopi Milos, with the ruins of the ancient guillopi, its cemeteries and a monumental calorie of the classical Chronics second half of the 4th of the BCs⁽⁾ Ministry of the Environment, Fisheries and Food/A1/F21/26587/12393/25-6-1990), Ministerial Decision 3888/21-2-1967, Government Gazette 168/B/9-3-1967, Ministerial Decision YΠΠΠ/ΑΧ/Α1/Φ21/58434/2938/16-11-1979, GG 209/B/29-2-1980, Ministerial Decision YΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision YΠΠΟ/DGA/ΑΧ/Α1/Φ21/58772/3934/9-10-2002; Government Gazette, Series II, No 1348/17-10-2002, Ministerial Decision YPAPO/DGAPK/A1/Φ21/58772/3934/9-10-2002 (Government Gazette, Series II, No 1690/2-12-2005)
- To the east of the underground transport line of the northern Milos, approximately 600 m is located on the border of the archaeological site in the Milos gypsyna (lack of Greek and Roman settlement) (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, Government Gazette, Series II, No 1193/19-11-1998).

As regards the planning area of the project in the Municipality of Folegandrou, Regional Unit of Thira, please note the following:

- To the north-west of a new Folegandro bachelor, approximately 1.4 km away, there is the historic memorial I. Theattokos Prefecture Temple of Foleganros (Ministerial Decision 10976/16-5-1967, Government Gazette, Series II, No 353//31-5-1967)
- Greece is located 1.7 km north-west of the new water/body and the Folegandro underground transport line. Within Greece, the following monuments are located:
 - \circ The country has a historical site and special natural beauty (Ministerial Decision A/ Φ 31/5760/571/24-4-1973, Government Gazette, Series II, No 526/8-5-1973).
 - O Historical monument I. Temple of Brigade in Greece (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)
 - Historical monument I. Church of Agios Antoniou in the country of Folegandrou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)

As regards the project area in the Regional Unit of Thira, Municipality of Thira, Regional Unit of Thira, please note the following:

• South-east of the new Water/Shira and the underground transport line, approximately 340 m away, there is an archaeological site of Monolithos, with archaeological residues dating from prehistoric times to late seniority (Ministerial Decision No ΥΠΠ/ΑΧ/Α1/Φ21/77169/3858/30-1-1980, Government Gazette, Series II, No 300/24-3-1980, Presidential Decree 16-2-1990, Government Gazette, Series II, No 139/D/19-3-1990).

As regards the project area in the Regional Unit of Naxos, Municipality of Naxos and Micro-Kyclades, Regional Unit of Naxos, please note the following:

- The entire project on the island of Naxos falls within Zone B of the archaeological site in Strida with residues from the processing of flint during prehistoric times (cores, flakes, etc.), the foundations of a circular tower of the 4th B.P.C.^{and} the granite quarries (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/DGAPK/ARX/A1/Φ21/32793/2143/28-4-2004); GG II 966, 29.6.2004, Ministerial Decision ΥΠΠΟ/DGAPK/AX/A1/Φ21/32793/2143/28-4-2004 (Government Gazette, Series II, No 140/4-2-2005)
- To the east of the underground transport line, at a distance of approximately 300 m, there is the ancient monument I. Agios Prokopiou Temple in Agios Arsene Naxos (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ30/ΚΗΡ/49013/1935/23-12-1998, Government Gazette, Series II, No 26/25-1-1999).

The declared archaeological sites and monuments found in the study area and the location of the project under study are set**out in the Land Use and Coverage Map**(Environmental Map: Annex 15 to this study.

8.2 Social economic environment

8.2.1 Demographic situation and trends

The project under consideration is located in the Municipality of Lavreotikos, the Municipality of Serifou, the Municipality of Milos, the Municipality of Folegandrou, the Municipality of Thira and the Municipality of Naxos, and more specifically in the municipal units:

- D.Lavreotikos D.E., Municipality of Lavreotikos,
- Serifou D.E., Municipality of Serifou,
- Mulos D.E., Municipality of Milos,
- Folegandrou D.E., Municipality of Folegandrou
- D.E. Thira, Municipality of Thira
- D.E. Naxos, Municipality of Naxos

The table below presents the most recent demographic data for the municipalities and municipal units where the project is located. Please note the following:

• The population of the municipality of Lavreotikos accounts for 5 % of the population of the Regional Unit of Eastern Attica.

- The population of the municipality of Serifou accounts for 14 % of the population of the Regional Unit of Milos.
- The population of the municipality of Milos accounts for 50 % of the population of the Regional Unit of Milos.
- The population of the municipality of Folegandros accounts for 4 % of the population of the Regional Unit of Thira.
- The population of the municipality of Thira accounts for 82 % of the population of the Regional Unit of Thira.
- The population of the municipality of Naxos accounts for 90 % of the population of the Regional Unit of Naxos.

Table 8.2-1 Population in the municipalities where the project under study is located (in 2011 census)

Geographical code Kallikratis	Description	Permanent Population
	TOTAL COUNTRY	10,816,286
	ATTICA	3,828,434
	Decentralised administration of Attica (Headquarters: Athens, and)	3,828,434
	Region of Attica (Headquarters: Athens, and)	3,828,434
49	REGIONAL UNIT OF EASTERN ATTICA	502,348
4905	Public Laureate (Headquarters: Lavronium,to)	25,102
490501	MUNICIPAL LOTTERY MODULE	9,611
49050101	Municipal Community of Lavretica	9,611
4905010102	Agios Gerasimos,o	281
4905010103	Agios Georgios,o (island)	0
4905010104	Upper Thoricon,to	215
4905010105	Labour Housing, Agios Ioannis Russian,o	823
4905010106	Thoricon,to	227
4905010108	Lower Poseidonia,h	397
4905010110	Lower Sunion,the	127
4905010101	Lavronium,to	7,078
4905010107	Legrena,	289
4905010109	Panomos,o	174
	Decentralised administration of Aegean (Headquarters: Piraeus,o)	508,246
	South Aegean region (Headquarters: Ermoupolis,h)	309,015
60	REGIONAL UNIT OF THEIRA	18,883
6001	Dimos Thiras (Headquarters: Hunting,h)	15,550
600101	MUNICIPAL UNIT OF THERAS	14,005
60010105	Municipal Community of Merchant Vessels	3,085
6001010502	Agios Georgios,o	343
6001010501	Maybe	1,938
6001010503	Extraneous,o	126
6001010504	Perssa,d	678
60010107	Municipal Community of Bishop of the Corner	1,462
6001010701	Angle Visit,h	118
6001010702	Camarion,the	1,344

Geographical code Kallikratis	Description	Permanent Population
60010101	Municipality of Thira	1,857
6001010103	Asscania,a (islands)	0
6001010104	Aspronisi,to (island)	0
6001010105	Outside jelly,o (D.K. Thira)	71
6001010106	Outside Residentials,	26
6001010107	Last time,h (island)	0
6001010101	Hunting,h	1,616
6001010108	Average residences,	143
6001010109	New Kamena,d	0
6001010110	Fernon bay,o	0
6001010111	Old Kamenis,h	1
6001010112	Christian,tea (islands)	0
60010109	Municipal community of Karterádou	1,293
6001010902	Outside jelly,o (Kardteradou K.K.)	55
6001010901	Carderde,o	1,238
60010111	Municipal Community of Messara	2,092
6001011101	Mesria,h	1,593
6001011102	Monolite,o	499
60010102	Local Community of Cape Verde	489
6001010202	Agios Nikolaos,o	54
6001010201	Cape Verdeto	355
6001010203	Lighthouse,o — Means Village,to	80
60010103	Local Community of Bothinos	756
6001010302	Agia Paraskevi,	57
6001010301	Boots,o	699
60010104	Local Community of Bourvoulou	535
6001010401	Bourvoulos,o	535
60010106	Local Community of One-Engney	395
6001010601	Outer Angle,d	326
6001010602	Enclosures,	69
60010108	Local Community of Day	535
6001010801	Daywick, the	431
6001010802	Panayia Kalou,i	104
60010110	Local Community of Megalohori	594
6001011001	Megalochoron,to	594
60010112	Local community of Pyrgos Kallristis	912
6001011202	Moni Profitos Iliaou, the	19
6001011203	Athenis bay,o	9
6001011201	Kallistis Tower,o	884
6005	Kos Foligandrou (Headquarters: Phéleganros,h)	765
60050002	Local Community of Upper Messrs	252
6005000202	Agios Georgios,o	0
6005000203	Agkali,h	9
6005000201	Upper Messrs,d	243
60050001	Local Community of Folegandrou	513
6005000102	Agios Ioannis,o (island)	0
6005000104	Karavostase,o	87

Geographical code Kallikratis	Description	Permanent Population
6005000105	Livadine,to	1
6005000103	Three siblings (islands)	0
6005000101	Fologanros,d	425
65	REGIONAL UNIT OF APPLE	9,932
6501	Public MULOS (Headquarters: Apple,h)	4,977
65010002	Municipal Community of diamond	1,347
6501000201	Dama,o	1,347
65010004	Municipal Community of Trivalalou	1,240
6501000402	Saint-Argyro, the	4
6501000403	Agios Gerasimos,o	3
6501000404	Apolonia,	272
6501000405	Boudia,	12
6501000406	Glarusia (islands)	0
6501000407	Kilns, dressings	49
6501000408	Mandrakis,tas	2
6501000409	Mytikas,o	25
6501000410	Pachaina, the	32
6501000411	Pponnisios,to (island)	0
6501000401	Trivasalos,o	838
6501000412	Guilloche,d	3
65010001	Local Community of Milos	819
6501000102	Arachion,to (island)	0
6501000105	Pineapples (islands)	0
6501000103	Antimonos,d (island)	0
6501000104	Amber,dd	0
6501000106	Ebourios,o	16
6501000107	Garden,o	6
6501000101	Apples,d	749
6501000108	Xylkeratias,h	0
6501000109	Rusks,to (island)	0
6501000110	Provasas,o	27
6501000111	Ralakion Kalakos,to	0
6501000112	Fourkovouni,the	0
6501000113	Ferropotamos,o	4
6501000114	Psathikas,	17
65010003	Local community of Peran Trivasallou	698
6501000302	Katsarara,o	33
6501000303	Komis,	16
6501000301	Other than Trivasalos,o	649
65010005	Local Community of Tripotent	873
6501000502	Agia Sunday, the	31
6501000503	Zefyria,d	176
6501000504	Canava,h	86
6501000505	Lot,the	13
6501000506	Pavlohori,to	25
6501000507	Schips,h	2
6501000501	Driller,h	540

Geographical code Kallikratis	Description	Permanent Population
6503	Kos Serifos (Headquarters: Serifos,h)	1,420
6503000002	Avenucalo,o	18
6503000003	Saint Ioannis,o	21
6503000004	Bos,o (island)	0
6503000005	Galani,d	59
6503000006	Galens,the	21
6503000007	Glauronios, to (island)	0
6503000008	Kurdish,o	58
6503000009	Koutalas,o	23
6503000010	Livadine,to	605
6503000011	Great Livodon,to	31
6503000012	Large village,the	12
6503000013	Moni Evangelistrias, the	2
6503000014	Lone Brigades, the	1
6503000015	Panayia,h	70
6503000016	Flat jelly,o	29
6503000017	Ramos,o	80
6503000018	Srifpoula,d (island)	0
6503000001	Serifos,d	364
6503000019	Sykalia,d	26
67	REGIONAL UNIT OF NAXOS	20,877
6702	Municipality of Naxos and Small Cyclades (Headquarters: Naxos,h)	18,904
670201	MUNICIPAL UNIT OF NAXOU	12,726
67020102	Agios Arsenio Municipal Community	1,327
6702010202	Saint Anna,d	176
6702010203	Agios Pantas, the	103
6702010201	Agios Arsene,o	717
6702010204	Agios Prokopios,o	96
6702010205	Maragoa,o	73
6702010206	Mastarakis,o	5
6702010207	Lot,h	157
67020101	Municipal community of Naxos	7,374
6702010102	Clips, clips	299
6702010103	Moni Chrysostomou,d	5
6702010101	Naxos,h	7,070
67020103	Local Community of Paper	672
6702010301	Paper,h	654
6702010302	Plate, slide	18
67020104	Local Community of Galanadou	455
6702010401	Galanadon,to	455
67020105	Local Community of Galini	273
6702010501	Galley,d	273
67020106	Local Community of Glind	585
6702010601	Glinadon,the	585
67020107	Local Community of Engineers	178
6702010701	Winners, etc.	178
67020108	Local Community of Kinidar	388

Geographical code Kallikratis	Description	Permanent Population
6702010802	Akrotiri,to	47
6702010801	Kinidaros,o	341
67020109	Local community of inks	652
6702010902	Agios Sea oil,o	106
6702010903	Kurunochoredon,to	105
6702010901	Bulls, bulls	414
6702010904	Mills,s	27
67020110	Local Community of Potamia	285
6702011002	Upper Potamia,h	127
6702011003	Lower Potamia,d	99
6702011001	Mean rivers,h	59
67020111	Local Community of Shangriou	537
6702011101	Upper Shangrinon,the	210
6702011102	Canakarion,to	49
6702011103	Kastraki,to	158
6702011104	Lower Shangrinon,the	27
6702011105	Small pens,h	93
6702011106	Panayia,h (island)	0

<u>Source</u>: Hellenic Statistical Authority, Population Census — Housing 2011 Permanent Population

<u>Note</u>: the table shows only the municipal units where the project is located and not all the municipal units of the municipalities where the project is located.

The tables below show how the demographic situation has changed over time in the municipal units where the project is located.

Table 8.2-2 Temporal change in population in the study area

Municipality/	Populat	ion		Trends in development (%)		
Municipal Units	1991	2001	2011	1991-2001	2001-2011	
D.Lavretica D.C.	10.293	10.407	9.611	1.1 %	—7.6 %	
D.C. Serifou	1.095	1.262	1.420	15.3 %	12.5 %	
Milos D.E.	3.222	4.736	4.977	47.0 %	5.1 %	
D.E. Folegandrou	558	676	765	21.1 %	13.2 %	
D.E. Hunting	12.333	12.453	14.005	1.0 %	12.5 %	
Naxos D.E.	8.924	11.772	12.726	31.9 %	8.1 %	
Total total	36.425	41.306	43.504	13.4 %	5.3 %	

Source of data: ELSTAT Inventory 2011, 2001 and 1991.

On the basis of the data in the table above, the following conclusions are reached:

- ➤ In the total population in the study area, the population increased significantly between 1991 and 2011.
- ➤ The Lavretica Regional Unit is the only area where there was a decline in population in the decade 2001-2011.
- In all the other districts in the study area there is an increase for both 1991-2001 and 2001-2011.

8.2.2 Productive structure of the local economy The tables below show the employees per branch of economic activity in the municipalities in the study area, according to the 2011 census data (ELSTAT).

Table 8.2-3 Economically active and inactive population, employed by sector of economic activity and unemployed

	Economically active						
TERRITORIAL UNIT		Employees				Vvrooo	Financially
TERRITORIAL ONLY	Total total	Total total	Primary Sector	Secondary Sector	Tertiary Sector	Total total	inactive
TOTAL GREECE	4,586,636	3,727,633	372,209	654,377	2,701,047	859,003	6,229,650
REGION OF ATTICA	1,771,562	1,452,203	17,528	246,561	1,188,114	319,359	2,056,872
EASTERN ATTICA REGIONAL UNIT	226,409	188,117	7,552	37,455	143,110	38,292	275,939
LAURETIC PUBLIC PROSECUTOR'S OFFICE	10,192	7,747	229	1,918	5,600	2,445	14,910
SOUTH AEGEAN REGION	140,016	120,950	6,245	20,600	94,105	19,066	168,999
REGIONAL UNIT OF THIRA	9,211	8,066	387	1,416	6,263	1,145	9,672
DIMOS THIRAS	7,667	6,687	236	1,121	5,330	980	7,883
KOS FOLIGANDROU	346	314	35	74	205	32	419
REGIONAL UNIT OF MILOU	3,709	3,376	204	1,002	2,170	333	6,223
AUDIOS SERIFOS	543	484	43	144	297	59	877
DIMOS MILOU	1,965	1,791	66	533	1,192	174	3,012
REGIONAL UNIT OF NAXOU	8,614	7,308	1,019	1,577	4,712	1,306	12,263
MUNICIPALITY OF NAXOS AND THE SMALL CYCLADES	7,789	6,571	899	1,420	4,252	1,218	11,115

Source: ELSTAT, population census 2011

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Table of 8.2-4 employed persons by industry (one-digit) in the study area

			Sectors of economic activity								
Description of place of permanent residence	Total total	A. AGRICULTURE , FORESTRY AND FISHERIES	F. CONSTRUCTIO NS	G. WHOLESALE AND RETAIL TRADE — REPAIR OF MOTOR VEHICLES AND MOTORCYCLE S	H. TRANSPORT AND STORAGE	I. ACCOMMODA TION AND CATERING SERVICES ACTIVITIES	N. ADMINISTRAT IVE AND SUPPORT ACTIVITIES	PUBLIC ADMINISTRAT ION AND DEFENCE — COMPULSORY SOCIAL SECURITY	O. EDUCATION	E. HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	OTHER SECTORS
TOTAL COUNTRY	3.727.633	372.209	254.081	651.739	192.871	291.589	102.192	359.779	294.359	236.831	971.983
REGION OF ATTICA	1,452,203	17,528	88,537	273,264	99,804	84,229	52,030	149,129	105,794	104,082	477,806
EASTERN ATTICA REGIONAL UNIT	188,117	7,552	13,704	36,916	12,263	10,534	6,242	17,010	12,032	11,583	60,281
LAURETIC PUBLIC PROSECUTOR'S OFFICE	7,747	229	701	1,489	651	637	309	742	394	314	2,281
SOUTH AEGEAN REGION	120,950	6,245	12,778	19,939	5,918	28,948	4,077	11,559	7,293	4,785	19,408
REGIONAL UNIT OF THIRA	8,066	387	1,001	1,536	420	2,423	400	403	363	131	1,002
DIMOS THIRAS	6,687	236	772	1,339	385	2,021	372	331	280	101	850
MUNICIPALITIES OF FOLIGANDROU, SICINO AND RENNET	499	78	82	60	11	140	9	25	40	6	48
REGIONAL UNIT OF MILOU	3,376	204	518	519	208	489	100	235	184	88	831
MUNICIPALITIES OF APPLE AND KIMOLIOU	1,990	87	246	326	148	234	62	149	114	62	562
AUDIOS SERIFOS	484	43	112	68	16	88	15	36	24	6	76
REGIONAL UNIT OF NAXOU MUNICIPALITY OF	7,308	1,019	991	1,138	226	1,132	161	476	584	223	1,358
MUNICIPALITY OF NAXOS AND THE SMALL CYCLADES	6,571	899	871	1,047	192	1,006	150	432	513	209	1,252

Source: ELSTAT, Population Census 2011

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According to the data in the table, the following conclusions can be drawn concerning the predominant economic activities in the study area:

Municipality of Lavreotikos

- The economically active population of the municipality of Lavreotikos, based on the 2011 population census, is 10 192 people, most of whom, i.e. 54.9 %, are employed in the tertiary sector, 18.8 % are employed in the secondary sector, while only 2.2 % are employed in the primary sector.
- Of the people employed in the Municipality of Lavretica, 19 % work in wholesale and retail trade, repair of motor vehicles and motorcycles.
- 10 % are employed in public administration and defence or compulsory social insurance
- 9 % work in the construction sector.
- 29 % are employed in other sectors.
- The level of unemployment in the Municipality of Lavretica (24 %) is higher than the average recorded level of Greek territory for the same period (18 %) and the corresponding unemployment rate at the level of the Region of Attica (18 %).

Municipality of Serifou

- The economically active population of the municipality of Serifou, based on the 2011 population census, is 543 people, most of whom, 54.7 %, are employed in the tertiary sector, 26.5 % are employed in the secondary sector, and only 7.9 % are employed in the primary sector.
- Of the employees in the municipality of Serifou, 23 % work in the construction sector.
- 18 % are employed in accommodation and food service activities.
- 14 % work in wholesale and retail trade, repair of motor vehicles and motorcycles.
- 16 % are employed in other sectors.
- The level of unemployment in the municipality of Serifou (10.9 %) is lower than the average recorded level of Greek territory over the same period (18 %) and the corresponding unemployment rate in the South Aegean region (14 %).

Municipality of Milos

- The economically active population of the Municipality of Milos, based on the 2011 population census, is 1 965 people, of whom the majority, i.e. 60.7 %, are employed in the tertiary sector, 27.1 % are employed in the secondary sector, and only 3.4 % are employed in the primary sector.
- Of the Municipalities of Milos and Kimolos, 16 % work in wholesale and retail trade, repair of motor vehicles and motorcycles.
- 12 % are employed in the construction sector.

- 12 % work on accommodation and food service activities.
- 28 % are employed in other sectors.
- The level of unemployment in the municipality of Milos (9 %) is well below the average recorded level of Greek territory over the same period (18 %) and the corresponding unemployment rate in the South Aegean region (14 %).

Municipality of Folegandrou

- The economically active population of the municipality of Folegandros, based on the 2011 population census, is 346 people, most of whom, 59.2 %, are employed in the tertiary sector, 21.4 % are employed in the secondary sector, while only 10.1 % are employed in the primary sector.
- Of the employees of the municipalities of Folegandrou, Sicinos and Anafis, 28 % are employed in accommodation and food service activities.
- 16 % are employed in agriculture, forestry and fisheries.
- 16 % work in the construction sector.
- 10 % are employed in other sectors.
- The level of unemployment in the municipality of Folegandros (9 %) is well below the average recorded level of Greek territory over the same period (18 %) and the corresponding unemployment rate in the South Aegean region (14 %).

Municipality of Thira

- The economically active population of the municipality of Thira, based on the 2011 population census, is 7 667 people, of whom the majority, namely 69.5 %, are employed in the tertiary sector, 14.6 % are employed in the secondary sector, while only 3.1 % are employed in the primary sector.
- Of the employees of the Municipality of Thira, 30 % are employed in accommodation and food service activities.
- 20 % are employed in wholesale and retail trade, repair of motor vehicles and motorcycles.
- 12 % work in the construction sector.
- 13 % are employed in other sectors.
- The level of unemployment in the municipality of Thira (13 %) is lower than the average recorded level of Greek territory over the same period (18 %) and the corresponding unemployment rate in the South Aegean region (14 %).

Municipality of Naxos and Micro-Cyclades

• The economically active population of the municipality of Naxos and the Minor Cyclades, based on the population census in 2011, is 7 789 people, the majority of whom, i.e. 54.6 %, are employed in the

tertiary sector, 18.2 % are employed in the secondary sector, while only 11.5 % are employed in the primary sector.

- Of the employees in the Municipality of Naxos and Small Cyclades, 16 % work in wholesale and retail trade, repair of motor vehicles and motorcycles.
- 15 % are employed in accommodation and food service activities.
- 14 % work in agriculture, forestry and fisheries.
- 19 % are employed in other sectors.
- The level of unemployment in the Municipality of Naxos and Small Cyclades (16 %) is lower than the average recorded level of Greek territory over the same period (18 %), but slightly higher than the corresponding unemployment rate in the South Aegean Region (14 %).

8.2.3 Employment

The employees by sector of economic activity have already been presented above in section "8.7.2 Productive structure of the local economy" of this Environmental Impact Assessment. Additional data on the main production sectors in the municipalities where the project is located are presented below.

Region of Attica (Municipality of Lavreticus)

The Region of Attica is the strongest voice in shaping Greece's competitive environment, in terms of entrepreneurship, transport infrastructure, financial and commercial activities, productive structure, investment in innovation and technology. The economic crisis has seriously damaged both the economic development of the Region and social cohesion, exacerbated by the continuous rise in unemployment and the emergence of phenomena that jeopardise social cohesion.

The Region of Attica:

- consistently ranked 2nd in per capita GDP since 2000 with a decreasing trend since 2008
- Athens ranks last in European cities as business centres

On the other hand, Attica maintains a dynamism in entrepreneurship, but has considerable problems:

- > Attica accounts for 35 % of SMEs in the country, achieving respectively 67 % of national turnover
- > around 94 % of SMEs have up to 9 employees and generate turnover up to EUR 500 000
- > the degree of integration of innovation in SMEs is only 12.8 % of new entrepreneurship
- > various surveys show that around 80 % of businesses are in the form of family businesses.
- in Attica, there are also more than 280 000 natural persons working as technicians of all kinds, machine operators, etc. Licensing and monitoring of these professions is considered outdated

Both Athens' problems related to 'business' and the quality of life, and the generally problematic business environment of the country, classify Athens as an attractive place of business (from 32nd place in 2006 to 34th place in 2009 and lower today).

The economic downturn caused a sharp fall in employment. In particular, in the four years 2009-2012 total employment fell by around 17.5 %, while employment was over 19 %. Continued job losses pushed the

unemployment rate to historically high levels: from 7.6 % in 2008 to around 35.2 % in Q4 2012. The economic crisis has gradually evolved into a liquidity crisis and thus a solvency crisis for SMEs and households, and ultimately into a social crisis, with manifest phenomena of poverty and economic poverty.

In this context, the Region of Attica is experiencing the effects of the current economic downturn to a very large extent as it lives and works around one third (37.90 %) of the active population in Greece. The level of unemployment in Attica has increased since 2008 (7.30 %) by 4.2 times in 2012 (38.42 %). In the country as a whole, the corresponding indicators were 8.62 % in 2008 and 35.19 % in 2012, an increase of 3.3 times. The number of unemployed in Attica in Q4 2012 was 524 600 people.

Table Labour Force 8.2-5 Survey 2008-2012 (population in thousand)

1	Ετος		ογός υσμός	Απασχο	λούμενοι	οι Άνεργοι		Ποσοστό Ανεργίας (%)	
		ΕΛΛΑΔΑ	ATTIKH	ΕΛΛΑΔΑ	ATTIKH	ΕΛΛΑΔΑ	ATTIKH	ΕΛΛΑΔΑ	ATTIKH
	2008	4.946,3	1.849,8	4.553,6	1.723,9	392,7	125,9	8,62%	7,30%
٥٨	2009	4.991,2	1.868,5	4.476,8	1.678,0	514,4	190,5	11,49%	11,35%
Τρίμηνο	2010	5.011,1	1.877,4	4.299	1.613,1	712,1	264,3	16,56%	16,38%
Δ'T	2011	4.958,7	1.880,0	3.932,8	1.472,8	1.025,9	407,2	26,09%	27,65%
-	2012	4.977,5	1.890,1	3.681,9	1.365,5	1.295,5	524,6	35,19%	38,42%

Source: ELSTAT.

The 'behaviour' of unemployment at country and Attica level is almost identical. Looking at the development of unemployment since 2000 — comparing Attica's and the country's performance in terms of the labour force (active population, employed and unemployed) — it appears that the trend in the unemployment rate has been homogenous, although since 2008 unemployment rates in Attica have risen, which has become more pronounced over time.

The sectoral structure of employment by sector of activity in Attica has over time been highly concentrated in the tertiary sector. The decline in employment was 4 times higher in the secondary sector than in the tertiary sector of the Region (see tables below).

In 2012 in Attica, 1 186 788 people were employed in the tertiary sector (82.75 % of employees, compared with 77.37 % in 2008), 229 906 people were employed in the secondary sector (19.37 % of those employed, compared with 28.02 % in 2008) and primary 14 471 persons (1.22 % of those employed, compared with 0.96 % in 2008). The primary sector is the only one to record net employment growth. In the secondary sector, 94 % of the reduction comes from the construction and manufacturing sectors.

Table 8.2-6 Sectoral Structure of Employment in Attica, 2008-2012

Τομέας	2008	2009	2010	2011	2012
Πρωτογενής	16.495	16.867	17.018	19.994	17.471
Δευτερογενής	373.719	360,805	326,592	277.522	229.906
Τριτογενής	1.333.733	1.328.081	1.309.389	1.274.233	1.186,788
Σύνολα	1.723.947	1.705.753	1.652.998	1.571.750	1.434.165

Source: ELSTAT.

Table 8.2-7 Percentage of employees by sector, 2008-2012

	2008	2009	2010	2011	2012
Πρωτογενής	0,96%	0,99%	1,03%	1,27%	1,22%
Δευτερογενής	28,02%	27,17%	24,94%	21,78%	19,37%
Τριτογενής	77,37%	77,86%	79,21%	81,07%	82,75%

Source: ELSTAT.

In more detail, over the period 2010-2012:

- The primary sector of the Attica Region appears to be the most responsive to employment-reducing pressures due to the economic crisis, with very few jobs lost compared to the other two productive sectors of the economy. In particular, the reduction in employment was only 124 persons or 0.7 %.
- The secondary sector of the Attica Region recorded a cumulative drop in employment of 29.4 % (corresponding to ~96 200 people), with the corresponding reduction at country level amounting to 29 %. The biggest decline in employment, among the sectors that make up the secondary sector, was recorded in the manufacturing and construction sectors. More specifically, the manufacturing sector accounts for 57.3 % (55 088 people) and the construction sector for 37.6 % (36 154 people) of the overall decline in employment in the secondary sector of the Region.
- The tertiary sector of the Attica Region recorded a cumulative decrease of 9.4 % (corresponding to ~122 600 people), with the corresponding reduction at country level amounting to 10.7 %. Among the sectors of the sector, the service industries (overall) account for 56 % of the overall decline in employment in the Attica Region, while the most significant loss in isolation (in quantitative terms) is in the trade sector, where employment fell by ~38 500 people (12.1 %).

As regards the structure of employment and unemployment by educational level, the following features can be observed:

- The doctoral/master team has increased by 1.61 times between 2008 and 2012 (from 76 026 to 122 447 people), while unemployment for this category has increased from 4.8 % to 12.9 %, i.e. 2.7 times
- Between 2008 and 2012 unemployed people in the Region with a university degree have increased 3 times, while with a TEI degree they have increased 4 times
- Similarly, unemployed people with a secondary school-leaving certificate have increased by 5.5 times, while those with a primary school-leaving certificate have increased by 4.3 times.

In general, it is concluded that unemployment in the Region, groups of the lower-level workforce, are affected by unemployment.

A crucial factor in the intensity of social phenomena in Attica is the steady increase in the long-term unemployed. At country level, the phenomenon is extremely worrying, with a 65 % unemployment rate for more than twelve (12) months, 30 % of the unemployed having been unemployed for more than two years and 12.9 % being unemployed for more than four (4) years.

According to the OAED (see table below), the long-term unemployed in Attica increased by 53 414 people in 3 years, representing 33.7 % of the long-term unemployed in Greece and 21.1 % of the long-term unemployed in Attica in 2012. The annual increases in long-term unemployment in Attica are large (35.54 % in 2012/2011 and 42.37 % in 2011/2010).

Table 8.2-8 Long-term unemployed (>= 12 months), 2010-2012

	2010	2011	2012
Αττική	57.447	81.790	110.86 1
Ελλάδα	195.37 4	265.46 2	328.70 2
% της Αττικής στη Χώρα	29,4%	30,8%	33,7%
% των μακρ. ανέργων της Αττικής στους άνεργους της Περιφέρειας	21,7%	20,1%	21,1%

Source: OAED.

Finally, with regard to unemployment and on the basis of the latest data from the National Statistical Authority, unemployment in the Region of Attica is $22.9 \%^{1}$.

The industries most affected by the crisis are trade and services. In many cases, entrepreneurs are unable to employ human resources and are in a disadvantaged position to lay off their employed human resources.

Research shows that the majority of companies want to employ people who have specialised knowledge of the subject and nature of the business. The aim of each entrepreneur is to employ as few employees as possible with as many specialised knowledge as possible. As a result, over the last year, one in two enterprises in the wider Athens area has made 60 % of its staff redundant and maintained the jobs occupied by skilled people.

The highest rates of redundancies and by extension of unemployment can be found in the trade and services sectors. In more detail, in the wider Athens area, 85 % of unemployed persons with university studies are graduates of economics, Polytechnics, Informatics, sociologists and educators at all levels. 45 % of this figure is made up of engineers and IT graduates. Typical results are the results of the survey on the employment of graduates of the University, carried out by the Institute's Liaison Office, according to which one in five graduates of sociologists is unemployed, while 70 % of those in employment stated that their profession has no or little connection with their studies. A similar survey, carried out by the University of Economics of Athens, shows that one in three graduates is unemployed, while 80 % of graduates find work linked to the subject of their studies in more than 2 years.

It is important to mention that the region of Attica has the highest unemployment rate among young people (15-24), which is 50.8% (compared with 52.7% in the country as a whole), followed by women with 25.7% (compared with 26.5% in the country as a whole).

To capture the socio-economic characteristics of Attica at a micro level, data from the KEPYO relating to the number of tax returns, the total declared income and the average (tax return) declared income per municipal unit were used. Data from the old municipalities were used for the more detailed local analysis. In particular, for the Municipality of Lavreotikos, please find below the following information:

Table 8.2-9 Total declared income and average (tax return) declared income per municipal unit

¹ Athens Chamber of Commerce and Industry, "Study for the implementation of programmes for the provision of vocational counselling and vocational training with the aim of enhancing the knowledge and competence of workers and unemployed persons in the Athens region"

Public/municipal	DECLARATION	NUMBER OF	DECLARED	AVERAGE
unit	S	INDIVIDUALS	INCOME	INCOME
				DECLARED
KERATEA	7217	10704	120748277	16731
LAVRIZO	6059	8745	97350150	16067

Source: KEPYO

Region of South Aegean (islands of Serifos, Milos, Foleganros, Thira and Naxos)

In 2011, the number of economically active residents of the Region is tolerated to 14 016 persons (ELSTAT. 2011) an increase of 11.37 % over the last decade.

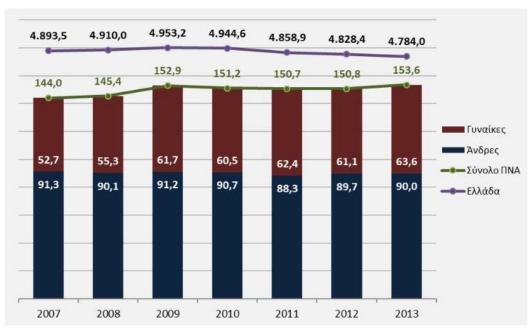
In 2001 the number of economically active residents of the Region was 125 772 persons compared to 94 590 in 1991. There is an increase of 33 %, following the significant population growth in the decade 1991-2001. In 1991 the number of economically active residents in the South Aegean region was 22.6 % higher than in 1981, more than twice the population. The previous observation reveals the establishment of productive ages in the Region in the decade 1981-91. The N. Dodecanese saw an increase in its economically active population by more than 30 %, while the N. Cyclades slightly more than 10 %.

The current real picture of the labour market in the context of the economic downturn since 2008 is not captured in terms of the extent and intensity of unemployment, underemployment and underemployment by official statistics.

However, it should be noted that key indicators show, compared to the country, significant differences in both the intensity and the extent of the phenomena.

As shown in the chart below, the economically active population of the South Aegean Region, following the decline in 2010 and 2011, reached 153.6 thousand people in 2013, which was higher than the highest previous figure (2009-152.9 thousand). By contrast, at country level, the working-age population has declined steadily since 2009, to a cumulative level of 3.4 %. As regards the gender structure of the economically active population, there has been a clear trend in 2007 to increase the proportion of women in the total economically active population of the South Aegean region, a trend which is also evident at country level.

Figure 8.2-1 Evolution of the Economic Active Population of the South Aegean Region and Greece, 2007–2013 (in thousands)



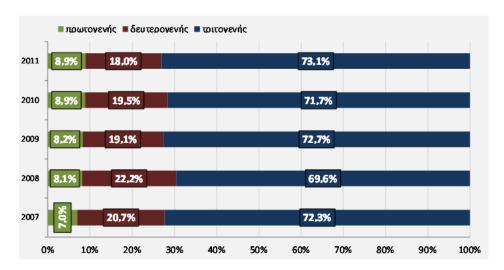
<u>Source</u>: Eurostat 2013 — Regional Statistics.

The conclusions regarding the employees are different. In this sector, the South Aegean region shows a trend similar to that of the country, although the phenomena are not as pronounced. More specifically, in the five-year period 2009–2013 the number of employees in the PPI fell by around 10 %, from 133.7 thousand to 120.5 thousand. In the country as a whole, over the corresponding period the decrease was more than 22 %.

Employment rates show a similar picture, although differences are less pronounced. In the South Aegean region, the reduction in the employment rate between 2009–2013 from the highest value (60.8 % in 2009) was 12.2 % (60.8 % compared to 53.4 %), while for the country since 2008 the highest value of the indicator (61.4 %) was 20.5 %. The difference in employment rates between the country and the PPI for 2013 amounts to 4.6 percentage points.

From 2007 to 2011, the last year for which data are available, the breakdown of employees by sector of economic activity has changed. The main change was the steady decline in the participation of the secondary sector in the employees since 2008, falling from 22.2 % of employees to 18.0 %. At the same time, the primary and tertiary sectors increased their rates over the same period, which in 2011 amounted to 8.9 % and 73.1 % of the region's employees.

Figure 8.2-2 Share by sector of persons employed in the PLC, 2013



Source: Eurostat 2014 — Regional Statistics

Negative employment indicators show a similar overall picture for the South Aegean Region and Greece as a whole, however, in this case, the intensity of the phenomena is different and occurs at different times. More specifically, the number of unemployed people in the South Aegean showed two large percentage increases, in 2009 compared to 2008 (54.8 %) and 2013 compared to 2012 (39.5 %). By contrast, in the country as a whole, the number of unemployed persons showed a steadily increasing trend between 2009 and 2012, with an average annual increase of 32.6 %, while the rate of increase decreased markedly in 2013 (11.3 %). Overall, out of the lowest figure for the number of unemployed (2008), the overall increase was 242.9 % for the country as a whole and 167.7 % for the South Aegean region.

More specifically, the unemployment rate in the South Aegean region moved higher than the country as a whole from 2007 to 2010 inclusive, with the trend to increase first in 2009, which showed a downward trend between 2011 and 2012. In 2013, the unemployment rate rose to 21.3 % from 15.4 % in 2012. By contrast, the unemployment rate at country level showed a steady upward trend from 2008 (lower value) to 2013, when it reached a very high level of 27.5 %.

However, the long-term unemployment rate is also an important indicator. This share at country level is consistently higher than in the South Aegean region. More specifically, in 2013 it reached 18.4 %, while in the PPI it was 8.0 %, an increase of 3.6 percentage points compared to 2012.

Unemployment is very high among young people. More specifically, in the 15–24 ages, for which data are available, the increase in the rate in the South Aegean region started from 2008 (14.9 %) and rose steadily until 2012, when it reached 41.0 %, before falling to 37.2 % in 2013. In the country, unemployment at the same age began in 2009 (25.7 %) to more than double by 2013 to 58.3 %.

It should be noted that in the South Aegean region, due to the strong tourism activity, which is escalating during the tourist months, there is a strong seasonality of the number of unemployed and employed persons.

This momentum is also reflected in the composition of unemployment between the long-term unemployed and the unemployed for less than 12 months. For example, in the third quarter (2014) long-term unemployment has fallen only slightly during the summer months, while overall unemployment is declining drastically. It therefore appears that there is a "hard core of long-term unemployment which is not affected

by periodic employment growth. Moreover, the size of this group appears to have increased dramatically since 2008.

As regards the unemployment situation in the two prefectures of the Region, the table below shows the structure of average annual unemployment per Prefecture for the years 2004, 2005, 2006, 2007 and 2008.

Table 8.2-10 Average annual unemployment rate by former Prefecture for 2004, 2005, 2006, 2007 & 2008

	2004	2005	2006	2007	2008
Dodecanese Prefecture	9,9	10,8	9,3	11,0	10,1
Prefecture of Cyclades	7,3	7,0	8,1	5,3	3,9

Source: 'Laws of Greece' option, 2009 — ELSTAT. —data processing

It can be seen from the above table that the Cyclades Prefecture performs relatively better in terms of unemployment rates than in the Dodecanese prefecture, particularly in 2007 and 2008. According to an official press release from ELSTAT for 2007 and 2008, the former Cyclades Prefecture had an average annual unemployment rate of 5.3 % and 3.9 % respectively, while the Dodecanese Prefecture was more than twice as high as 11 % and 10.1 % respectively. A common feature for the two Prefectures was the tendency to reduce unemployment for these years.

The following table shows the economically active population of the PPI at municipal level in the study area, according to the data from the latest national census (2011).

Table 8.2-11 Economically active population, employment and unemployment at municipal level in the South Aegean Region, 2011

	Economically active	Employees	Unemploye d persons	Total total	% Unemployed
AUDIOS SERIFOS	543	484	59	1.420	10,87
DIMOS MILOU	1.965	1.791	174	4.977	8,85
KOS FOLIGANDROU	346	314	32	765	9,25
DIMOS THIRAS	7.667	6.687	980	15.550	12,78
Kos Naxou & Micro- Cyclades	7.789	6.571	1.218	18.904	15,64

Source: ELSTAT

8.2.4 Per capita income

The table below shows the gross domestic product by region and prefecture, where the project is located.

Table 8.2-12 Gross Domestic Product per capita by region and prefecture where the project is located

Regions

and Prefectures	2004	2005	2006	2007	2008	2009	2010	2011*	2012*	2013*	2014*	2015*	2016*	2017*
GREECE	17.683	18.134	19.769	21.061	21 845	21.386	20.324	18.643	17.311	16.475	16.402	16.381	16.378	16.757
Attica	23.026	23.735	26.234	28.096	29.215	28.992	27.630	25.380	23.530	22.540	22.389	22.229	22.204	22.784
Eastern Attica	(1)	(1)	(1)	(1)	(1)	(1)	(1)	23.212	21.056	19.972	19.633	19.146	18.879	19.096
AEGEAN ISLANDS, CRETE	16.652	17.178	18.479	19.497	20.518	19.521	18.362	16.558	15.117	14.705	14.925	15.043	14.686	15.014
South Aegean	19.666	20.609	22.012	23.389	24.747	22.872	21.709	19.748	18.163	17.874	18.045	18.280	17.769	18.091
Andros, Thira, Kea, Milos, Myconos, Naxos, Paros, Syros, Tinos	23.129	25.211	25.860	28.185	29.388	27.428	26.153	23.442	20.481	21.756	21.470	21.713	21.660	21.898

Source: ELSTAT, 2020.

Region of Attica (Municipality of Lavreticus)

According to the *strategic environmental impact study of the Regional Operational Programme of Attica for the 2014-2020 programming*period, over the period 2005-2010 the GDP (Gross Domestic Product) of the Region of Attica increased by 16.68 %, with an average annual rate of change in GDP of 3.48 %, while over the same period Greece's GDP grew by 13.1 % with an average annual GDP change of 2.67 %.

In particular, as can be seen from the following table from 2005 to 2009, the GDP of the Region of Attica is increasing, albeit with a decreasing trend, while in the period 2009-2010 it is decreasing. At country level, the phenomenon is more pronounced and there has been a decline in GDP since 2008-2009.

Table 8.2-13 Gross domestic product by region 2005-2010

ΠΕΡΙΦΕΡΕΙΕΣ	2005	2006	2007	2008	2009	2010	Μεταβολή ΑΕΠ 2005 - 2010	
Σύνολο Ελλάδος	193.050 €	208.622 €	223.160 €	233.198 €	231.081 €	222.151 €	13,10%	
Ανατ. Μακεδονία - Θράκη	7.782 €	8.172 €	8.926 €	9.303 €	9.210 €	9.054 €	14,04%	
Κεντρική Μακεδονία	26.714 €	28.929 €	31.257 €	32.409 €	31.736 €	30.086 €	11,21%	
Δυτική Μακεδονία	4.613€	4.940 €	5.290 €	5.590 €	5.461 €	5.281 €	12,64%	
Θεσσαλία	10.111€	10.931 €	11.358€	11.756 €	11.495 €	10.742€	5,87%	
Ήπειρος	4.358 €	4.620 €	4.961 €	5.080 €	5.036 €	4.917 €	11,38%	
Ιόνια Νησιά	3.828 €	4.070 €	4.372 €	4.476 €	4.296 €	4.029 €	4,99%	
Δυτική Ελλάς	9.735 €	10.391 €	10.838 €	11.060 €	10.634 €	10.326 €	5,73%	
Στερεά Ελλάς	9.512€	9.829 €	10.262€	10.615€	10.186 €	10.059€	5,44%	
Πελοπόννησος	8.528 €	9.326 €	9.837 €	9.923 €	9.826 €	9.436 €	9,63%	
АТТІКН	88.846 €	97.001 €	104.426 €	110.192 €	110.518 €	106.636 €	16,68%	
Βόρειο Αιγαίο	2.810 €	3.044 €	3.279 €	3.448 €	3.394 €	3.155 €	10,95%	
Νότιο Αιγαίο	6.465 €	6.897 €	7.391 €	7.872 €	7.903 €	7.475€	13,52%	
Κρήτη	9.749 €	10.471 €	10.964 €	11.473€	11.386 €	10.955 €	11,01%	

It should be noted that the GDP of the Region of Attica has a significant share in the total GDP of the country and in 2010 it accounted for 48 % of total GDP (Country) with a continuous trend of growth.

The rate of change in GDP in the Attica Region from 2006 to 2010 (no official data on GDP developments after 2010) shows a downward trend, close to zero in 2009 (marginal growth 0.29 %) and turns negative in 2010 (-3.64 %). The sharpest decline is between 2008 and 2009. At country level, the rate of change in GDP is also on a declining trend, with a negative value since 2009 (-0.92 %) and a decline of 4 % in 2010 (-4.02 %).

It should be noted, however, that while the GDP of the Region of Attica grew at a higher rate than that of Greece in 2005-2009, the decline observed between 2009 and 2010 is moving at a rate slightly lower than that of the country. This seems to highlight a relative 'resistance' of Attica to the effects of the economic crisis.

As regards the gross domestic product per capita (see graph below) for Attica, in 2009 it stood at EUR 24 884-2the largest in comparison with the rest of the country's regions — but only one year down by - 1.87 %.

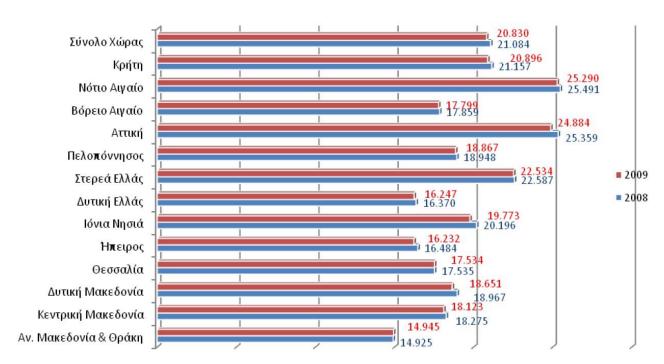


Figure 8.2-3 GDP per capita by region (years 2008-2009)

In Attica, over the same period (2008-2009), there is also the 2nd highest negative value (-1.90 %) of the rate of change in GDP per capita in Greece (Figure 7.1.10.1d), the largest decline in the region of the Ionian Islands and then in the Region of Western Macedonia. The decline in GDP per capita is significant, both in relation to the fact that at country level the rate of change was considerably lower, and to the size of the population affected.

To sum up and taking into account the evolution of GDP and per capita GDP of the Region, it is clear that although in the period prior to the economic crisis, the Region of Attica grows at a higher rate (increasing its economy) than the country as a whole, during the period of the economic crisis in Greece (2010-2012), the evolution of the key labour market indicators in Attica compared to those at national level shows that

the economic crisis² is more pronounced in the Region of Attica than the average in Greece, with the corresponding negative effects on the region's productive and socio-economic fabric.

Region of South Aegean (islands of Serifos, Milos, Foleganros, Thira and Naxos)

It ranks among the wealthiest regions of the country but also in Europe as a whole (2nd best performance among the regions of the country), corresponding to 123 % of the country's average gross domestic product (GNP) and 107 % of the average European etc. GNP of 27 (Eurostat 2010, EU27=100).

In particular, the evolution of the regional GNP over the last decade shows that the Region had achieved positive growth rates of GNP up to 2007. On the other hand, according to the latest data, compared with 2008, when the first impact of the global economic crisis in Greece emerged, there was a decrease of around 8 % of the region's gross domestic product (GNP).

In 2008 the PPI produced 3.3 % of the country's total Gross Value Added (GVA) and 0.06 % of the EU27. In 2009, the gross value added to the region's total production sectors amounted to EUR 6819,5 million, a decrease of 1.46 % compared to 2008.

Overall, the region's GDP declined faster than that of the country over the period 2008–2011, while as a percentage of the country's total GDP it recovered slightly in 2012. In 2012, the GNP accounted for 3.21 % of the country's total GDP, compared with 3.33 % in 2008.

Based on MGNP in 2011 Purchasing Power Units (PPS), the PAN was in second place among the 13 regions of the country (after the Region of Attica) and the GDP in PPS stood at EUR 22 300, well above the country's (EUR 20 000).

However, the upward trend in PPI GDP stopped in 2009, starting a continuous downward trend up to 2012 (latest available data). Over the period 2008–2012, the regional GDP decreased by 22.6 % to 6 240 million. EUR 2 000 000 (at roughly the same levels as in 2004), with the largest annual decline in GDP in 2011 (9.29 % compared to 2010). Finally, the GDP of the N. Cyclades (25.9 % compared to 19.9 % of the Prefecture of the Dodecanese) fell significantly more domestically in the period 2008–2012.

As regards the distribution of GDP between the prefectures, in particular for the last five years, it was noted that the Cyclades, throughout the five-year period 2007–2011, had consistently higher GNP, with a difference of EUR 6 600 on average (in PPS). It was observed that while the trend was increasing until 2010 (EUR 7 700), this difference fell to EUR 5 700 in 2011, which means that GNP of the Cyclades was 31 % higher than in the Dodecanese. In any event, in 2011, the GNP for both prefectures was respectively lower than its higher value.

-

² Although there are no official GDP data available at regional level, for the years 2011 and 2012.

32.000 30.000 Κυκλάδες 28.000 26.600 26,000 24.100 Νότιο Αιγαίο 24.000 22.500 22,000 20,600 20.000 Δωδεκάνησα 20.000 18,000 18.400 16,000

Figure 8.2-4 Gross Domestic Product per capita in PPS per Prefecture of the PPI, (EUR)

Source: Eurostat — Regional gross domestic product (million EUR), by NUTS 3 regions

As regards the development and level of development of the two territorial units, both Prefectures take precedence over the country. They are classified in the country's developed Prefectures, with a GNP that is well above the corresponding national one. Of course, this predominance is due to certain tourist centres of development and is not balanced spatially and sectorally.

2009

2010

2011

However, there is a relative dynamism of the Prefecture of Cyclades, as the Prefecture's share in the total GDP of the country increases and at the same time increases its difference from the average national level in relation to the GNP index. In contrast, the Dodecanese prefecture, although still well above the country's average level of development, has declined relative to 2000 and its share of national GDP is also decreasing. Of course, this decline is also reflected in the position of the region in relation to national figures, due to the greater weight of the Prefecture of the Dodecanese than the Cyclades in the composition of the GDP of the Prefecture.

8.3 Technical infrastructure

2007

8.3.1 Land, sea and air transport infrastructure

8.3.1.1 Region of Attica (Municipality of Lavreticus)

Road network

In the Region of Attica in recent years, major projects have been carried out in the road transport sector, with most notable:

- The upgrading of parts of PATHE and the complete unbalancing of Kifissou Avenue as the coastal front, which completed the so-called outer ring of Athens, while creating an insurmountable barrier between the western suburbs and the city centre.
- The completion of Attica Odos and Western Regional Hymettos as the University Pole, with which an incomplete regional ring was developed between the northern (PATH/Volonea) and the west (EO Athens-Korinthos/Megara) gateway of Attica to El. Venizelos' (international air portal) and the eastern and southern suburbs (via L. Katehakis). Part of this 'external' ring is also the Western Regional Aigaleo, a motorway connecting the Attiki Odos and the Athens-Korinthos E.O. along the western border of the basin.
- The upgrading of peri-urban road connections, in particular the roads serving Olympic facilities, such as L. Marathon and L. Varis-Kropi.

 The upgrading of urban motorways (Kifisia, Mesogeia, etc.), with projects and interventions to improve traffic flows, which include bans on left-hand speeds and improvements in signalling, as well as unbalancing certain critical junctions.

These projects significantly upgraded the level and quality of the basic road network in Attica (urban and interurban). However, this significant upgrading has failed to improve overall traffic conditions or to contain congestion in the Region. It is estimated that in 2008 55 % of the main roads operated under saturation conditions, whereas the then estimates predicted that by 2012 this figure would have risen to 95 %. Accordingly, the average intra-ring speed had fallen to 11 km/h in 2006 compared to 18 km/h in 1996, while outside the ring it reached 20 km/h from 22 km/h in the same period. It is significant that in the case of Attica Odos too, despite the significant reduction in traffic congestion and the environmental benefits observed in the first years of operation, saturation trends have been observed in the last five years. There are also more intense saturation phenomena in L. Kifissou, as well as on the coastal highway (Poseidonos), which has hitherto been regarded as part of the 'external' ring.

The continuous increase in the price of petrol and the sharp downward trend in the car market in an environment of severe economic crisis over the past two years, however, appear to have had a positive impact on this sector, leading to a reduction in traffic loads of 15-30 % at the end of 2010.

Interurban passenger transport (KTEL)

In Athens, there are two intercity bus terminals (KTEL) which serve travel to and from the Region. The Kifisos station (contribution with L. Athens) covers the majority of prefectures, including KTEL Aitoloakarnania, Arcadia, Arta, Achaia, Grevena, Drama, Evros, Zakynthos, Ilia, Imathia, Thesprotia, Thessaloniki, Ioannina. Kavala, Kastoria, Corfu, Kefalinia, Kilkis, Corinth, Lakonia, Lefkada, Messinia, Xanthi, Pella, Preveza, Rodopi, Serres, Florina and Chalkidiki. The station at Liosia Street (in the area of three Bridges) serves Central Greece, i.e. KTEL Evia, Evritania, Thiva, Karditsa, Larissa, Livadeia, Magnisia, Pieria, Fthiotida and Fokida. The two stations are in direct contact with the national road network (EO Athens — Lamia and E.O. Athens — Corinth).

Intra-regional passenger transport is served by the Prefecture of Attica, which also operates the Athens-Thessaloniki route. In the Region of Attica, air services are operated by radial from the field of Aros (Pl. Egypt) and the Thai Square, where the starting points are located, to:

- o Airport Rafina,
- Rafina N. Makris Marathon,
- Oropos Agios despatches,
- o Lavrio-Sunio,
- Megara and
- o Vilnius Red.

KTEL Attica has 136 buses and carries approximately 8 000 000 passengers per year.

Airports

In 2001, the new international airport "El. Venizelos", which establishes Athens as the main international air hub of Greece, both in terms of international connections and national connections to the numerous regional airports of mainland Greece and islands. With the completion in 2004 of Attiki Odos and the upgrading of the

Varis-Koropi road and the rail link (suburban railway and metro), its accessibility and attractiveness have substantially improved.

In addition, in the Region there are the war airports of Elefsina and Tatoius, which can be used in the context of emergencies (e.g. fire fighting), but are not sufficient with their current infrastructure to meet regular civil aviation needs.

Port infrastructure

The port infrastructure of Attica comprises four ports of national and international reach, Piraeus (with its extensive port area including the main passenger port and the freight port of Keratsini — Iconio), Lavrio, Rafina and Elefsina.

The international port of Piraeus is the largest passenger port in the Mediterranean, while serving important freight traffic. It consists of three sectors, with clearly separated and autonomous functions:

- The (Central) Passenger Port with five domestic stations and one foreign port;
- The Commercial Port (Drapetsona Keratsini N. Ikonio), which serves the movement of containers and is an important transhipment hub for transshipment goods) and
- The repair zone (Perama, Salamina)

The port of Lavrio focuses on passenger and tourism activities to and from the Aegean islands and to a lesser extent commercial activities. The port of Lavrio is currently under development, with important port projects having recently been completed, and equally important projects are ongoing and will be completed within the next five years. The contribution of the Port of Lavrio to the restructuring of maritime transport in Greece is expected to be significant if the necessary land routes are implemented, including the upgrading of the Marcopoulos-Lavrio road, but above all the rail link (extension of a suburban railway), which will significantly improve its access.

Large passenger traffic to the islands of the Cyclades serves the port of Rafina, which also serves small domestic freight traffic. The main problem of the Port of Rafina is that the transport work it undertakes is not consistent with both its capacity (it is a fully artificial port, which has led to ever-greater port works) and its location within the city's urban fabric, with the result that access conditions have disrupted the city's and maritime front's profile. With a view to establishing his rail connection (extension of the suburban), consideration could be given to taking on a specialised role, hosting fly dolphins and connecting to N. Evia.

The port of Elefsina is an important commercial port and is alternatively considered to be complementary to Piraeus in cargo handling for the Attica region. A major problem is his position at the heart of the city, and it has already been proposed, through the local GPS, that it be extended to the west of the city of local ports operating on the islands of the Region and in Trizinia and serving all their needs. Ferry connections to South Evia operate in Oropos and Agia Marina.

Marinas and other local ports operate in Alimos, Anavlos, Vouliagmeni, Glyfada, Zea, Lavrio, Porto Rafi and Faliro (Fleisvos). Private tourist ports also operate.

As regards the development of the regional port infrastructure and the envisaged role of each port, the General Framework for Spatial Planning and Sustainable Development promotes the uniform planning and management of the entire port system ('Attiki port system'), gradually transferring coastal shipping services from the central port of Piraeus to the ports of Rafina and Lavrio. The direction for the central port of Piraeus

is to continue to maintain coastal shipping services, mainly for the Argosariko region, to specialise in the cruise industry, while a significant part of it is upgraded to the urban area of coastal local authorities in the wider city of Piraeus. The relevant proposals of the GEPSPAA remain relevant and could be pursued in the context of the national port policy (specification of the work of passenger ports in the Region), in conjunction with the implementation of the necessary works to upgrade the land-based (mainly rail) connections — and taking into account the constraints of the technical characteristics of each.

As regards freight transport, the Iconio-Perama section, together with the facilities of the port of Elefsina and the wider coastal area, together with the ship repair facilities in Perama and the Thriasio Pedio Freight Centre, are intended to form a common set of freight, combined transport and logistics services. The ports of Corinth and Chalkida (if strengthened) could also be included in the wider port system of the Region to complement the maritime freight infrastructure of the wider industrial and wholesale region of Attica.

8.3.1.2 Region of South Aegean (islands of Serifos, Milos, Foleganros, Thira and Naxos)

The geographical specificity of the South Aegean region is not found in any other EU Member State. This peculiarity creates requirements for the development of a highly complex maritime and air transport system.

The principle of transport policy in the region is to consider transport through a human-centric model that gives priority to serving islands and their activities. The sub-objectives in the transport sector are:

- Interconnecting the individual island clusters with all mainland ports and Crete in order to ensure accessibility to intra-island, inter-island and interregional scales.
- The promotion of the main ports and airports in the island area in the context of the creation of a Trans-European Transport Network Corridor.
- The development of ports as international and internal transit hubs.

The specific geopolitical and physical characteristics of the area of the South Aegean Region (such as insularity, location, scale, size, etc.) determine the relative weight of the three transport networks (maritime, air and land), the spatial organisation of the respective infrastructure, as well as the way in which and the degree of complementarity of the transport system as a whole, and make transport and communications a crucial element. The insularity of the South Aegean Region, its geographical location in relation to the country and the needs of intra-regional and interregional connections make the role of transport infrastructure, in particular air and maritime transport, fundamental.

In more detail:

Road network

Given the insular nature of the region, the road network is very limited. The absence of major roads of national, interregional or supra-local importance in the region does not remove the importance of road infrastructure at local level.

However, the uncontrolled continuous production of roads on the islands has serious environmental impacts on land use, coastal areas and the natural environment, which in the long term reduces or even eliminates their short-term and often superficial feasibility.

In general, the development role of road transport is necessarily limited to the local (island) level and its importance is always commensurate with the size of the land area concerned and the scale of the needs they meet.

Airports

The fragmentation of the site requires the operation of a dense network of airports and heliports, which have been substantially improved through European funding.

According to data from the Civil Aviation Authority in the South Aegean Region, there are 14 airports. More specifically, those islands with an airport are: Astypalaia, Kalymnos, Karpathos, Kasso, Kastelorizo, Kos, Leros, Milos, Myconos, Naxos, Paros, Rhodes, Santorini and Syros.

In particular, there are two international airports in the NPN, Rhodes and Kos, as well as two airports with legal entry and exit points, Mykonos and Thira. The latter accept both domestic and foreign flights and can be points of entry and exit from the country as they provide customs services. There are also four non-legislated entry and exit points for Paros, Milos, Naxos and Karpathos. These airports are domestic airports which can accept charter flights on an informed basis. The remaining six airports in the Region are classified as purely domestic and serve only domestic flights. Of all the airports in the Region of only two, Thira and Karpathos, they also have military use in addition to civil use.

These airports shall ensure both intra-regional and interregional connections and the international connection of the region.

As regards the main air services to the South Aegean, it is structured as follows:

- 1. National air transport based on:
 - mainly Eleftherios Venizelos from Olympic and Aegean Airlines (Olympic Air and Aegean Airlines)
 - Macedonia (Thessaloniki) from Aegean Airlines
 - N. Kazantzakis (Iraklion) from the local Cretan Airlines, Sky Express
- 2. International air transport, based on several foreign airports using charter flights. Many of the charter airlines in the summer have so dense, regular and periodic services with the islands more than scheduled air services.

As regards the traffic of PAN airports, it appears that Rhodes airport is the one with the highest passenger traffic both domestically and abroad, with a total passenger traffic of 3 470 111 in 2009. It is followed by Kos airport with 1 517 946 passengers, a difference which in recent years has reached almost 2 million passengers. There are 699 108 passengers at Thira airport in third place and Mykonos airport in fourth place with 428 450 passengers.

By contrast, Naxos airport has the smallest traffic, with only 26 704 passengers in 2009, of which only 3 929 were flying abroad. It should be noted that this is partly due to the fact that Naxos airport cannot serve aircraft with a large number of passengers and that any foreign traffic occurs in the summer months with the arrival of few charter flights. It should also be noted that Rhodes and Kos airports have a much higher foreign passenger traffic than the domestic passenger traffic recorded between 1994 and 2009. This ranking reveals the primacy of Rhodes and Kos as tourist destinations from abroad over the other islands of the Region.

As regards domestic air connections, all airports in the Region are directly linked to Athens either by regular flights or by flights on a non-profit basis. The exception is Meistani and Kasos airports, which do not have a direct connection to Athens and are connected via Rhodes. Several airports in the summer months get a direct connection to Thessaloniki and Heraklion. Any other direct island connections with each other are subject to the scheme of poor routes and are financed by the State.

Despite efforts to meet the needs of the Region, via the poor routes, there is a lack of connections between the islands and the Cyclades prefecture between the Dodecanese and the Prefecture of the Cyclades. This poses major problems for intra-regional transport.

It should be noted that, between 2007 and 2008, it was attempted to develop a seaplane network based on the port of Lavri and destination in the Cyclades. The routes were operated by AirSea Lines, which operated mainly in the Ionian Sea and on the connection of islands to Italy, which, due to the unexpected attraction of passengers on these routes, definitively interrupted the routes. Since then, an interest in developing a corresponding network has been expressed by Argo Airways, which operates in the port of Volos and has requested authorisation from the HCAA to start services to the Southern Aegean. To date, these routes have not started.

In the South Aegean, 28 heliports fully equipped on the following islands operate under a licence from the Ministry of Transport: Agathonisi, Lapsis, Patmos, Arkas, Nichros, Tileos, Symi, Chalk, Karpathos (Olympos), Rhodes, Andros, Tinos, Kae, Kythnos, Serifs, Milos, Sifnos, Kimolios, Mykonos, Koufonisia, Amorgos, Donsa, Heraklia, Schinousa, Antiparos, Skinos, Anafis, Ios, Foleganros and Theasia. The main purpose of their construction and operation, on the basis of Presidential Decree No 19, published in Government Gazette 35/03.03.2009, is to cover the special needs of deprived areas (e.g. for the transport of patients), while the main purpose is to retain population and develop wealth-producing sources and tourism in the region in question.

The heliports of the Region have been built on islands which do not have an airport, except for Rhodes and Karpathos, which have both an airport and a heliport. It should be noted that the PPI also operates three private heliports, one of which is in Milos, for the needs of the company S & B Industrial Minerals SA and two in Mykonos, for the needs of the hotel units which built them.

The main problems that have arisen are the lack of know-how for the maintenance of machinery by municipal managers, as there is often a phenomenon of delegating their operation to local staff who are not adequately trained, as well as the lack of coordination between the Civil Aviation Authority and the municipalities.

Port infrastructure

The main transport infrastructure of the South Aegean Region is of course its ports, which exceed 43 and carry a large number of passengers and freight each year. However, a large number of these ports do not have sufficient infrastructure and their location in urban centres limits their scope for expansion.

According to the classification in the 2013–2018 National Ports Strategy (SNA, 2012), the Region includes ports of international interest (Mykonos, Rhodes), ports of national importance (Thira, Kos, Paros, Syros) Ports of major interest — inter-district level — Naxos, Patmos, Tinos and a multitude of ports of local importance. Compared to previous classifications in force during the current MCSDP, the following variations are recorded for ports:

- Rhodes and Mykonos, upgraded from national and local importance respectively, to international interest.
- Kos, which is being upgraded from regional to national.
- Hunting and Paros, which are upgraded from local to national.
- Syros, which is being upgraded to national importance.
- Naxos, Tinos and Patmos, upgraded to major interest

In addition to the above categories, which are considered to be the main ports, a number of smaller ports operate on the islands: Agathonisi, Cork, Carpathos (Diaphani), Lesses, Maximis, Tilos. In addition, the ports of Rhodes, Mykonos, Naxos, Paros and Syros are part of the comprehensive network (comprehensive network) of the Trans-European Transport Networks.

As regards the movement to and from the ports of the PVD from Piraeus, vessels depart for 34 islands in the South Aegean. Most of the arrivals are concentrated on the Cyclades islands, with eight of them having more than thirty arrivals per week. In particular, the first place is Syrian with 39 arrivals a week, followed by Paros with 38, Naxos with 35, Myconos and Milos with 33, Sifnos with 31 and Serifs with 30 weekly arrivals. As regards the Dodecanese, Rhodes with 14 arrivals per week is in the first place, followed by Kos with 11, Patmos, Leros and Astypalaia with 5, Kasos and Karpathos with 3 weekly arrivals.

It should be noted that Agathonisi, the mines, Thirasia and Antiparos do not have a direct connection to Piraeus, nor to any other port in Attica. The port of Piraeus is also the only port serving coastal shipping services to the Dodecanese, as the ports of Rafina and Lavrio serve only islands in the Cyclades. Finally, account must be taken of the fact that ships sailing to the Dodecanese are of greater tonnage, both for passengers and for vehicles, compared to those sailing exclusively to the Cyclades.

Similarly, vessels departing from Rafina to seven islands in the South Aegean, namely the Cyclades only, while vessels departing from the port of Lavrio to twelve islands in the South Aegean, including only the Cyclades.

8.3.2 Environmental infrastructure systems

8.3.2.1 Waste water treatment plants

D.Lavretica D.C.

In the area of the project in Lavreotiki, it operates a waste water treatment facility in close proximity to the location of the project (approximately 100 m in the north of the GM), designed for a peak population of 8 558 and has a decision approving a PO.

Format of 8.3-1 LIP positions operating in the area of the project at the Lavretica Regional Unit

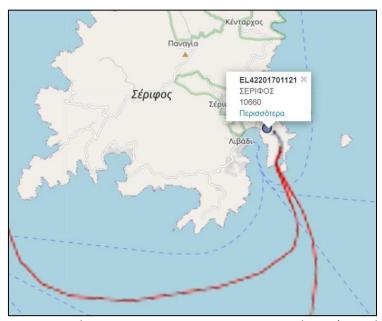


Source: Operating Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, http://astikalimata.ypeka.gr/Services/Pages/Browse.aspx)

Municipality of Serifou

In the area of the project in the municipality of Serifou, on the south-west boundary of the land of the new water/Serifesland, a waste water treatment facility (WTP) is operated, designed for a peak population of 8 558 and has a decision approving a PDO.

Format of 8.3-2 WWTP positions operating in the area of the project in the municipality of Serifos



Source: Operating Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, http://astikalimata.ypeka.gr/Services/Pages/Browse.aspx)

Municipality of Milos

According to the Operational Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, 2020), there is currently no waste water treatment plant operating in the municipality of Milos.

Municipality of Folegandrou

According to the Operational Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, 2020), there is currently no waste water treatment plant operating in the municipality of Folegandrou.

Municipality of Thira

There are five (5) waste water treatment facilities in the project area in the municipality of Thira:

- The waste water treatment plant of Katerida, designed for a peak population of 3 150, is located to the west of the new Hunting water body.
- 3.2 km south of the project is located in the waste water treatment plant for the agglomeration of Messaria, which is designed for a peak population of 15 000 and has a decision approving a PO.
- the waste water treatment plant for the settlement of Thira (Fira) is designed for a peak population of 7 500 and has a decision approving a PDO.
- the waste water treatment plant for the settlement, on the north of the island of Thira, is designed for a peak population of 7 415 and has a decision approving a PDO.
- the waste water treatment plant for the agglomeration of Ekkopios, to the south of the island of Thira, is designed for a peak population of 5 289 and has a decision approving a PO.

Format of 8.3-3 WWTP posts operating in the area of the project in the municipality of Thira



Source: Operating Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, http://astikalimata.ypeka.gr/Services/Pages/Browse.aspx)

Municipality of Naxos

In the area of the project in the municipality of Naxos, 4.9 km to the east of the project, operates a waste water treatment facility designed for a peak population of 20 000 and has a decision approving a P.O.

Format of 8.3-4 WWTP positions operating in the area of the project in the municipality of Naxos



Source: Operating Monitoring Database — Wastewater Treatment Facilities (Special Secretariat for Water, http://astikalimata.ypeka.gr/Services/Pages/Browse.aspx)

8.3.2.2 <u>Sanitary landfills for waste</u>

According to the list of operational landfills for urban waste of the Ministry of the Environment and Energy, the following applies to the regions where the project is located:

- In the Region of Attica, the 2nd landfill site of the Western Attica region operates in the area of Skachtiri, Municipal Directorate of Fyli, which serves all local authorities in the mainland of Attica and Aegina.
- In the South Aegean Region, the following landfills operate in the wider area of the project under study:
 - The Serifo landfill site, in Troules, near the cape sword, which serves all settlements on the island of Serfou.
 - The FOLEGANDROU landfill in Kaylarina, the Community of Folegandrou, which serves all settlements on the island of Folegandrou.
 - The Naxou landfill site, in the place of Xydis, of the municipal unit of Naxos, which serves all settlements on the island of Naxos.

The **municipality of Serifou** has been operating a landfill site since 2012 at the "fat" site with a built capacity of 33.030 m³ and it is estimated that to date 5.910 m³ has been paid.

The sorting initiatives at source carried out in the municipality are as follows:

- A contract has been signed with the EYPD but has not yet been implemented.
- Collection of lamps through the TAD Play cycle (300 kg-2014).
- Collection of batteries in special bins via the TINES (48.7 kg-2014).

In addition, the municipality has a landfill in the post of 'fatty', which is not restored and is expected to be restored immediately. With regard to the planned infrastructure, the following are foreseen:

- Setting up a recyclable material transfer station for three streams (glass, metals, paper-plastic) within the Sierfou landfill.
- Composting of pre-sorted organic material and green from pruning in a small mechanical composter with a capacity of 40tn/year within the Srifes HYT. There is also a provision for cutting greens.
- System of domestic composting of total capacity and source sorting (PPS) of organic material (coffee system).

There is no infrastructure for the treatment and final disposal of MSW in the **municipality of Milos**. All the MSW are to be made available to the landfill at the 'Fyrligos' site in the wider 'Bradoni' area, with a surface area of approximately 22 hectares. Although the Rehabilitation Permit (ref. 44340/25.06.2014) has been issued, the site remains active as the Milos HYT has not yet been constructed.

However, as a transitional solution and until the construction of the Mile HYT, it is envisaged that the MSW be ballasted in a special area close to the landfill site (the 'Fyrligos' site). The baler in question is estimated to receive 2 800 tonnes of MSW per year (quantity for the year of entry into operation — gradually decreasing with the implementation of the recyclable and organic GIS programmes), while around 5 600 parcels per year will be produced, which will be stored in a temporary storage area on the same land. In the same area, it is planned (about 8.3da) to install the WMAW and the composting unit.

Finally, provision is made for the construction of a landfill site (XYTA and access road) at the 'Agios Theodori-Brantoni' site within a plot of 64.8 hectares. The capacity of the HWT will be 100.380 m³ (for 20 years of operation, including periodic coating material, but not final coverage). According to DAEC 11086/10.11.2011, the average annual capacity of 20 years is estimated at 3 346 tn/year.

A landfill site at the 'Kalylarina Petsousi' site is **operating** in Fologandr. The landfill started operating in 2009 and has a total capacity of approximately 12 660 tonnes. To date, 25 % of the landfill site has been filled and capacity remains for about 7 years. The landfill is operated by a private individual.

In addition, there is also a temporary storage area for recyclable materials. The site is located on the site of the landfill site and its operation started in 2015. On a monthly basis, approximately 3.5 recyclable materials are brought to the temporary storage site. The recyclables are then taken to the KAY of Thira.

Since 2013, the municipality has developed a separate collection system for recyclable materials, which collects around 42 a year. In the municipality, the collective alternative management system for separate collection of lamps is active (SED FOTECH). Finally, studies are being carried out to restore the illegal landfill to the 'Chilimodou' post, which has not been operational since 2009.

There is no infrastructure for the treatment and final disposal of MSW in the **municipality of Thira**. The largest amount of MSW is driven to the active landfill in the Aalaki area, which has been in operation since 2003. The area of the XADA is approximately 76.5da. A rehabilitation permit has already been issued for the landfill, but due to the lack of a licensed solid waste management or disposal facility on the island, it is not possible to close it. The construction of an Integrated Waste Management Facility (IWMF) is planned, which includes the sorting of mixed MSW (sieve, manual sorting), composting and landfill, which is currently being studied. Until the construction of the landfill, and in accordance with the final action plan for dealing with the permanent cessation of remaining active landfills in the North and South Aegean regions, the SWRs will be temporarily ballasted and stored, together with sorting and recycling actions.

The municipality provides for a baler and temporary storage site for MSW at Megalohori Regional Unit, Mavromati mines (now Metaxas). The capacity of the baler is in the order of 42 t/day and the area is 6.7da. For these infrastructures, the technical studies of the infrastructure projects have been carried out, the tender documents and technical specifications for the equipment have been submitted and a dossier has been submitted for an installation permit & inclusion in the LPD.

There has been a private CMAY in Hunting since 2008, where around 3 000 t/year are collected (according to data from the NCA). The municipality has a contract with the HCAA for sorting at the source of packaging materials (2 currents) and has 260 bins (1.1 m³) and 1 vehicle to collect these materials.

A promotion system for domestic composting has also been in place since 2012 involving 200 houses. In addition, a separate collection of bio-waste (door/door with coffee bags) is implemented in Kamari and Pireas, which concerns professionals, as well as the collection of pruning throughout the municipality.

Two collective alternative management systems are active in the municipality for the separate collection of WEEE (SED FOTECHYCLECTION & TED RECECTION of Packaging). Specifically in 2014, according to the available data, 0.33 tonnes of lamps and 62.5 tonnes of other WEEE were collected by the municipality. In addition, at selected locations in the municipality, separate collection of batteries is implemented through the TIN. In 2014, 0.42 tonnes of batteries were collected by the municipality.

For the disposal of waste, the Municipality of Naxos has 1 active landfill at the location 'Ethios Stavros' Naxos. As regards packaging recycling, according to the study entitled 'Development of a system for the integrated management of solid waste in the municipality of Naxos', there are 23 recycling points on the island of Naxos. The recyclables are collected from special sewers with grabs, and the materials are transported to the landfill site for temporary storage. The recyclables are then transferred to the Recyclable Materials Selection Centre (KDAY) of the Hellenic Recycling Company in Attica.

Two collective alternative management systems are also active in the municipality for the separate collection of WEEE (SED Fotokilisation & SED Reclamation of Packaging). Also at selected locations in the municipality, separate collection of batteries is implemented through the TIN.

In terms of infrastructure, the Naxos landfill site for the burial of non-hazardous solid waste is under construction on a plot of approximately 170 hectares in the 'Korphi Xydis' site of the Municipality of Naxos. The surface area of the active landfill site is estimated at about 44 hectares and has a lifetime of 20 years. Road, green and fencing projects are also under construction on the site, and provision is made for the supply of a self-propelled scraping and condensing machinery, the capacity of the first landfill cell being estimated at a minimum of 46 350 m³ and the total capacity of 463.500 m³.

8.3.3 Water, electricity, gas and telecommunications networks

8.3.3.1 Region of Attica (Municipality of Lavreticus)

Water supply network

The water problem of the capital was effectively covered in the 1990s with the diversion of the river Evinos to the Mornos reservoir by EYDAP. Raw water is transferred through the Mornos and Yliki aqueducts to the four Water Treatment Units in Galatsi, Polydendrio, Jones and Mandra.

In particular, the four water refining plants have a total capacity of 1.5 hm3/day and operate:

refineries in Galachi, designed for 0.45 hm³/day, with a maximum capacity of 0.54 hm^{3/day}.

- the Mididi refineries designed for 0.61 hm 3/day^{with}a maximum capacity of 0.80^{hm}3/day.
- refineries in Kirka, designed for 0.20 hm 3/day with a maximum capacity of 0.31 hm 3/day.
- new refineries in Mandra, designed for 0.20 hm 3/day with a maximum capacity of 0.30 hm 3/day.

The water is purified by flocculation, precipitation, refining and disinfecting in the construction plants by adding chlorine that removes it from microbes and micro-organisms. The water is then channelled from the treatment units to the city tanks, which are dispersed in various parts of the city, and now account for 45. From the tanks the water is distributed to consumers through an extensive network of 7 million metres long pipes that need continuous upgrading due to ageing of parts and significant leakages.

In addition to the areas covered by EYDAP with its own management, it also provides water to municipalities in the rest of Attica which undertake its own management, while part of Western Attica is not yet covered by EYDAP's water.

In addition to the surface waters of the reservoirs, underground water resources are also used for water supply in Athens. Water boreholes are around a hundred, located in the area of the middle of Voikos Kifissos, around Yliki and in the area of north-east Parnitha.

In Attica, the most important water project is the Marathona reservoir with a useful capacity of 32.2 hm³. This reservoir is part of the wider water system of EYDAP, which includes the above-mentioned surface and underground water resources, as well as an extensive network of external aqueducts. Marathon operates mainly as an unregulated device, and is fed by the run-off of Haradros as well as by water transported from Mornos and Yliki.

The rainy surface run-off is injected by natural run-off into the rainwater pipeline network and into the streams of the basin and end up in the sea.

There are no major irrigation projects in Attica. The demand for irrigation is mainly met by groundwater and, in part, water from the EYDAP. In Attica, therefore, approximately one-fifth of the water consumption is intended for irrigation. Of this quantity in rural areas, a large proportion — up to 50 % of the water transported — is lost due to the poor condition of irrigation networks or inadequate techniques.

Electricity

In terms of energy infrastructure, PPC's electricity grid is the main service network, covering most of the consumption needs. In Attica there are two PPC power plants, the St George plant in Keratsini and the Lavrio plant, with a total production of 1.932 MW. The contribution of Renewable Energy Sources (RES) to the total capacity of power plants is limited, with 3.1 MW produced using wind power, 33.9 MW with biomass and 0.6 MW with hydrodynamic energy, while the use of solar energy is low.

Natural gas

The natural gas network is constantly expanding to cover more and more areas of mainland Attica, but has not greatly penetrated domestic consumption in all areas of Attica.

Telecommunications infrastructure

As regards telecommunications, Attica is served by a fixed telephony network which is constantly being upgraded. In addition, it has full coverage by mobile networks, broadband networks and ERT's digital television, with a relative shortfall in part of the island area.

8.3.3.2 Region of South Aegean (islands of Serifos, Milos, Foleganros, Thira and Naxos)

Water supply — Irrigation

Meeting the water needs of the PPI is a top priority both because the water needs of the population need to be met and for the maintenance of the main sector of the islands' economy, tourism. A second priority is water for irrigation and for meeting livestock needs, since on most islands (usually small ones) the primary sector is not the main factor in their economy and then water for industrial use, which is in any case small on the islands. Larger islands (e.g. Rhodes) which have the soil resources for intensive cultivation require significant amounts of water that compete with them to meet water needs. In this case too, the first priority is water supply and then the construction of land improvement works that will meet the island's irrigation needs.

A general observation is the existence of many coastal streams draining most of the water district, making it difficult to exploit surface waters. Also, the development of karst, mainly open to the sea aquifers poses additional difficulties in the exploitation of underground water reserves (overexploitation, brackishing). The quantity of groundwater estimated from the hydrological balance can only be used to a small extent. This percentage varies on the various islands and depends on the terrain, the formation of hydrogeological basins with a hydraulic barrier to the sea, and the geology and tectonics of the area.

In particular, the drinking water needs of the islands of the YW Aegean are met by drilling underground capacity, transporting water by aquifers, desalination plants and ponds.

In particular for the islands of the South Aegean (Cyclades and Dodecanese), the main source of drinking water is groundwater (fully covered by groundwater needs, e.g. on the islands of Karpathos, Antiparos, Kea, Kythnos, etc.), but a large proportion of water needs are covered by desalination plants (full coverage in Syros and a large proportion of several islands), water transport by vessels (Amorgos, Lepsi, Agathonis, Kimolios, etc.) and reservoirs (e.g. Anafis).

On most islands water needs are covered by more than one source of drinking water (e.g. on the island of Thira, for 2014, 54 % were covered by groundwater, 46 % by desalting and 0.35 % by ship transport, while in Sifnos 60 % by desalates and 40 % by groundwater). In many regions of the islands there is a deficit, especially during the summer period.

Finally, in most islands it is necessary to repair or build distribution networks and water storage tanks.

Energy

The existing infrastructure of stand-alone power plants adequately meets the needs, except for the peak season in which demand is growing too much.

The electricity interconnection of the islands with the national transmission system has taken place for the islands which are relatively close to the mainland with submarine cables at medium and high voltage. Submarine interconnections in the medium trend have been made in groups of islands connected to a central autonomous oil plant usually at the average voltage, eliminating the small autonomous stations that existed on each of these islands. However, efforts are ongoing with several preliminary studies to connect the islands to the national transmission system aimed mainly at exploiting wind capacity and transferring production to the mainland.

Currently, autonomous energy production units in the Region are located on islands with significant tourist activity, such as Thira, Kos, Mykonos, Rodos and Syros, as well as islands that develop tourism such as Amorgos, Andros, Astypalaia, Ios, Kalynos, Karpathos, Kea, Kythnos, Leros, Milos, Paros, Patmos, Serifos, Sifnos and Symi.

Of the category of islands facing serious problems of development and infrastructure, only some have autonomous units, such as Agathonisi, the Arctics, the Maximis, etc.

As regards steam power plants, which are the most economic power units for large quantities, there are several plants in the Region, using oil and fuel oil as fuel. Hydroelectric power plants, not available. On the other hand, solar parks, which are solar panels with photovoltaic cells, operate in Kythnos and the Arctic.

In recent years, and particularly in the Aegean islands, investments have been made in renewable energy projects as part of the electricity interconnection of the islands with the mainland network in Greece and the use of their rich renewable energy sources, as well as the contribution of these projects to Greece's targets for reducing emissions of air pollutants from Thermokipio (ATH). In the PAN, investments in this sector are mainly related to the construction of wind farms.

Telecommunications

As regards the fundamentals of the Region's telecommunications infrastructure, the relevant infrastructure is considered to be satisfactory, at least for the purpose of ensuring classical and narrow-range data services (narrowband). In addition, however, there are smaller islands or agglomerations that do not have sufficient infrastructure or do not have alternative telecommunications routes, which would add to the security and reliability of the system. As a result, the existing telecommunications network, especially for smaller islands, needs to be modernised and expanded. Furthermore, despite the liberalisation of the telecommunications market, there have been no significant investment initiatives in the region by other providers (excluding mobile telephony) and the basic infrastructure is still being developed by OTE, which, through commercial agreements, offers technical infrastructure to the former.

As regards the use of mobile telephones, the Region has a 100 % use rate, according to the results of a survey by the Information Society Observatory, compared with 96.7 in Greece.

With regard to the broadband telecommunications network (ADSL connections), the South Aegean Region has a dynamic profile, with particularly increased access to internet for households, as it is the second region of the country after Attica.

The situation with regard to existing broadband supplies is considered satisfactory, especially in the large islands where the infrastructure has been developed in line with commercial demand and the technical capabilities of the interconnectors between the islands and the existing OTE centres. The failure to cover certain smaller islands (e.g. Memaxis, Kasos, Arkas, Skinos, Donsa, Dimos and K. Koufonisi) is due to weaknesses in the access network technology (South Aegean Entrepreneurship Report, 2007).

According to a recent study by the Information Society Observatory, the South Aegean Region has 45.4 % and 47.2 % of the use of computers and internet, which is one of the three regions with higher levels than the country's averages.

The operation of ICT-related departments of the University of the Aegean creates opportunities and prospects for the development of ICT products and services that will meet the needs of the local economy and society (<u>source</u>: 'Strategic Environmental Impact Assessment (SEA) for the updated Regional Waste Management Plan (PESDA) of the South Aegean Region', 2016).

8.3.4 Renewable energy sources

The position of the onshore sections of the project in relation to renewable energy projects licensed by study area is set out in the following schemes. In particular, the following are worth mentioning:

• <u>D.Lavretica D.C.</u>: Five wind turbines are located at the border of the study area at a distance of 1.6 km north of the project under study. In any case, the project is underground along the existing road network and therefore cannot in any way affect the location of planned renewable energy projects. The details of the park are presented in the table below.

Identifier	29815
CA	C-00412
IT	NA-00576
Company	RENEWABLE ENERGY CENTER (REA)
Validity	0.10500 MW
State of play	OPERATING LICENCE
Comments	NSPS

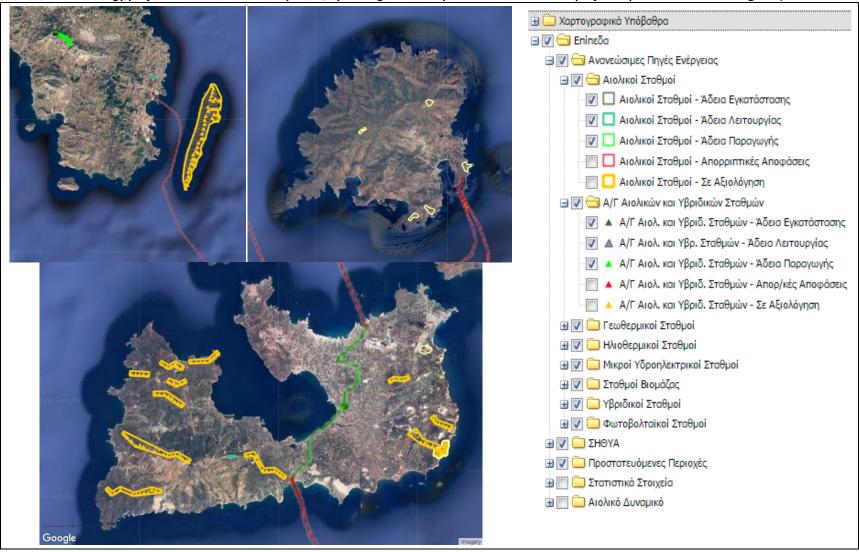
<u>Source</u>: Geoinformation map RAE (http://www.rae.gr/geo/)

• <u>Municipality of Serifou</u>: The underground metropolitan area of Serifou passes around a plot of land where an application is made for an assessment of a 1.99 MW photovoltaic park. The details of the park are presented in the table below.

Identifier	2480
CA	C-06362
IT	_
Company	KATINA KRETIS S.A.
Validity	1.999000 MW
State of play	APPLICATION FOR AN EVALUATION
Comments	PHOTOVOLTAIC STATION 1.99 MW WITH BATTERIA REGISTERED. VALUE 1 MW

Source: Geoinformation map RAE (http://www.rae.gr/geo/)

Figure The 8.3-5 location of a project under study in the study area of the Regional Unit of Lavreotikos, the Municipality of Serifou and the Municipality of Milos in relation to renewable energy projects with an installation permit, operating licence or production licence. The project is presented in red and green)



Source: Geoinformation map RAE (http://www.rae.gr/geo/)

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Figure The 8.3-6 location of a project to be studied in the study area of the municipality of Folegandrou, the Municipality of Thira and the Municipality of Naxos and the Micro-Cyclades in relation to renewable energy projects with an installation permit, operating licence or production licence. The project is presented in red and green)



Source: RAE Geographic Information Map (http://www.rae.gr/geo/

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• <u>Municipality of Milos</u>: An application for a sub-assessment of a wind farm with twelve wind turbines is located at a distance of 450 m north-west of the project under consideration, close to the landing point in the N. Milos. In any case, the project is underground along the existing road network and therefore cannot in any way affect the location of planned renewable energy projects. The details of the park are presented in the table below.

Identifier	32620
CA	C-05804
IT	_
Company	PPC RENEWABLES S.A.
Validity	1 047 MW
State of play	APPLICATION FOR AN EVALUATION
Comments	COMPONENT 1 047 MW

<u>Source</u>: Geoinformation map RAE (http://www.rae.gr/geo/)

• <u>Municipality of Folegandrou</u>: Six wind turbines are located at the borders of the study area with six wind turbines, located at a distance of 2 km south-west of the project under study, near the settlement of Livadi. In any case, the project is underground along the existing road network and therefore cannot in any way affect the location of planned renewable energy projects. The details of the park are presented in the table below (it belongs to the same cluster of A/P as the above-mentioned Wind Park located in the study area of the island of Milos).

Identifier	32620
CA	C-05804
IT	_
Company	PPC RENEWABLES S.A.
Validity	1 047 MW
State of play	APPLICATION FOR AN EVALUATION
Comments	COMPONENT 1 047 MW

Source: Geoinformation map RAE (http://www.rae.gr/geo/)

- <u>Municipality of Thira</u>: No existing or evaluated renewable energy projects are located in the municipality of Thira.
- Municipality of Naxos: No existing or evaluated renewable energy projects are located in the study
 area in the municipality of Naxos. In any case, the project is underground along the existing road
 network and therefore cannot in any way affect the location of future renewable energy projects.

8.4 Anthropogenic pressures on the environment

8.4.1 Existing sources of pollution or other pressures on the environment

Municipality of Lavreotikos

According to the approved 1st Review of the River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017), the man-made pressure on the Attiki Water District leads to pollution and pressure on water reserves. Point sources of pollution are mainly due to industrial activities, livestock farms, landfills and the discharge of (treated) waste water from urban areas. The most important pressures associated with the municipality of Lavreotikos are:

Point Sources of pollution

- The Lavrio Waste Water Treatment Facility is located in the study area, which is located approximately 100 m north of the project under consideration.
- o In the study area, a thermal power station is located at the Lavrio Energy Centre on the plot crossed by the underground G.M.
- o 29 industrial units have been registered within the boundaries of the municipality. None of them are located within the study area.
- Only one large hotel is located in the municipality of Lavreotikos, but it is located far away from the study area.
- o Two companies with fish farming are registered, but both are outside the study area.
- o In the municipality of Lavreotikos, a landfill is located (Keratea district, post Agios Ioannis Foves), but it is now inactive and resisted. Located to the north, outside the study area.
- Seven regions with quarrying/mineral activities within the limits of the Water District of Attica have been recorded. None shall be located within the study area.

Diffuse sources of pollution

The pollution loads resulting from agricultural activity in the municipality of Lavretica are shown in the table below:

REGION			Surface run-off	Vertical run-off	Vertical run-off
	ENOTHTA	N (kg/year)	P (kg/year)	N (kg/year)	P (kg/year)
ATTICA	OF LAUNDRY	681,0	358,9	1,.558,8	38,6

• The pollution loads resulting from the Paediatric Livestock Farming in the municipality of Lavretica are shown in the table below:

REGION	DIMOTIKI H ENOTHTA	BOD surface run-off (kg/year)	Surface run- off N (kg/year)	Surface run- off P (kg/year)	BOD vertical run-off (kg/year)	Vertical run- off N (kg/year)	Vertical run- off P (kg/year)
ATTICA	OF LAUNDRY	631,79	355,31	44,19	97,19	304,55	7,36

Other species of anthropogenic stress

- O In the study area and within the Lavrio Energy Centre (AES), a desalination unit is in operation. The resulting desalinated water meets the needs of the water use network of the transformers' fire extinguishing system and helps to compensate for losses of closed cooling circuits and water-vapour circuits of internal combustion machinery (IMM) heat recovery boilers.
- The port of Lavrio (outside the study area, approximately 4 km south of the project under study) focuses on passenger and tourism activities to and from the Aegean islands and to a lesser extent commercial activities. The port of Lavrio is currently under development, with important port projects having recently been completed, and its contribution to the restructuring of maritime transport in Greece is expected to be significant if the necessary land routes are implemented, which will significantly improve its access.

Municipality of Serifou

According to the approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017), the most significant human-induced pressures on the study area in the municipality of Sirfou are as follows:

• Point Sources of pollution

- The site of the study area is the Sierfou Waste Treatment Facility, which is located next to the project to be studied, at the south-west boundary of the land of the new water/Serifesland.
- o In the study area, the Sterfou thermal station (SPP) is located, 2 km west of the project.
- No industrial plant is recorded within the study area.
- 10 hotel units³ (with a capacity of 306 beds) and 1 camping of 269 places are located in the municipality of Serifos.
- o A unit with fish farms is recorded but is located outside the study area.
- There is an inactive landfill site in the municipality of Serifou, which is now inactive and is currently in the process of preparing the final study to restore it. Located in the south-west, outside the study area. In the vicinity of the landfill, the island's active landfill site is located.
- No quarrying/minerals are identified within the study area. A mining site is located throughout the island of Serph.
- Other species of anthropogenic stress
 - o There is no desalination unit in the study area.
 - o Km south-west of the water is located in the port of Sirfou, in the agglomeration of Livadi

Municipality of Milos

According to the approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017), the most significant human-induced pressures on the study area in the municipality of Milos are as follows:

- Point Sources of pollution
 - No Waste Water Treatment Facility (WTP) is found within the study area.
 - o In the study area, 240 m west of the land of the new water is located by the PPC's PPC.
 - o No industrial plant was identified within the study area.
 - o In the municipality of Milos, there are 30 hotel units⁴ (with a capacity of 1,09 beds) and 1 camping of 300 places (sited in the study area).
 - No fish farming units are recorded in the area.

³ Figures for 2009

⁴ Figures for 2009

- o In the municipality of Milos there is an active landfill site (Bratoni, Fyrgos) which is currently being tendered for rehabilitation publication of a transitional solution. Located in the southeast of the island, outside the study area.
- There is a very intense quarrying/mineral activity on the island of Milos. Two areas are located within the study area: the first is located 370 m southeast of the underground GM in the N. Milos (surface bentonite mines) and the second is 250 m to the east of the underground G.M. in the N. Milos is a quarrying area.
- Other species of anthropogenic stress
 - There is no desalination unit in the study area.
 - 150 m south-east of the Municipal Unit in the south of Milos and 0.8 km south of the water level is situated at Milos Airport.
 - 2 km to the west of the underground GM in N. Milos is the Port of Milos in the agglomeration of dada

Municipality of Folegandrou

According to the approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017), the most important man-made pressures on the study area in the municipality of Folegandrou are as follows:

- Point Sources of pollution
 - No treatment facility is identified in the study area.
 - No thermal station (AES) is located in the study area.
 - No industrial plant was identified within the study area.
 - o 27 hotel units⁵ (with a capacity of 864 beds) and 1 camping of 150 people (sited in the study area) are located in the municipality of Folegandro.
 - No fish farming units are recorded in the area.
 - 0.9 km from the land of the new Folegandros bachelor is found to be an inactive landfill site (Chilomodos site) which is in the process of preparing the final study to restore it. Located within the study area. The new landfill on the island of Folegandrou (active) is located 800 m south-west of the project, at the Kaylarina site.
 - No quarrying/minerals are identified within the study area.
- Other species of anthropogenic stress
 - Within the study area, there is a PPC desalination unit in the agglomeration of Karavostase, with a capacity^{of}700 m 3/d, and is planned to be extended with a capacity of 350^m3/d.

⁵ Figures for 2009

o 250 m from the underground G.M. is the port of Folegandros in the settlement of Karavostase

Municipality of Thira

According to the approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017), the most important man-made pressures on the study area in the municipality of Thira are as follows:

- Point Sources of pollution
 - o The waste water treatment facility (WTP) of Katerida is located in the study area, which is located 1.7 km west of the Hunting water. Also, Km south of the project is the waste water treatment plant for the agglomeration of Messaria
 - At the south-eastern boundary of the land of the new water body is the PPC Thira APS
 - O No industrial plant was found within the study area.
 - o In the Municipal Unit of Hunting, 224 hotel units are located⁶ (with a capacity of 9 439 beds) and 3 camping sites are located for 1 098 people.
 - No fish farming units are recorded in the area.
 - In Thira there is an active landfill site (Aalaki site) which is in the process of preparing the relevant studies in order to be closed and restored. Located to the west, outside the study area.
 - o In Hunting, 2 regions with quarrying/mineral activities are recorded. None shall be located within the study area.
- Other species of anthropogenic stress
 - 9 existing or proposed desalination plants are registered on the island of Hunt. At the borders
 of the study area, approximately 2 km north of the sub-project is located, the existing unit of
 the agglomeration 'Exo Gilo Ferson' is located and its proposed extension (in planning phase)
 with a capacity of 2 000 m^{3/d}each is located.
 - O To the east of the project under study, the port of Thira, which belongs to category K2 'Ports of National Importance' and is suitable for freight and coastal shipping, is located far from the study area, and it also accepts a large number of cruise ships. The central port is the port of Atheni, which is 8 km from the island's capital and is the main pillar for receiving visitors to the island. To the south, the island also has a fishing shelter on the beach of Vlycha, with a total usable length of the jetty of 700 m and a maximum depth of 2.5 m, which is also located outside the study area.
 - o 250 m south-west of the new Hunting service is located at Thira Airport

N	axos	D.	F

⁶ Figures for 2009

According to the approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017), the most significant human-induced pressures on the study area in the Naxos Regional Unit are as follows:

- Point Sources of pollution
 - Outside the study area, 4.9 km east of the project is located at Naxos OEL
 - No thermal station (AES) is located in the study area.
 - No industrial plant was found within the study area.
 - In the municipal unit of Naxos, 125 hotel units are located⁷ (with a capacity of 5 550 beds) and
 3 camping sites are located in a total of 1,118 people.
 - No fish farming units are recorded in the area.
 - o In Naxos, eight repressed landfills are identified in the following positions: Honest Stavros, Bambakia A, Bambakia B', Rékes, Didi, Seadi, Hirmorros-Pandelides and Mothoni-Alia (all located outside the study area). The active landfill site on the island is located in the northeast, outside the study area, in the position of Xydis Krown.
 - No quarrying/minerals are identified within the study area. The marble and emery farms of Naxos are located sufficiently far, to the east of the sub-project.
- Other species of anthropogenic stress
 - o There is no desalination unit in the study area.
 - Outside the study area, north-eastern, the port of Naxos is located in the island's capital and is suitable for the transport and handling of both general and bulk goods. In addition to coastal shipping and fishing, it also accepts pleasure boats.
 - o 3 km to the east of the project is Naxos Airport.

8.4.2 Exploitation of natural resources

Within the study area of the project under study, the exploitation of natural resources focuses mainly on:

- The development of agricultural crops and the practice of livestock farming, which are highly
 developed mainly in the area of study on the island of Milos and the smallest on the island of Naxos
 and the Lavretic Regional Unit.
- Two areas with surface mining/solar exploitation are located within the study area on the island of Milos: 370 m south-east of the G.M. in N. Milos are located 250 m east of the GM on the south of Milos.
- Activities related to the tourism sector are particularly developed in the study area of the islands of Serfou, Milos, Folegandrou and Naxos.
- The agglomerations found in the study area are related to the exploitation of natural resources to

⁷ Figures for 2009

carry out normal urban activities (water supply needs, etc.).

8.5 Atmospheric environment — Air quality

8.5.1 Limits for the protection of the atmospheric environment

In Greece, there are legislative limits for gaseous and particulate pollutants, in line with the air quality limits established in the European Union. With a number of new directives on air pollution, the European Union has also introduced new limits for the various air pollutants. These limits refer to the protection of both human health and ecosystems. The directives applicable to the new limits are:

- Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic hydrocarbons in ambient air (JMD 22306/1075/E103, Government Gazette, Series II, No 920, 2007).
- Directive 2008/50/EC on ambient air quality and cleaner air for Europe (JMD No 14122/549/E.103 (Government Gazette, Series II, No 488)).

The table below sets out the national air quality limits in accordance with Joint Ministerial Decision No H.P. 14122/549/E.103 (Government Gazette, Series II, No 488 2011)on measures to improve air quality, in compliance with Directive 2008/50/EC on ambient air quality and cleaner air for Europe of the European Parliament and the Council of the European Union 21 May 2008.

Table 8.5-1 Limit values for the protection of human health

Averaging period	Limit value	Margin of tolerance	Date by which limit value is to be met
Sulphur dioxide			
1 hour	350 μg/m³, not to be exceeded more than 24 times in a calendar year		(1)
1 day	125 μg/m³, shall not be exceeded more than 3 times in a calendar year		(1)
Nitrogen dioxide			
1 hour	200 μg/m³, shall not be exceeded more than 18 times in a calendar year	50 % on 19 July 1999, decreasing from 1 January 2001 and every 12 months thereafter by equal annual percentages to reach 0 % on 1 January 2010	1 ^{as of} January 2010
Calendar year	40 μg/m³	50% on 19 July 1999, decreasing from $1^{January}$ 2001 and every 12 months thereafter by equal annual percentages to reach 0% on $1^{January}$ 2010	1 ^{as of} January 2010
Benzene			
Calendar year	5 μg/m³	5 μg/m 3 (100 %) on 13 December 2000, decreasing from 1 January 2006 and every 12 months thereafter by 1 μg /m 3 to reach 0 % on 1 January 2010	1 as of January 2010
Carbon monoxide			
Maximum daily eight-hour average ⁽²⁾	10 mg/m ³	60 %	(1)
Lead			
Calendar year	0,5 μg/m ^{3 (3)}	100 %	(3)
PO ₁₀			

Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

Averaging period	Limit value	INJargin of folerance	Date by which limit value is to be met
,	50 μg/m³, not to be exceeded more than 35 times per calendar year		(1)
Calendar year	40 μg/m ³	20 %	(1)

Markings

(1)	Already in force since 1 January 2005.
(2)	The maximum daily 8-hour mean concentration will be selected by examining 8-hour running averages, calculated from hourly data and updated each hour. Each 8-hour average so calculated will be assigned to the day on which it ends i.e. the first calculation period for any one day will be the period from 17:00 on the previous day to 01:00 on that day; the last calculation period for any one day will be the period from 16:00 to 24:00 on that day.
(3)	Already in force since 1 January 2005. Limit value to be met only by 1 January 2010 in the immediate vicinity of the specific industrial sources situated on sites contaminated by decades of industrial activities. In such cases, the limit value until 1 January 2010 shall be 1,0 μ g/m³. The area in which higher limit values apply must not extend further than 1 000 m from such specific sources.

8.5.2 Main sources of pollutant emissions to air in the study area

The main sources of air pollution in the study area are analysed below:

• <u>Vehicle traffic on the existing road network</u> (existing national, provincial and local roads) is the main source of air pollution for the study area. Emissions from vehicle traffic are produced at a relatively low height and therefore do not have a good potential for diffusion and dilution.

The gaseous pollutants released from vehicle operation are carbon monoxide (CO), oxides of nitrogen (NOx) and hydrocarbons (HCs) which belong to the primary pollutants, while those formed in the atmosphere due to chemical reactions (photochemicals) are called secondary. In particular, gaseous pollutants emitted by petrol-fuelled vehicles shall include:

- o Carbon dioxide (CO₂) (from the combustion of gasoline).
- o Carbon monoxide (CO) (by incomplete combustion of gasoline).
- Hydrocarbons (HC) or (VOC) also derived from incomplete combustion and relating to light HCs and benzene hydrocarbons with carcinogenic effects in humans. Evaporated petrol is also included.
- Oxides of nitrogen (NO_x), produced at high combustion temperatures.
- Lead (Pb), which is a key additive in leaded petrol for octane control.
- Bromine ethylate and chlorine ethylate;

LPG-fuelled vehicles (CNG and LPG) have lower HCs and CO emissions.

- \circ CO₂.
- Co, but in lower proportions than petrol engines due to better combustion.
- HCS equal to or lower than petrol-powered. Emissions of light HCs are up to 5 times lower, but those of aromatics and polyaromatics, which are also carcinogenic, are higher (benzopyrene).

- No_x less in percentages than petrol-powered.
- o SO₂ on account of a higher sulphur content in diesel.
- O Solid particles (& 2,5 μm) consisting of HCs, SO₂, NO₂, sulphuric acid.
- Formaldehyde and other aldehydes;

Other sources of pollution related to vehicle movement are tyre and brake wear (solid particles and asbestos, the use of which is currently banned in brake construction) and the use of regenerated mineral oils containing PCBs that can lead to the release of dioxins. Air conditioning systems also release CFCs.

In the lower atmosphere, light unsaturated HCs and NOx by photochemical reactions with oxygen and other organic compounds (formaldehyde) produce photochemical oxides such as ozone (O₃).

- <u>Industrial gaseous pollution sources</u> generally weigh either on emissions from the production process or on emissions from industrial combustion. Also, depending on the area of influence, they can be divided into local and larger areas.
- Emissions from the production process mainly include SO₂ (generally typical of industrial pollution in developed countries), particulate matter, volatile hydrocarbons, SO₃, HF and other process-specific gases. Emissions from industrial combustion come from the combustion of fuel oil, less than oil and in specific cases natural gas, and there are cases where other materials (wood, sawdust) are used.
- The operation of <u>quarries</u> is linked to the increased production of dust (suspensioned and settled solids) in the atmosphere, due to the management of an increased volume of earth moving and generally graded materials. These emissions can be significantly reduced by appropriate measures.
- <u>Central heatings produce pollutants</u> such as CO₂, CO, SO₂ and particulates (mainly black carbon). SO₂ emissions are particularly reduced due to the use of low sulphur oil. Central heating systems with oil burner and boiler have largely predominated in urban centres. On the contrary, individual heating systems (oil stoves, gas stoves, electric bodies, etc.) coexist to some extent in rural areas and in areas characterised by low incomes and unorganised construction. Emission factors depend mainly on the quality of the fuel and the state of the heating system (good functioning, correct installation, periodic adjustment and adequate maintenance). The amount of fuel consumed (and thus the total emissions) depends on the efficiency of the installation and the existence of losses.
- The <u>burning of wood or wood derivatives</u> (fires, pellets, etc.) is mainly related to the release of CO₂, CO and black carbon. These heating systems are increased in rural areas.
- The <u>agricultural and livestock activities</u> carried out in the area may cause some damage to the atmosphere.

8.5.3 Assessment and evaluation of existing air quality in the study area

It should be noted that there are no large agglomerations in the study area.

In general, the current atmospheric burden in the study areas of the Attica and Cyclades subprojects does not appear to be significant. The main sources of air pollution are:

 Road traffic on the national and provincial roads. The pollution of the atmosphere in CO and NO_x from road traffic in the areas is relatively low, while dispersal conditions are even more conducive to keeping concentrations low.

- Heating systems. Emissions from central heating, fireplaces or stoves of dwellings contain mainly CO_{2, CO}
 and SO₂ and are estimated to be small, as the agglomerations in the immediate area are few and small in size.
- The operation of the power plants of Lavrio, Serifou, Milos and Thira with emissions of sulphur oxides and nitrogen. Moreover, there are no significant industrial activities in the wider area other than the abovementioned SPP affecting the atmospheric environment.
- The operation of the mining/solar areas of Milos which affect the area with suspended and precipitated solid particles.

Together with an assessment of the above and taking into account the good dispersal conditions which result in a high rate of air renewal, it is estimated that the atmosphere in the immediate area of the projects, which lacks practically significant sources of pollution, is in very good condition.

8.5.4 Changes over time and trends

According to the Annual Atmospheric Pollution Report 2018 (Ministry of Energy, 2019):

- Under national and Community legislation, it is the country's obligation to operate a network of air pollution measurement stations.
- To this end and with the resources of the 2nd CSF, within the framework of the operational programme 'ENVIRONON', the Ministry of the Environment, Energy and Energy, as the Ministry of the Environment, Regional Planning and Public Works, upgraded stations in the Athens basin and other cities that were already in operation, while also installing new stations in large cities, setting up the National Air Pollution Monitoring Network (EDPAP). The EOPAP has been operational since 2000.
- In 2015, the 2007-2013 NSRF funds were upgraded under the OPERA to the EDPAP operating the Ministry with new air pollution measurement analysers certified in accordance with European standards and the measurement sites for particulate matter (PM10 and PM2.5) and benzene were increased.

The evolution over time of the values of the measured pollutants (carbon CO, nitrogen oxides NO and NO₂, Ozone O₃, sulphur dioxide SO₂, particulate matter PM₁₀, PM_{2.5}, Benzole C_{6H 6} and Vara Metal) shows that, although there are variations in annual average pollution values over time, there is a downward or stabilisation trend depending on the pollutant. This development can be attributed, in particular, to the technological upgrading of the car fleet and the means of transport, the implementation of the exhaust control card (KEK), the measures to control emissions of pollutants from various sources, the use of fuels with better technical specifications, the operation of track-based means, the facilitation of circulation of means of transport, the penetration of natural gas in the domestic, industrial and tertiary sectors, the completion of major traffic projects, etc.

Specifically for each pollutant, we note the following:

- Carbon monoxide generally shows a downward trend in prices.
- For sulphur dioxide there is a significant downward trend in prices linked to reductions in sulphur content in both diesel and heating oil and unleaded petrol.
- For benzene until 2014 there is a decreasing trend in concentrations compared to previous years, with an increase in the concentration value followed by a stabilisation trend in 2015.
- For nitrogen monoxide there is a tendency to slightly decrease the values.

- For nitrogen dioxide there has been a tendency to reduce or stabilise prices in recent years, in most of the measuring positions.
- For ozone there is generally a trend to stabilise prices with strong year-to-year fluctuations in some stations, due to the nature of the pollutant.
- For particulate matter (PM₁₀) there is generally a slight decrease in pollution values by this pollutant or stabilisation.
- For particulate matter (PM_{2,5}) there is a slight trend of lower values or stabilisation.

For the study area it is estimated that there is no significant difference in the evolution of very low concentrations of air pollutants.

8.6 Acoustical environment and vibrations

8.6.1 Noise legislation

8.6.1.1 Noise limit values produced in the construction phase

There is no specific noise ceiling for construction works in Greece. Presidential Decree 1180/81 lays down the maximum permitted limit for noise emitted into the environment by industrial installations and construction sites, which in this case concerns machinery and installations to be used during construction.

Table 8.6-1 Maximum permissible noise limits for installations

Region	Maximum noise limit dB(A)
Industrial areas legislated	70
Areas where the predominant element is industrial	65
Areas where the industrial and urban elements are equally predominant	55
Areas where the urban element predominates	50

In addition to the above Presidential Decree in Greece, relevant legislation is in force concerning noise from construction sites, air hammers, etc. More specifically, in the context of protection against construction noise, both the developer and the developer are under an obligation to apply the current legislative framework for the protection of the acoustic environment from the construction of the project.

The legislation in force is summarised below:

- 1. Ref. Decision 56206/1613/Government Gazette, Series II, No 570/9.9.86 determining the sound emission of construction site machinery and appliances in compliance with Directives 79/113/EEC, 81/1051/EEC,85/405/EEC.
- 2. Ref. Decision 2640/270/78 (Government Gazette, Series II, No 689/78 on the use of nested fences)
- 3. Ref. Decision 765/91 (Government Gazette, Series II, No81) "Setting the noise limit values of plumbs, cable-walls of doppers, shippers and excavators"
- 4. Ref. Decision 37393/2028/2003 (OJ 1418B/1-10-2003 "Measures and conditions relating to noise emissions into the environment by equipment for use outdoors".
- 5. Joint Ministry of the Interior Decision 64001/1927/1988 (OJ 751B/18-10-1988) "Type approval of the noise limit value of machinery and building site factors, in particular motorised air compressors, tower cranes, converging generators, power generators and portable concrete breakers and air hammers".

The following table shows typical and permissible sound levels of machinery and construction vehicles.

Table 8.6-2 Standard and permissible sound level of construction machinery

Machine/Vehicle	Range A-sound level (dB(A))	Permissible level (dB(A))
Breaker	81-98	111 ¹
Concrete mixer	75-88	114 ¹
Grader > 160KW, <350 KW	80-93	113 ²
Propeller	72-93	113 ²
Mechanical excavator	80-93	113 ²
Dumper vehicle	80-93	113 ²
Loader	72-93	108 ²

MINISTERIAL DECISION 69001/1921, GOVERNMENT GAZETTE 751/18.10.1988

It should be noted that, in accordance with Presidential Decree 85/91 and Joint Ministerial Decision 37393/2028/2003 (Government Gazette, Series II, No 141/1.10.2003) on measures and conditions relating to noise emissions into the environment from equipment for use outdoors, the use of individual hearing protection devices is required when workers' sound exposure exceeds 90 dB(A).

8.6.1.2 Noise limit values generated in the operational phase of the project

The operation of the project under consideration is not related to the emission of significant noise levels.

Greek legislation does not provide for an assessment of noise generated by energy transmission projects. An evaluation of the noise generated by transport projects is foreseen, which is carried out in accordance with Joint Ministerial Decision No οικ. 211773/2012 (Government Gazette, Series II, No 137) laying down indicators for the assessment and maximum permissible limits for environmental noise indicators arising from the operation of transport projects, technical specifications for special acoustic studies for the calculation and application of noise barriers, specifications for environmental noise monitoring programmes and other provisions.

<u>Article 3</u> 'Environmental*Transport Noise Assessment Indicators*' defines as indicators for assessing environmental noise resulting from the operation of road projects the following:

L_{den} (L_{day-evening-night})= 24-hour weighted noise assessment index=

(Lday, afternoon-night)

$$\mathsf{L}_{\mathsf{den}} = 10\mathsf{Ig}_{24}^{\frac{1}{24}} \big(12*10^{\frac{L_{day}}{10}} + \ 4*10^{\frac{L_{evening+5}}{10}} + 8*10^{\frac{L_{night+10}}{10}}\big)$$

where:

L_{day} (12-hour weighted day noise assessment index)

Levening (4-hour weighted afternoon noise assessment index)

L_{night} (8-hour weighted night noise assessment index)

The periods of application of the above indicators are defined as:

Daytime period: from 01.05 to 01.10 between 07:00 and 19:00

² MINISTERIAL DECISION 765, GG 81/21.2.1991

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- Afternoon period: from 19:00 to 23:00 hours
- Time period at night: from 23:00 to 07:00 hours.

<u>Article 4</u> 'Limits for environmental traffic noise assessment indicators' lays down the maximum permitted limits for the above road noise indicators:

- For the L_{den} index (24-hour): 70 dB(A)
- For the L_{night} index (8-hour night): 60 dB(A)

The above indicators and limits shall be calculated and measured at a height of 4.0 ± 0.2 m (3.8 to 4.2 m) above the ground and at a minimum distance of 2 m from the most exposed (to the linear source of traffic noise), façade (external wall or roof), residential buildings and other sensitive uses in need of protection.

According to Article 2 'Scope':

The indicators and thresholds apply to housing receivers located within all kinds of statutory housing development boundaries such as GIS, town plans, settlements, etc. for which there is a decision to set building limits and conditions.

In addition, they shall apply to protect sensitive receivers such as:

- Health and education facilities (schools, hospitals, etc.)
- Old people's homes, blind houses and similar institutions
- Cultural/social event venues (open theatres, conference centres, etc.).

8.6.2 Main sources of environmental noise or vibration emissions in the study area

In the study areas of the Attica and Cyclades subprojects there are no significant sources of noise pollution, such as large urban and commercial centres, etc. The size of the agglomerations found in the study areas is limited, and land use is dominated by areas covered by natural vegetation and agricultural areas.

The most important source of noise pollution in the study areas is the traffic of vehicles on the existing provincial and local road network. Other sources of noise pollution in the study area are:

- The agricultural and livestock activities carried out in the area
- The usual urban activities of the settlements in the area.
- The operation of the mining/solar regions of Milos
- Operation of the SES of Lavrio, Serifou, Milos and Hunta
- The tourism activities carried out on the islands of Serof, Milos, Foleganros, Thira and Naxos are increasing over the summer months.

In general, it is considered that the quality of the acoustic environment in the study areas is good, as the significant noise sources are missing, with the exception of the SPPs mentioned above, which is an isolated use and not generalised exploitation throughout the study area.

8.6.3 Assessment and evaluation of the existing quality of the acoustic environment in the study area

As already mentioned above, on the basis of the existing sources of encumberment of the acoustic environment recorded in the study area, it has been estimated that the quality of the acoustic environment in the study area at the Regional Unit of Lavreotikos is slightly degraded due to the Lavrio Energy Centre (ESC), within or around which the sub-project is located.

As regards the other parts of the study area (Serios, Milos, Fologanros, Thira and Naxos), it was assessed that the acoustic environment was of good quality, as the major noise sources were missing, with the exception of point noise sources such as the SPP and quarrying areas mentioned above.

8.6.4 Changes over time and trends

As regards the Lavretica Regional Unit, since most of the project's transit area in the underground part of the project falls within or around the land of the Lavrio Energy Centre, it is estimated that this is a degraded environment in the acoustic environment, but with a tendency to stabilise noise levels.

With regard to the other parts of the study area (Serifos, Milos, Fologanros, Thira and Naxos), according to the strategic environmental impact study for the 'Crete-Aigaiou Islands Operational Programme 2007-2013' (March 2007), with regard to trends in the acoustic environment, please note the following:

- According to EU data in Greece, there are 122 mechanical two-wheelers for every 1000 inhabitants, compared with 61/1000, which is the EU average.
- Also 1 mechanical two-wheeler corresponds to each two cars when the EU average is 1/7.
- In the last seven years mopeds in Greece have increased by 70 % when they fell by 15 % in the EU.
- The trend of increasing cars but especially of powered two-wheelers in recent years is expected to lead to a corresponding increase in road noise.
- The implementation of Community and national legislation, through the creation of operational noise control plans, should gradually lead to a reduction in noise levels, as they will be implemented.

8.7 Electromagnetic fields

8.7.1 Main sources of electromagnetic radiation emission in the study area

In the study areas of the subprojects of Attica and the Cyclades, the main sources of electromagnetic radiation are the licensed and constructed water/system of the island of Naxos, in combination with the 150 kV underground Unit and the facilities of the Lavrio Energy Centre, which include the Lavrio hotspot.

8.7.2 Assessment and evaluation of the current electromagnetic background situation

8.7.2.1 Electromagnetic (H/M) fields generated by the operation of a substation (C/C)

The estimates for the electromagnetic radiation produced in the operating water/system of Naxos and the Lavrio hotspot are presented below.

The determination of acceptable values of EMF is the subject of **ICNIRP**, the *International Commission for the Protection of Non-Ionising Radiation*, a non-governmental organisation with scientists of all the necessary disciplines, recognised by the World Health Organisation (WHO), the International Labour Organisation (ILO), the European Union.

In 1998 ICNIRP published the Directive on the "Directive on limits of exposure to time-varying electric and magnetic fields" which set maximum limits for the continuous exposure of the general public to electromagnetic fields. All past and new research work and regulations have been examined and weighed up in the preparation of this Directive.

In 1999, the Council of the European Union Recommendation L199/519ECon the limitation of exposure of the general public to electromagnetic fields was published and fully adopted the limits of the ICNIRP Directives. The above limits were ratified by the Scientific Steering Committee of the European Union and integrated into the institutional framework of the Member States of the European Union. In Greece, Joint Ministerial Decision 3060FOR238 (Government Gazette, Series II, No 512/25.04.02) on measures to protect the public against the operation of low-frequency electromagnetic field emission devices applies.

In summary, the above limits for the frequency of 50Hz are set at 5 kV/m for the electric field and 100 μ T for magnetic induction.

These levels are not risk limits and contain large safety factors to address the uncertainties that exist about the effect of fields on biota and to meet the requirement to prevent adverse effects. It should also be noted that the above regulations specify the permissible levels of fields and under no circumstances lay down safety distances, as they appear from time to time in publications.

In order to compare the values of the electromagnetic fields present at substations in operation with the reference levels of magnetic fields provided for in the regulations, measurements were carried out on the operating water/category 150 kV/MT of Onophyte, which is a complete substation with two M/T power. The values of the magnetic fields measured are minimal, especially at the limits of the fence of the substation where magnetic field values of 0.5 to 14.2 mg were measured which are well below the limits of the ICNIRP Directive and Joint Ministerial Decision 3060FOR238 (Government Gazette, Series II, No 512/25.04.02).

In addition, PPC commissioned the Department of Electrical Engineering and Computing Technology of the University of Patras (Prof. D. Chaakas and E. Mimos) to carry out a study on the level of electric and magnetic field in the surrounding area of the 150 kV/MT outdoor water bodies, which was carried out in November 2003. The above study shows that the requirements of the regulations for the protection of humans from electric and magnetic fields are fully met since the maximum possible values of these fields at the fencing limits of the substations are many times (tens and in many cases thousands of times) lower than the permitted limits.

A number of measurements were also carried out by the Greek Atomic Energy Commission (Hellenic Atomic Energy Commission) at operating PPC substations (now ADMIE). These measurements were carried out at the request of the respective municipalities on whose administrative boundaries these substations are located.

The above reports are consistent with all previous studies, as they also confirm that the measured values of magnetic induction B and electric field E are often lower than those permitted. For example, at the fence limits of Volos I, the values of magnetic induction B are between 61 and 563 times lower than the limit value of 100 μ T and the electric field E values are between 9.5 and 218 times the limit value of 5 kV/m, while for Agios V the values of magnetic induction B are between 117.4 and 512.82 times the limit value of 100 μ T and the E electric field values are between 13.2 and 277 times lower than the limit value of 5 kV/m.

It should be noted that the Greek Atomic Energy Commission is designated by Joint Ministerial Decision 3060 (Government Gazette, Series II, No 512/25.4.02) as the body responsible for carrying out measurements and monitoring compliance with the limits on safe exposure of the public to low frequency electromagnetic fields.

A comparative table is presented below with the limit values of the regulations and the actual values measured in substations, as indicated in the above-mentioned studies.

Table 8.7-1 Electromagnetic field values from measurements at PPC substations and regulatory cap values

	PRICES OF MOLECULES OF TENSION			
STUDIES	Magnetic induction (μΤ)	Electric field intensity E (kV/m)		
Measurements at the Oinofyta bath/Board	0,05-1,42	_		
University of Patras study on electromagnetic field at 150/20kV substations	0,16-1.99	0,018-1,145		
EEAE report of the Ministry of the Environment and Energy on Substation Volos I	0,019-1.648	0,022-0.524		
EEAE report of the Ministry of the Environment and Energy on the Agios Vassiliou substation	0,195-0.852	0,018-0.379		
Ceilings set by the ICNIRP and set by Joint Ministerial Decision 3060 (Government Gazette, Series II, No 512)	100	5		

It emerged that the maximum electromagnetic field values at the fencing limits of the substations are not only much lower than the maximum permissible values, but are in many cases close to zero or to reach the sensitivity limits of the measuring instrument.

These prices are much lower than in the homes and are due to household electrical appliances (Report of the University of Patras).

8.7.2.2 <u>Electromagnetic (H/M) fields generated by the operation of a 150 kV power transmission line</u>

Please note the following:

- Electric and magnetic fields are not only created around transmission lines (high voltage) and distribution (medium and low voltage) of electricity, but their existence in the surroundings is inherent in the electricity use itself. Thus, an electric and magnetic field develops around any electric module (household appliances, internal electrical installations, electric machines), the sizes of which depend for a given location only on the voltage and current intensity respectively.
- Given that the intensity of these fields weakens as the distance to the source increases, in many cases
 the use of household electrical appliances results in exposure to magnetic field (magnetic induction)
 values higher than those which could come from adjacent electric lines, since significant safety
 distances occur at all possible residence locations.
- The electric and magnetic fields generated by the operation of power transmission lines are low-frequency (50 Hz). The intensity of these fields weakens rapidly as the distance from the source which generates them increases and therefore any visual contact with electric lines does not automatically result in an electrical or magnetic field burden.

Regulations for the protection of humans against electrical and magnetic fields

The following table shows the limits of the brake intensities for the protection of humans against 50 Hz fields, which are given in various directives and regulations.

Table 8.7-2. Brake intensities limits to protect people against 50 Hz electric and magnetic fields at continuous public exposure and in employment

	Brake intensities limits			
Protection Regulations	Uncontrolled stay of the public		Controlled occupation	
	E (kV/m)	Β (μΤ)	E (kV/m)	Β (μΤ)
IRPA/INIRC Temporary Instructions, 1990	_	100	10	F00
ICNIRP Guidance, 1998	5	100	10	500
UK NRPB Regulation, 1993	12	1600	12	1600

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	Brake intensities limits					
Protection Regulations	Uncontrolled public	stay of the	Controlled occupation			
	E (kV/m)	Β (μΤ)	E (kV/m)	Β (μΤ)		
NRPB overview, 2004	5	100	10	500		
German Decree 26.BIMSchV 1996	5	100	_	_		
Recommendation of the Council of the European Union, 1999	5	100	_	_		
KYA 3060 (TAX) 238, GOVERNMENT GAZETTE, SERIES II, NO 512/25.04.02	5	100	_	_		
Directive of the European Parliament and of the Council on occupational exposure, 2004	_	_	10	500		

<u>Source</u>: "Reclassification of the 150 kV network and new 400 kV lines in the prefecture of Achaia — electric and magnetic fields as environmental factors" (Department of Electrical Engineering and Technology of Computers University of Patras, 2009)

With regard to the limit values presented in the above table, please note the following:

- In 1977 the International Radiation Protection Society (IRPA) formed the International Commission for Protection against Non-Ionising Radiation (INIRC). In January 1990 the Commission, in cooperation with the WHO's Environmental Department of Health, published 'Temporary limit guidelines for exposure to electric and magnetic fields 50/60Hz'. In this work, with a duration of more than 10 years, all relevant scientific publications were weighed and taken into account.
- In 1997, the International Commission for Protection against Non-Ionising Radiation (ICNIRP) (which replaced IRPA/INIRC) 'Directives on exposure limits to time-varying electric, magnetic and electromagnetic fields', published in 1998. In order to draw up these guidelines, all the more recent research work was also examined and assessed. In these directives, without the restriction 'temporary directives', the limits of the 1990 temporary directives (5 kV/m and 100 μT for continuous public exposure and 10 kV/m² and 500 MT for professional employment) remain unchanged.
- The ICNIRP boundaries were derived from the following procedure:
 - critical view of all scientific publications on the effects of fields
 - o setting threshold values giving rise to harmful health effects
 - introduction of safety factors, which result from threshold values for basic restrictions
 - consider the worst cases of links between electric and magnetic fields and the human body to determine the reference levels (thresholds), i.e. the measurable physical quantities associated with exposure.
- In 1993, the UK regulation was published with significantly higher thresholds than the ICNIRP limits.
- In 1996, the German Federal Decree enacts the permitted limits for electric and magnetic fields for the continuous exposure of the public. These limits coincide with the limits of the Directive.
- The 1999 Recommendation of the Council of the European Union on the limitation of exposure of the general public to electromagnetic fields was published. In this Recommendation, the Council adopted the limits of the ICNIRP Directives following their ratification by the Scientific Steering Committee of the European Commission.
- In 2002, the Joint Ministerial Decision (KYA 3060 (Φ) 238, Government Gazette, Series II, No 512, 25.4.02) adopted the European Commission's limits.

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- In 2004, a Directive of the European Parliament and of the Council was published, which sets the thresholds for employment.
- The environmental studies compare the permitted limit values in the regulations with the maximum values which appear or will appear. This comparison shows whether or not the requirement to protect people has been met.

Conclusions

These are findings of valid international bodies responsible for the protection of human health, such as the *International Radiation Protection Association (IRPA)*, which are responsible for analysing and weighing the results of scientific research, drawing at regular intervals, drawing conclusions and drawing guidelines for exposure to an electric and magnetic field of 50 Hz. This analysis and weighting concern both laboratory investigations and epidemiological studies.

These conclusions and the results of scientific research on the protection of human beings, once weighed and accepted, are incorporated into the regulations governing the design, construction and operation of civil engineering works.

In addition to the Greek Regulation (standard ELOT ENV 50166-1), the design, construction and operation of electricity transmission lines shall follow the instructions and limits of the corresponding international regulations (Directive ICNIRP — International Commission for Non-Ionising Radiation Protection of the World Health Organisation, the establishment of the Scientific Committee of the Council of the European Union).

The Recommendation of the Council of the European Union on the limitation of exposure of the general public to electromagnetic fields was published in July 1999. In this recommendation, the Council adopts the ICNIRP limits after their validation by the Scientific Steering Committee of the European Commission.

The common limits of the ICNIRP Directive and the Recommendation of the Council of the European Union on the continuous exposure of the public to 50 Hz frequency fields are:

for magnetic induction: B= 100 μT;

for electric field strength: E = 5 kV/m.

The above limits apply in Greece on the basis of Joint Ministerial Decision No 3060 (Φ) 238 (Government Gazette, Series II, No 512/25.04.02) on measures to protect the public against the operation of low-frequency electromagnetic field emission devices.

If the limits of the Regulations are not exceeded, people are protected from the electrical and magnetic field.

The above limits are not risk limits, but contain very large safety factors to address ambiguities by the limited knowledge of the influence of fields and to meet the requirement to prevent adverse effects.

The transmission lines of the Greek system meet the limits of all the above Regulations.

ADMIE S.A. shall be kept constantly informed of new investigations into the potential effects on human health of the electrical and magnetic field of the transmission lines.

It has been established from both theoretical studies and measurements at transmission and distribution facilities that the values of the fields are significantly below the limits of the above Regulations.

In particular, the magnetic field values, which in the last 15 years have been scientifically investigated for possible effects on human health, are tens to hundreds of times lower than the regulatory limits.

It should be noted that, at a distance of some dozens of metres from the Transmission Line axis, both electrical and magnetic field values are minimised and practically set to zero.

8.8 Waters

8.8.1 Management plans

8.8.1.1 Forecasts of management plans relating to the study area

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

The main objectives of the 1st Review of the River Basin Management Plan of the South Aegean Water District are:

- Maintain or restore good surface water and groundwater status by 2015 or beyond by 2021 (during the 1st revision of the Plan).
- Consolidating and complementing the previous piecemeal European water legislation;
- Water resource management approach at the level of a water region, understood as consisting of one
 or more adjacent catchment areas together with associated groundwater and coastal waters,
 designating the competent authority for its exercise
- Exercise of management of water resources on the basis of programmes water region management plans.
- Ensure realistic pricing of all water-related services.

Specifically, the environmental objectives set for the 177 surface water systems or water bodies (WBs) and the 116 Groundwater Systems (WS) of the water body by 2021 are summarised below:

- For 71 WBs the objective is to maintain high ecological status
- For 86 water bodies the objective is to maintain good ecological status
- For 13 HMWB the objective is to determine ecological potential by 2021 and to take measures (if necessary) to achieve good ecological potential by 2027
- For 174 WBs and HMWB the objective is to maintain good chemical status
- For 3 HMWB the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027
- For 88 WWBs the objective is to maintain good quantitative status
- For 28 WWBs the objective is to achieve good quantitative status whenever natural conditions allow it after 2027
- For 88 WWBs the objective is to maintain good chemical status
- For 28 WWBs the objective is to achieve good chemical status whenever natural conditions allow it after 2027

River, lake or transitional water bodies are not present in the project area under study. The following coastal water bodies are found:

• 'EL1437C0063N — Serif coast',

Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

- 'EL1437C0076N Northern Eastern Coast of Milos'.
- 'EL1437C0077N Southern Western Coast of Milos'.
- 'EL1437C0080N Sicino-Folegandrou coasts'.
- 'EL1437C0084N Santorini calf exterior coasts'.
- 'EL1437C0066N Faculty Nice'.
- 'EL1437C0070N Koufonisia coast'.

The groundwater bodies found in the background of the study area, where the project under study is located, are as follows:

- 'EL1400690 Nothchia', Sirfou Island
- 'EL1400721 Zefyria (A)', 'EL1400722 Zefyria (B)' and 'EL1400730 Milos', Island of Milos
- 'EL1400860 Folegandrou', Folegandrou Island
- 'EL1400872 Karari Friendon Merchant (B)', Island of Thira
- 'EL1400770 Central Naxos Kourou', 'EL1400760 meadow', Naxos Island

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

The main objectives of the 1st revision of the River Basin Management Plan of the Water District of Attica are:

- Maintain or restore good surface water and groundwater status by 2021.
- Consolidate and complement previous piecemeal European water legislation.
- A water resource management approach at the level of a water region (river basin district), which is understood as consisting of one or more adjacent catchment areas together with associated groundwater and coastal waters, designating the competent authority for its exercise.
- Exercise of water resource management on the basis of programmes/water region management plans.
- Ensuring social consensus by promoting participatory processes.
- Promote rational cost analyses.

In particular, the environmental objectives set for the 30 surface water bodies of the water bodies in Attica until 2021 are as follows:

- For 1 EWS the objective is to maintain high ecological status.
- ➤ For 7 EWS the objective is to maintain good ecological status.
- For 2 HMWB the objective is to maintain good ecological potential.
- For 17 EWS it is the achievement of good ecological status.
- For 1 HMWB it is the achievement of good ecological potential.
- For 2 HMWB the objective is to determine ecological potential by 2021 and to take measures (if

necessary) to achieve good ecological potential by 2027. This objective concerns river HMWB where the situation could not be assessed in this management cycle.

- For 4 EWS the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027. This objective concerns 2 rivers and 2 coastal EWS where the situation could not be assessed in this management cycle.
- ➤ For 1 HMWB the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027, as the status could not be assessed in this management cycle.
- For 1 HMWB the objective is to achieve good chemical status by 2027.
- > For a total of 24 surface water bodies the objective is to maintain their good chemical status.
- ➤ 22 NCOs fall under the exceptions set out in Article 4.4 and the objective set for them is to achieve good status by 2027.

Accordingly, the environmental objectives set for the 21 water bodies of the MWB of Eastern Sterea Ellada are as follows:

- For 13 water bodies and 6 subsystems the objective is to maintain good quantitative status.
- For 3 water bodies and 2 subsystems the objective is to achieve good quantitative status by 2027.
- For 12 water bodies and 4 sub-systems the objective is to maintain good chemical status.
- For 4 water bodies and 4 subsystems the objective is to achieve good chemical status by 2027.

River, lake or transitional water bodies are not present in the project area under study. There is the coastal water body 'EL0626C0003N Sea of Lavrio-Makronisos'.

In addition, underground water system 'EL0600170 — Lavreotikos' is found in the background of the wider area where the project is located.

8.8.1.2 Check the project's compatibility with the provisions of the management plans

The project under study does not conflict with the provisions of the approved management plans, in particular:

- Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14)
 (Special Secretariat for Water, 2017)
 - As regards the relationship between the location of the project and protected areas in the South Aegean Water District, please note the following:
 - In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.7 km.
 - On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1.3 km.
 - In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 3.5 km.
 - On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos —

Profitis Ilias — Wider Area' over a length of approximately 700 m.

- In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 13.5 km.
- On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 — Western Milos, Antimilos, Polygos and Islands' over a length of approximately 7 km.
- As regards the relationship between the location of the project and protected areas in the South Aegean Water Department that have been classified as recreational/penalty waters, please note the following:
 - 0.8 km west from the landing point of the submarine cable in the southern Milo is located near the 'Côte Provaa' (GRBW149287155), which in 2013-2018 is assessed as being of excellent quality.
 - 0.6 km west from the landing point of the submarine cable in western Naxos is located near Akti Agios Prokopios (GRBW149292181) which in 2013-2018 is assessed as being of excellent quality.
- The project under consideration does not conflict with the actions envisaged in implementation of Community Directives proposed as measures for the South Aegean Water Department (EL14).
- Furthermore, the project under consideration does not conflict with the additional measures provided for in the Southern Aegean River Basin Management Plan (EL14).
- Approved 1st Revision of River Basin Management Plan of the Water District of Attica (EL06) (Special Secretariat for Water, 2017)
 - The project under consideration does not conflict with the actions envisaged in implementation of Community Directives proposed as measures for the Attiki Water Department (EL06).
 - Furthermore, the project under consideration does not conflict with the additional measures provided for in the River Basin Management Plan for the Water of Attica (EL06).

The project under study is not related to:

- Increased abstraction of water from surface or underground water resources
- Increased production of liquid or solid waste which may affect surface or underground water resources.
- 8.8.1.3 <u>Checking the project's compatibility with the provisions of any approved Flood Risk Management Plan</u>

According to data from the Ministry of the Environment and Energy (www.ypeka.gr/Default.aspx?tabid=252):

• The designation of the Potential High Flood Risk Zones in Greece's 14 Water Districts has been completed and an update of the Preliminary Flood Risk Assessment Report (22-11-2012) has been

submitted to the Commission.

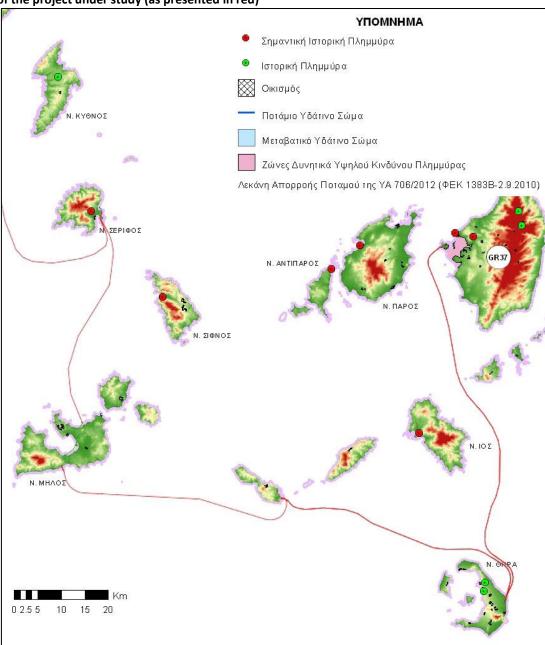
- In implementation of Joint Ministerial Decision 31822/1542/E103 (Government Gazette, Series II, No 1108/21.7.2010), which transposed into national law Directive 2007/60/EC of the European Parliament and of the Council of 23^{October} 2007 on theassessment and management of flood risks, the Ministry of the Environment, Energy and Energy completed and submitted to the European EIOET database:
 - (A) up-to-date data on historical floods recorded in the 14 Water Districts of the country which have caused significant negative impacts.
 - Areas of high flood risk potential for the whole territory;
- These data constitute the first stage of implementation of this Joint Ministerial Decision and Directive
 on the 'Preliminary assessment of flood risks' and the identification of 'Potential High Flood Risk Zones'
 per Department of Water.
- Pursuant to Article 10 of Directive 2007/60/EC and Article 9 of Joint Ministerial Decision 31822/1542/E103 (Government Gazette, Series II, No 1108/21.7.2010), which transposed into national law Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, the data of the Preliminary Flood Risk Assessment for the 14 Water Districts of Greece were made public.

Water District 14 "Aigaiouth Islands"

The figure below presents an extract from the Plan 'Potential High Flood Risk Zones — Water District 14 "Aigaiouan Islands" and the location of the project under study. The location of the project is not located in the vicinity of a Potential High Flood Risk Zone, except in the case of the island of Naxos, where a potentially high flood risk zone is located within 1 km of the project area.

Figure 8.8-1 Extract from the Plan 'Zones Potential High Flood Risk - Water District 14 'Aigaiou, Islands" and the

location of the project under study (as presented in red)

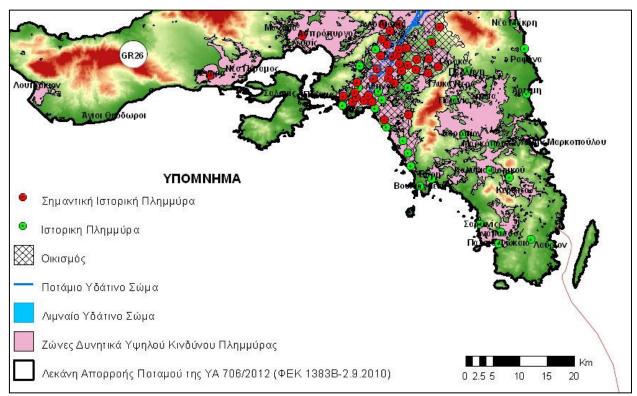


<u>Source</u>: project "Zones High Flood Risk Zones — Water District 14 "Aigaiouth Islands"" (Special Secretariat for Water, 2012)

Water District 06 'Attiki'

The figure below presents an extract from the Plan 'Zones Potential High Flood Risk — Water District 06 'Attica' and the project under study located in the Water District in question. The location of the project under consideration is not close to an area with a potentially high flood risk zone, as the closest is to the north-west of Lavrio, approximately 10 km away. It should be noted that a Historical Flood has been recorded in the area of the settlement of Lavrio, but it is located 2-3 km south of the project summary.

Figure 8.8-2 Extract from the Plan 'Zones Potential High Flood Risk — Water District 06 'Attiki' (Special Secretariat for Water, 2012) and location of a project under study (as presented in red)



Source: Project 'Zones Potential High Flood Risk — Water District 06 'Attica' (Special Secretariat for Water, 2012).

8.8.2 Surface water

8.8.2.1 Description of surface natural or artificial hydrographical network in the study area

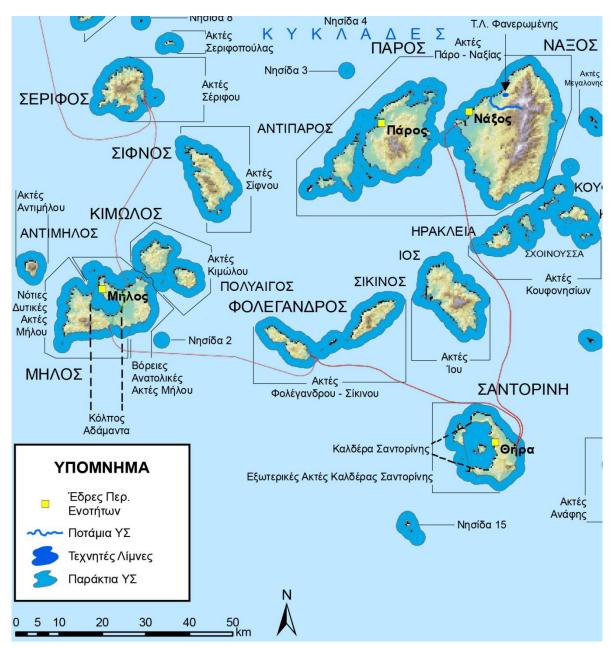
Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

The definition of water bodies is one of the main steps in the process of drawing up Greece's water management plans, as provided for by Greek legislation and on the basis of the European Water Directive. Surface waters are defined as: Rivers, Lakes, Coastal Waters and Transitional Waters.

River water bodies

River water bodies are not found in the location area of the project under study, according to the data presented in the approved 1st revision of the River Basin Management Plan of the South Aegean Water District (EL14).

Figure 8.8-3 Position of the project under study and correlation with surface water bodies in the Water Department of the Aegean Islands (EL 14), as shown in red.



<u>Source</u>: Draft 'Surface Water Systems' of the approved 1st revision of the River Basin Management Plan of the South Aegean Water District (EL14), Special Secretariat for Water, 2017.

Lake water bodies

Lake water bodies are not present in the location area of the project under study.

Coastal and transitional water bodies

According to Article 2 of the Directive, coastal waters concern a zone of one mile from the coastline, while the transitional ones concern partially salty waters close to the mouths and coastlines.

The berthing location of the island of Serfou is located in the following coastal WB:

• 'EL1437C0063N — Sief coasts',

The bottling position in the northern Milos is hereinafter the coastal WB:

• 'EL1437C0076N — Northern Eastern Coast of Milos'.

The mooring position in the southern Milos is the following coastal WB:

• 'EL1437C0077N — South Western Coast of Milos'.

The mooring site of the island of Folegandrou is located in the following coastal water bodies:

'EL1437C0080N — Sicinos — Florandrou coasts'.

The mooring site of the island of Thira is the following coastal WB:

• 'EL1437C0084N — Santorinis caldra exterior coasts'.

The mooring location of the island of Naxos is the following coastal WB:

• 'EL1437C0066N — Faculty — Nice'.

The submarine part of the project passes east through the following coastal WB:

'EL1437C0070N — Koufonis Islands coast'.

The table below shows the coastal water bodies present in the area of the project under study.

Table 8.8-1 Coastal water bodies of the water district of the Aegean Islands and types in the area of the project under study

System code	System name	Type of	Coastline length (km)
Cyclades LAP (EL1437)			
EL1437C0063N	Sierfou coast	IIIE	156,38
EL1437C0076N	Northern Eastern coasts of Milos	IIIE	140,86
EL1437C0077N	Southern Western coast of Milos	IIIE	140,44
EL1437C0080N	Coast of Sicino-Folegandrou	IIIE	217,38
EL1437C0084N	Extraneous calf coast of Santorini	IIIE	135,75
EL1437C0066N	Coast of Paro — Nice	IIIE	691,181
EL1437C0070N	Koufonis beaches	IIIE	290,81

<u>Source</u>: approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14), Special Secretariat for Water, 2017

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

River water bodies

River water bodies are not present in the location area of the project under study.

Lake and transitional water bodies

Lake and transitional water bodies are not present in the location area of the project under study.

Coastal water bodies

The following figure shows an extract from the map entitled 'Surface water bodies of the Water Department of Attica' the approved 1 revision of the River Basin Management Plan of the Attica Water District (EL06) (Special Secretariat for Water, 2017).

In the area of the project under consideration, there is the coastal water body 'EL0626C0003N Sea of Lavrio-Makronisos', where the landing point is located in the Regional Unit of Lavretica and passes part of the submarine cable.

Figure 8.8-4 Position of the project under study and correlation with surface water bodies in the Attiki Water District (EL 06), as shown in red.



<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Attica Water District (EL06) (Special Secretariat for Water, 2017).

8.8.2.2 <u>Description of existing uses, both statutory and actual, of surface water resources</u>

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

Total annual water requirements in the Aegean islands (EL14) were estimated at $204,5 \times 10^6 \text{m}^3$. As shown in the table below, the main water needs relate to irrigation and water supply, which account for 54.5 % and 44.3 % of the total water needs respectively. Water needs to meet livestock needs represent a very small percentage of 1.2 %, while the need for industrial use is minimal.

The table below presents the estimate of the total annual water needs for all uses.

Table 8.8-2 Annual Water Needs in the YW of Aegean Islands (EL14) per Use

Water supply	Livestock farming	Irrigation	Industry	Total total
^{HM} 3/year				
90,66	2,39	111,36	0,05	204,5
44.33 %	1.17 %	54.45 %	0.02 %	

Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Water Department of the Aegean Islands (EL14) (Special Secretariat for Water, 2017).

One of the main issues faced by a large part of the Aegean islands is the supply of water needs due to the lack of water that occurs mainly in the summer months. To meet these needs, which are of immediate priority, desalination plants have been built on several islands in addition to the exploitation of groundwater by means of boreholes and surfaces via reservoirs and ponds, while in others the needs are also met by means of water transport by aquifers.

On the basis of all the information collected, it is estimated that the supply of water through desalinations is in the order of 10 %, while water transport accounts for 1 % and concerns islands mainly on the Cyclades and the Dodecanese.

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

In the Attica Basin Basin (EL0626), total annual withdrawals to cover the needs for all activities and uses amount to $^{\sim}503.4 \text{ hm}^3$. Water supply, which is the main water user, consumes 82.7 % ($^{\sim}$ 416.2 hm 3) of total water abstractions, followed by irrigation with abstractions amounting to $^{\sim}13.2$ % of total abstractions ($^{\sim}66.7 \text{ hm}^3$), industry with $^{\sim}3.7$ % ($^{\sim}18.5 \text{ hm}^3$) and livestock farming with $^{\sim}0.4$ % (2.1 hm 3).

The table below presents the estimate of the total annual water needs for all uses.

Table 8.8-3 Estimation of total annual needs for all uses in the Attica FYR (EL06)

Water supply	Livestock farming	Irrigation	Industry	Total total
^{HM} 3/year				
416,2	2,1	66,7	18,5	503,4
82.7 %	0.4 %	13.2 %	3.7 %	

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Attica Water District (EL06) (Special Secretariat for Water, 2017).

8.8.2.3 <u>Presentation of available quantitative and qualitative data in the main flows and waters</u> affected by the project

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

As already mentioned above:

- River water bodies are not present in the location area of the project under study.
- Lake water bodies are not present in the location area of the project under study.
- The berthing location of the island of Serfou is located in the following coastal WB:
 - 'EL1437C0063N Serif coast',
- The bottling position in the northern Milos is hereinafter the coastal WB:
 - o 'EL1437C0076N Northern Eastern Coast of Milos'.
- The mooring position in the southern Milos is the following coastal WB:
 - o 'EL1437C0077N Southern Western Coast of Milos'.

- The mooring site of the island of Folegandrou is located in the following coastal water bodies:
 - 'EL1437C0080N Sicino-Folegandrou coasts'.
- The mooring site of the island of Thira is the following coastal WB:
 - 'EL1437C0084N Santorini calf exterior coasts'.
- The mooring location of the island of Naxos is the following coastal WB:
 - 'EL1437C0066N Faculty Nice'.
- The submarine part of the project passes east through the following coastal WB:
 - 'EL1437C0070N Koufonis Islands coast'.

Meeting the water needs in the South Aegean region is a top priority both because the water needs of the population need to be met and for the maintenance of the main sector of the islands' economy, tourism. A second priority is water for irrigation and for meeting livestock needs, since on most islands (usually small ones) the primary sector is not the main factor in their economy and then water for industrial use, which is in any case small on the islands. Larger islands (e.g. Rhodes) which have the soil resources for intensive cultivation require significant amounts of water that compete with them to meet water needs. In this case too, the first priority is water supply and then the construction of land improvement works that will meet the island's irrigation needs.

A general observation is the existence of many coastal streams draining most of the water district, making it difficult to exploit surface waters. Also, the development of karst, mainly open to the sea aquifers poses additional difficulties in the exploitation of underground water reserves (overexploitation, brackishing). The quantity of groundwater estimated from the hydrological balance can only be used to a small extent. This percentage varies on the various islands and depends on the terrain, the formation of hydrogeological basins with a hydraulic barrier to the sea, and the geology and tectonics of the area.

In particular, the drinking water needs of the islands of the YW Aegean are met by drilling underground capacity, transporting water by aquifers, desalination plants and ponds.

In particular for the islands of the South Aegean (Cyclades and Dodecanese), the main source of drinking water is groundwater (fully covered by groundwater needs, e.g. on the islands of Karpathos, Antiparos, Kea, Kythnos, etc.), but a large proportion of water needs are covered by desalination plants (full coverage in Syros and a large proportion of several islands), water transport by vessels (Amorgos, Leps, Agathonis, Kimolios, etc.) and reservoirs (e.g. Anafis).

On most islands water needs are covered by more than one source of drinking water (e.g. on the island of Thira, for 2014, 54 % were covered by groundwater, 46 % by desalting and 0.35 % by ship transport, while in Sifnos 60 % by desalates and 40 % by groundwater). In many regions of the islands there is a deficit, especially during the summer period.

Finally, in most islands it is necessary to repair or build distribution networks and water storage tanks. The supply of water to the 12 anhydrous islands, which belong to the Cyclades and the Dodecanese, is provided by means of water transport by aquifer vessels.

According to the assessment of the total extent of pressures on surface water resources found in the study area, the following points should be noted:

• In the coastal water body 'EL1437C0063N — Coastal Serifou', low-intensity anthropogenic pressures are exerted by the presence of a port, marina, desalination plant and a small number of industrial

plants.

- In the coastal water body 'EL1437C0076N Northern Eastern Coasts of Milos', medium-intensity
 anthropogenic pressures are exerted by the presence of a port, marina, desalination plant and several
 industrial plants.
- In the coastal water body 'EL1437C0077N Southern Western Coasts of Milos', low-intensity anthropogenic pressures are exerted by the presence of a port, marina, desalination plant and a small number of industrial plants.
- In the coastal water body 'EL1437C0080N Coasts of Sicin-Folegandrou', low-intensity anthropogenic
 pressures are exerted by the presence of a port, marina, desalination plant and a small number of
 industrial plants.
- In the coastal water body 'EL1437C0084N External coasts of Santorini calf', low-intensity anthropogenic pressures are exerted by the presence of a port, marina, desalination plant and a small number of industrial plants.
- In the coastal water body 'EL1437C0066N Coastal Village Nice', low-intensity anthropogenic
 pressures are exerted by the presence of a port, marina, desalination plant and a small number of
 industrial plants.
- In the coastal water body 'EL1437C0070N Koufonisia coasts', low-intensity anthropogenic pressures
 are exerted by the presence of a port, marina, desalination plant and a small number of industrial
 plants.

The ecological and chemical status of this water body is shown in the table below.

Table 8.8-4 Ecological and chemical status of coastal water bodies in the project area

		Natural/	Ecological	Chemical	Level of Confi	dence	Overall			
Code	System name	HMWB status/Pote ntial		status	Ecological	Chemical	situation			
Cyclades LAP (EL1437)										
EL1437C0063N	Sierfou coast	Natural	High	Good	1	1	High			
EL1437C0076N	Northern Eastern coasts of Milos	Natural	High	Good	1	1	High			
EL1437C0077N	Southern Western coast of Milos	Natural	High	Good	1	1	High			
EL1437C0080N	Coast of Sicino- Folegandrou	Natural	High	Good	1	1	High			
EL1437C0084N	Extraneous calf coast of Santorini	Natural	High	Good	1	1	High			
EL1437C0066N	Coast of Paro — Nice	Natural	High	Good	1	1	High			
EL1437C0070N	Koufonis beaches	Natural	High	Good	3	1	High			

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Water Department of the Aegean Islands (EL14) (Special Secretariat for Water, 2017).

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

As already mentioned above:

- River water bodies are not present in the location area of the project under study.
- Lake water bodies are not present in the location area of the project under study.
- Transitional water bodies are not present in the location area of the project under study.

In the area of the project there is the coastal water body 'EL0626C0003N Sea of Lavrio-Makronisos'. The ecological and chemical status of this water body is shown in the table below.

Table 8.8-5 Ecological and chemical status of transitional water bodies in the project area

Cada	System name I/HMW		Ecological	Chemical	Level of Confidence		Overall
Code	System name	I/HMW status/Pote B ntial		status	Ecological	Chemical	situation
EL0626C0003N	Lavrio- Makronos Sea	Natural	Good	Good	1	1	Good

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Water Department of Attica (GR06) (Special Secretariat for Water, 2017).

8.8.2.4 Available changes over time and trends in surface water quality and quantity evolution

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

In accordance with the approved '1st Review of the River Basin Management Plan of the South Aegean Water District' (Special Secretariat for Water, 2017), the change in the quality of coastal water bodies falling within the project area is shown in the table below:

Table 8.8-6 Trends of changes in ecological and chemical status of coastal water bodies in the project area

Code System name		Natural/		ological s/Potential	Chemical status		Comments
Code	System name	HMWB	1 ^{the}	1st Revision	1 ^{the}	1st Revision	
Cyclades LAP (EL	1427)		RBMP	of RBMPs	RBMP	of RBMPs	
Cycludes LAP (EL	.1437)						New methodological
EL1437C0063N	Sierfou coast	Natural	Good	High	Unknow n	Good	approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0076N	Northern Eastern coasts of Milos	Natural	Good	High	Unknow n	Good	New methodological approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0077N	Southern Western coast of Milos	Natural	Good	High	Unknow n	Good	New methodological approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0080N	Coast of Sicino- Folegandrou	Natural	Good	High	Unknow n	Good	New methodological approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0084N	Extraneous calf coast of Santorini	Natural	Good	High	Unknow n	Good	New methodological approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0066N	Coast of Paro — Nice	Natural	High	High	Unknow n	Good	New methodological approach to grouping schemes (on ecological status). Expert judgement (on chemical status)
EL1437C0070N	Koufonis beaches	Natural	Good	High	Unknow n	Good	Results of a National Monitoring Network. Expert judgement on chemical status

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Water Department of the Aegean Islands (EL14) (Special Secretariat for Water, 2017).

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

In accordance with the approved '1st Review of the River Basin Management Plan of the Water Department of Attica' (Special Secretariat for Water, 2017), the change in the quality of the coastal water body falling within the project area is set out in the table below:

Table 8.8-7 Trends of changes in ecological and chemical status of coastal water bodies in the project area

Code System name		System name Natural/		Ecological // status/Potential		cal status	Comments	
Code	System name	HMWB	1 ^{the} RBMP	1st Revision of RBMPs	1 ^{the} RBMP	1st Revision of RBMPs		
Cyclades LAP (EL1437)								
EL0626C0003 N	Lavrio- Makronos Sea	Natural	High	Good	Unknow n	Good	Area change due to corrections resulting from more precise delimitation — New methodological approach to grouping systems. No exceedances observed	

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Attica Water District (EL06) (Special Secretariat for Water, 2017).

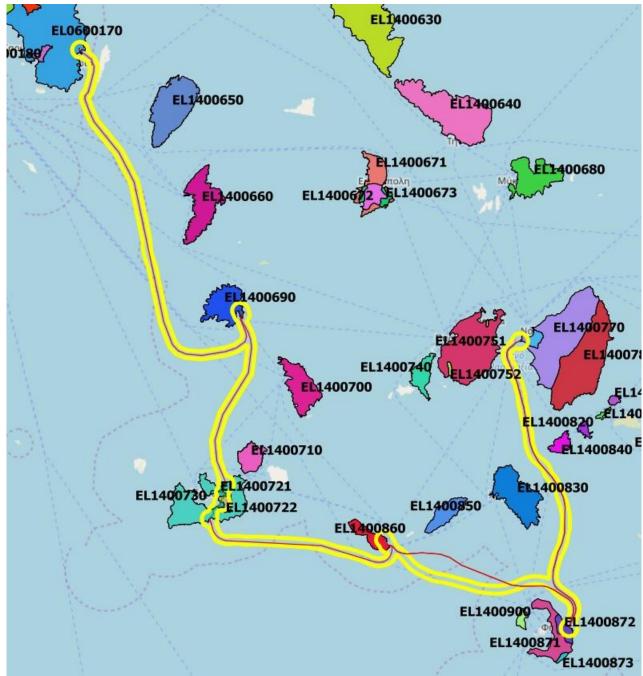
The above mentioned surface water bodies do not belong to the surface water bodies with the greatest problems due to point or diffuse sources of pollution.

8.8.3 Groundwater

8.8.3.1 <u>Description of hydrogeological characteristics of the study area</u>

The groundwater water systems within which the project falls are presented in the figure below.

Figure 8.8-5 Position of the project under study and correlation with groundwater bodies in the Water Department of the Aegean Islands (EL 14), as presented in red. Yellow shows the study area.



Source: Geoportal, Special Secretariat for Water, http://wfdgis.ypeka.gr/, 2020.

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

The geological formations on the islands of the Water District are very diverse. In particular, the islands of the Cyclades constitute the metamorphic cyclic mass with the presence of marble, crystalline limestones, slates and tastes. It develops on almost all the islands of Cyclades, Ikaria and Samos. Local granitic penetrations are observed (Serifos, Naxos, Myconos, Paros, etc.).

The groundwater bodies found in the background of the study area, where the project under study is located, are as follows:

- Underground water system EL1400690 Noochia, Sierfou Island, is found in the background of the
 wider area where the Sirfou Water Board and the underground Message of Serifou are located. The
 groundwater body EL1400690 develops into medium to low permeability granite. It is a fracture
 aquifer with an area of 72.46 km².
- The underground water system EL1400721 Zefyria (A), theisland of Milos, is located in the background of the wider area where the new Milos water body and parts of the underground Message Unit of the Prefecture of Milos are located. The groundwater body EL1400721 develops into quaternary deposits and moderately complete volcanic formations. It is a granular aquifer with an area of 7.9^{km²}.
- The underground water system 'EL1400722— Zefyria (B)', the island of Milos, is located in the background of the wider area where part of the underground Unitof V Milos is located. The groundwater body EL1400722 develops in quaternary deposits and moderately complete volcanic formations. It is a granular aquifer with an area of 7.39 Km².
- The groundwater system 'EL1400730 *Milos'*, 'EL1400730 *Milos'*, Island of Milos, is located in the background of the wider area where parts of the underground Unit of V.M. Milos and the underground Unit of the Prefecture of Milos are located. The groundwater body EL1400730 develops into volcanic rocks of compact low to very low permeability. It is a cracking aquifer with an area of 142.08^{km²}.
- The groundwater system 'EL1400860— Folandrou', Island of Folegandrou, is located in the background of the wider area where the new Folegandro Water System and the underground G.M. Folegandrou are located. The groundwater body EL1400860 develops in medium to low permeability shale and marble rotation. It is a cracking/carstical aquifer with an area of 32.09 Km².
- In the background of the wider area where both the new water body and the underground G.M. Thira are located, there is an underground water system 'EL1400872 Kamari-Ferion Merchant (B)', the island of Thira. The groundwater body EL1400872 develops on an old-soil horizon and low permeability volcanic formations. It is a granular aquifer with an area of 17.84 Km².
- Underground water system EL1400770— Central Naxos Kourou Kourou, Island of Naxos, is located in the background of thewider area where the underground GM of Naxos is located. The underground water body EL1400770 develops in granitic/mixed rocks, and low to very low permeability marble and slate. It is a cracking/carstical aquifer with an area of 213.97 Km².
- In the area of study of the project on the island of Naxos, but 2 km to the east of the project, the groundwater system 'EL1400760— meadow', theisland of Naxos, is present. The groundwater body EL1400760 develops into moderately complete alluvial deposits. It is a granular aquifer with an area of 11.35^{km²}.

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The MW of Attica develops in an area with a multifaceted relief, the main feature being the development of long and variable directions of mountain masses, which are characterised by intermediate lowland basins. In the north and west of the MW area, the mountains of Parnithas, Kitheronas, Patera and Geranias are located mainly in the direction A-D. In the eastern part, Pentel grows from north to south with the Grammatiko-Marathon mountains and the mountains of Ymitto and Lavretica. Pentli has approximately cyclical growth, while in Hymatto and Lavretic the mountain axes are arranged from north to south. In the middle of the area, the Kifissos basin lying through the river of the same name in the direction of B.BA to the N.N.D. In the eastern part there is still the inner basin of the Mesogeia with the coastal zone of Marathona — Nea Makris, while in the west the Thriassio Pedio and Megara basins. The mountains are constructed from the geological base of the area and the quaternary sediment basins, with the edges of the Tritogian formations.

The geological background of the area is constructed by two distinct systems delimited approximately along the imaginary line of the Kifissos drainage axis. In the east there are mainly metamorphic and pyrogenic rocks (marbles, various slates, crystalline limestones, dolomites, meta-volcanic rocks, granite), which are part of indigenous (Almuropotamos — Attica) and incubated tectonic units (unit of neo-Greek tectonic cover). To the west (Parnitha, Kitheronas, Patera, part of the Cereanias) sedimentary carbon lines with flysch of the subpelagic unit (Pelagenic non-metamorphous formations) appear. The intermediate lowland basins are mostly of Mocene age and most of them are characterised by neotoctonal activity.

Underground water system 'EL0600170 — Lavretica' is found in the background of the wider area where the submerging point and the underground GM of the Lavreitiko D.E. are located. Its extent is 361.77 km².

The system comprises a large number of different types of aquifers, mainly with low capacity, which develop in the crystallistic and post-alpine rocks of the Attica peninsula, in the area south of the imaginary line Vari-Kalyvia Thoriko-Porto Raphtis, to Sunio. More specifically, the system develops: (a) karstic aquifers in upper marble formation based either on the Kamara underlying slate or sea level, (b) carbic aquifers in the formation of lower marble developed on the basis of sea level, and (c) granular aquifers in the quaternary sediment mass in the Legra, Passa Pigadi, Lavrio, Thoric and Keratea basins.

8.8.3.2 Description of existing uses, both statutory and actual, of groundwater resources

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The existing uses of water bodies within the study area are as follows:

- 'EL1400690 Nothchia', Sirfou Island: Most of the water body consists of pastures, while a significant part is cropped. Finally, other uses occupy relatively small areas. A relatively large number of abstractions can be observed from the National Register of Hydro-Placing Points (NCS), while total abstractions are estimated at 1.37x106^m3/y.
- 'EL1400721 Zefyria (A)', Island of Milos: Most of the water body consists of crops, while a significant
 part concerns pastures and urban use. Finally, other uses occupy relatively small areas. Very few
 abstractions are recorded by the NRA, while total abstractions are estimated at 0.15x106^m3/y.
- 'EL1400722 Zefyria (B)', Island of Milos: Almost all of the water body consists of crops, and a significant part concerns pastures. Finally, other uses occupy relatively small areas. The NRA does not record abstractions, while total abstractions are estimated at 0.08x106^m3/y.
- 'EL1400730 Milos', Island of Milos: Most of the water body consists of pastures, while a significant part is crop and forest. Finally, other uses occupy relatively small areas. Water abstractions are

observed by the NHS in the north-east, while total abstractions are estimated at 0.56x106^m3/y.

- 'EL1400860 Folgeandrou', Folegandrou Island: Most of the water body consists of pastures, while
 a significant part concerns crops. Finally, other uses occupy relatively small areas. The NHS records a
 abstraction, while total abstractions are estimated at 0.03x106^m3/y.
- 'EL1400872 Kamari Friendon Merchant (B)', Island of Thira: Almost all of the water body consists of crops, while other uses occupy relatively small areas. A significant number of abstractions are recorded by the NRA, while total abstractions are estimated at 1.39x106^m3/y.
- 'EL1400770 Central Naxos Kourou', Naxos Island: Most of the water body consists of pastures, while a significant part concerns crops. Finally, other uses occupy relatively small areas. A large number of abstractions have been observed by the ESY mainly in the southern part, with total abstractions estimated at 8.48x106^m3/y.
- 'EL1400760 meadow', Naxos Island: Almost all of the water body consists of crops, while a significant part is for urban use. Finally, other uses occupy relatively small areas. A significant number of abstractions are recorded by the NRA and total abstractions are estimated at 1.98x106^m3/y.

The table below presents data on the annual supply and extractions from groundwater bodies found in the study area.

Table 8.8-8 Annual feed and extractions from groundwater bodies found in the study area

Code	Name:	Annual average feed (10 ⁶ m ³)	Average annual withdrawals (10 ⁶ m ³)	Irrigation (10 ⁶ m ³)	Water supply (10 ⁶ m ³)	Livestock (10 ⁶ m ³)	Industry (10 ⁶ m³)	Quantitative status of the groundwater system
EL1400690	Nothchia	1.96	0.30	0.07	0.23	0.003	0.000	Good
EL1400721	Zefyria (A)	0.32	0.15	0.15	0.00	0.001	0.000	Good
EL1400722	Zefyria (B)	0.07	0.08	0.08	0.00	0.001	0.000	Bad
EL1400730	Apple	6.10	0.56	0.55	0.00	0.011	0.000	Good
EL1400860	Folegandrou	3.18	0.03	0.02	0.01	0.000	0.000	Good
EL1400872	Karavriou- Verion — Merchant (B)"	1.22	1.39	0.31	1.08	0.000	0.000	Bad
EL1400770	Kentriki Naxos — Kourou	11.16	8.48	8.40	0.00	0.078	0.001	Good
EL1400760	Meadow	0.91	1.98	1.97	0.00	0.009	0.000	Bad

<u>Source</u>: approved 1 revision^{of the} Management Plan for the Water Department of the Aegean Islands (EL14).

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

The background to the wider study area is the 'EL0600170 — Lavreticus' underground water system. The area of the system is dominated by areas with natural vegetation, while land uses include agricultural and residential uses. At the same time, there are uses of the secondary sector relating to a power plant, metal, perfume, food and oil mills. The groundwater body is abstracted to meet local needs.

The system's supply is estimated to be close to $^{20x10.6}$ m³, while the take-offs are estimated to be about $3.92x10^6$ m³ according to the estimates of the deliverable.

Table 8.8-9 Annual feed and extractions from groundwater bodies found in the study area

Code	Name:	Annual average feed (10 ⁶ m ³)	Average annual receipts (10 ⁶ m ³)	Irrigation (10 ⁶ m ³)	Water supply (10 ⁶ m ³)	Industry (10 ⁶ m³)	Quantitative status of the groundwater system
EL0600170	Lavatics	20	3.92	3.16	0.42	0.32	Good

Source: approved 1^{revision of the} Attiki Water District Management Plan (EL06).

8.8.3.3 <u>Presentation of available quantitative and qualitative data to the main underground aquifers</u> <u>as well as to those affected by the project</u>

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

The table below gives for the groundwater bodies found in the background of the study area the chemical and quantitative status determined and the existing trends in pollution or falling levels due to over-abstraction.

Table 8.8-10 Quantitative — chemical status of underground bodies found in the background of the study area

WWB code	Name of HWB	Quantitativ e status	Chemical status	Increased data prices due to natural background	Increased prices data elements anthropogenic effect	Marine penetra tion	Main pressures
EL1400690	Nothchia	Good	Good				Livestock, landfill, waste water treatment plant
EL1400721	Zefyria (A)	Good	Good	Natural background: As, Pb	Local Sailing stitching		Local over- exploitation
EL1400722	Zefyria (B)	Bad	Bad	Mn, Zn and Pb, As, Cr, Ni	Sailing stitching	YES	
EL1400730	Apple	Good	Good				XADA, SAL
EL1400860	Folegandrou	Good	Good	CL			LANDFILL, WASTE WATER TREATMENT PLANT
EL1400872	Karavriou- Verion — Merchant (B)"	Bad	Bad	SO4, As, Fe, Mn, Pb	Sailing stitching	YES	NAO
EL1400770	Kentriki Naxos — Kourou	Good	Good	CL, SO4, Al, Ni	Local nitrates		Agriculture, Livestock farming, landfill, landfill, waste water treatment plant
EL1400760	Meadow	Bad	Bad	As, Ni	Stitching, Nitrates, Sulphates	YES	Agriculture, SAL Livestock farming,

<u>Source</u>: approved 1 revision^{of the} Management Plan for the Water Department of the Aegean Islands (EL14).

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

The table below presents the results of the characterisation of groundwater bodies (WBs) found in the background of the project area, based on their chemical and qualitative assessment.

Table 8.8-11 Quantitative — chemical status of underground bodies found in the background of the study area

WWB code	Name of HWB	Quantitativ e status	Chemical status	Increased values of anthropogenic impact elements	Main pressures	Marine penetration
EL0600170	Lavatics	Good	Good	No ₃ , Cl, metals	Georgia Urbanisation Industry	Local

Source: approved 1^{revision of the} Attiki Water District Management Plan (EL06).

8.8.3.4 Available changes over time and trends in groundwater quality and quantity evolution

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14) (Special Secretariat for Water, 2017)

The following table shows the changes in the quantitative and qualitative status of the water bodies located in the project area, as set out in the approved 1st revision of the River Basin Management Plan of the South Aegean Water District (EL14) of 2017, compared to the first River Basin Management Plan of the South Aegean Water District of 2015.

Table 8.8-12 Trends of changes in quantitative and qualitative status of the Health Services in the project area

	_	Quantitat	tive status	Qualitat	ive status	Comments
Code	System name	1 ^{the} RBMP	1st Revision of RBMPs	1 ^{the} RBMP	1st Revision of RBMPs	
EL1400690	Nothchia	Good	Good	Good	Good	
EL1400721	Zefyria (A)	Good	Good	Good	Good	Local continentalisation
EL1400722	Zefyria (B)	Bad	Bad	Bad	Bad	Overexploitation of aquifer. Increased concentrations of Cl.
EL1400730	Apple	Good	Good	Good	Good	_
EL1400860	Folegandrou	Good	Good	Good	Good	
EL1400872	Karavriou- Verion — Merchant (B)"	Bad	Bad	Bad	Bad	Overexploitation of aquifer. Increased concentrations of Cl.
EL1400770	Kentriki Naxos — Kourou	Good	Good	Good	Good	Local nitrates
EL1400760	Meadow	Bad	Bad	Bad	Bad	Overexploitation of aquifer. Increased concentrations of Cl.

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Water Department of the Aegean Islands (EL14) (Special Secretariat for Water, 2017).

Four out of 7 of the total water bodies found in the project study area in the Water Department of the Aegean Islands are assessed with good quantitative and qualitative status. 3 ("EL1400722 — Zefyria (B)", Island of Milos, "EL1400872 — Karari — Freis — Merchant (B)", the Island of Thira and "EL1400760 — meadow", the island of Naxos) have consistently poor quality and quantitative status, mainly due to over-abstraction and marine penetration of the aquifer.

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (ELO6) (Special Secretariat for Water, 2017)

The following table shows the changes in the quantitative and qualitative status of the Water System 'EL0600170 — Lavretic' located in the project area, as presented in the approved 1st Review of the River Basin

Management Plan of the Attica Water District (EL06) of 2017, compared to the first River Basin Management Plan of the Attica Water District of 2013.

Table 8.8-13 Trends of changes in quantitative and qualitative status of the Health Services in the project area

Carla	Contain	Quantitat	ive status	Qualitati	ve status	Comments
Code	Code System name		1st Revision of RBMPs	1 ^{the} RBMP	1st Revision of RBMPs	
EL0600170	Lavatics	Good	Good	Good	Good	Local continentalisation

<u>Source</u>: approved 1^{revision of the} River Basin Management Plan of the Attica Water District (EL06) (Special Secretariat for Water, 2017).

Therefore, the groundwater bodies found in the background of the wider area of the project under study do not show any trends of qualitative or quantitative degradation.

8.9 Risks to human health, cultural heritage and/or the environment, in particular due to accidents or disasters

8.9.1 Natural catastrophe risk

This section presents the risks to human health, cultural heritage and/or the environment, due to accidents or disasters, identified in the study area, taking into account the current state of the environment, without taking into account the project being studied. The effects resulting from the vulnerability of the project under study to risks of major accidents or disasters are set out in the corresponding section ('9.14') of Chapter 9 of this EIA.

In the wider study area the causes of natural origin that may pose a risk to human health, cultural heritage and/or the environment are:

- Earthquakes
- Fires
- Floods

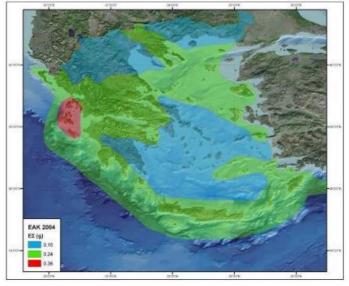
Based on the geological and tectonic characteristics of the area, there is no risk of landslides/settlement catastrophes. The following paragraphs set out the natural disaster risk elements for the region.

8.9.1.1 <u>Seismic risk</u>

The tectonic characteristics of the area are described in section 8.4.2.

On the basis of the Greek Earthquake Regulation, Greece is divided into three seismic risk zones I, II and III, the limits of which are laid down in Greece's seismic hazard map.

8.9-1 Map of seismic risk map of Greece



Source: New Greek Earthquake Regulation

A ground seismic acceleration value A=a*g (g: gravity acceleration) according to the table below.

Seismic risk zone	1	=	III
Seismic risk zone	0,16	0,24	0,36

The values of the soil seismic accelerations in the table are estimated on the basis of seismic data to have a 10 % probability of being exceeded over the next 50 years.

According to the New Earthquake Regulation, the largest part of the project area belongs to zone I. The territorial acceleration reduced to the gravity acceleration for this zone is α =0.16. The island of Hunt is the only one belonging to Zone II with a territorial acceleration of α =0.24.

8.9.1.2 Flood risk

As explained in paragraph 8.13.1.3, in accordance with the Flood Risk Management Plan for the Flood Basin of the Waters of the Aegean Islands (EL14) and the Flood Risk Management Plan for the Flood Basin of the Waters of Attica (EL06), the study area is outside zones Potential High Flood Risk.

8.9.1.3 Fire hazard

From the data on agro-forestry fires of the Hellenic Fire Brigade, the Ministry of Citizen Protection, for the period 2013-2019 in the wider study area, the following applies:

- 255 fires have been recorded in the municipality of Lavretica, while the total burnt area is 5.91 km². The competent forest office of the study area in the D. Lavreikou is the Lavrio Forestry Authority.
- 48 fires have been recorded in the municipality of Serifou, while the total burnt area is 17.87 km². The competent forest office of the study area in the D. Serifou is the Mileus Forestry Office.
- 19 fires have been recorded in the municipality of Milos, while the total burnt area is 0.95 km². The competent forest office of the study area in the Mulos D. is the Mileus Forestry Office.
- 1 fire has been recorded in the municipality of Folegandrou, while the total burnt area is 0.08 km². The competent forest office of the study area in the D. Folegandrou is the Naxos Forestry Office.
- 30 fires have been recorded in the municipality of Thira, while the total burnt area is 0.22 km². The
 competent forest office of the study area in the D. Thira is the Naxos Forestry Office.
- 179 fires have been recorded in the municipality of Naxos and Micro-Cyclades, while the total burnt area is 11.34 km². The competent forest office for the study area in D. Naxos and Midon Cyclades is the Forest Headquarters of Naxos.

From the recorded fires, it can be observed that those that occurred on grassland (82.06 %) predominate, followed by forest land (11.29 %) and agricultural land (4.92 %).

Table of 8.9-1 forest fires in the Municipality of Lavretica 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	56	0	57,7	0	46,6	0,7	58	0	0
2014	57	100	2.841	0	737	0	926	0	0
2015	37	5	20	0	29	0	30	0	0
2016	42	104	602	0	47	2	61	3	0
2017	32	0	1,6	0	84,4	1,7	3,6	0,8	0
2018	19	0	12,7	0	77,65	0	17,1	0	0

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2019	12	0	4,05	0	29,54	2,9	2	5	0

Source: Greek fire brigade, https://www.fireservice.gr/el/synola-dedomenon

Table of 8.9-2 forest fires in the Municipality of Serf 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	13	0	87	0	14225,4	13	16	30	0
2014	6	0	0	0	268	5	15	0	0
2015	4	0	0	0	194	1	0	0	0
2016	6	0	0	0	342	0	50	0	0
2017	5	0	0	0	66,5	0,2	0	0	0
2018	8	0	0	0	2330,7	10,6	40,6	0,1	0
2019	6	0	0	0	127,7	0,5	3,3	0	0

Source: Greek fire brigade, https://www.fireservice.gr/el/synola-dedomenon

Table of 8.9-3 forest fires in the Municipality of Milos 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	2	0	0	0	10	0	3	0	0
2014	3	0	0	0	400	0	0	0	0
2015	5	0	35	0	31	0	5	0	0
2016	5	0	0	0	467	0	0	0	0
2017	1	0	0	0	0	0	0	0	0,1
2018	2	0	0	0	1	0	0	0	0
2019	1	0	0	0	1	0	0	0	0

Source: Greek fire brigade, https://www.fireservice.gr/el/synola-dedomenon

Table of 8.9-4 forest fires in the Municipality of Folegandrou 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	0	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0
2016	1	0	30	0	20	0	30	0	0
2017	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0

<u>Source</u>: Greek fire brigade, https://www.fireservice.gr/el/synola-dedomenon

Table of 8.9-5 forest fires in the Municipality of Thira 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	13	0	0	0	129,1	0	2	0	0,1
2014	3	0	0	0	22	0	0	0	0

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2015	3	0	0	0	5	0	0	0	1
2016	1	0	0	0	0	0	0	0	0
2017	4	5	0	0	40	0	15	0	0
2018	5	0	0	0	1,8	0	0,1	0,6	0
2019	1	0	0	0	1	0	0	0	0

<u>Source</u>or: Greek fire brigade, https://www.fireservice.gr/el/synola-dedomenon

Table of 8.9-6 forest fires in the Municipality of Naxos and Small Cyclades 2016-2018

Year	Number of fires	Forests (str)	Forest area (str)	Brown (str)	Site(s) (strem)	Reeds — Walloon (str)	Agricultural Areas (str)	Crop residues (strem)	Skoupi- Dopies (strem)
2013	18	0	23	0	392,8	0,5	202,7	0	0
2014	31	0	0	0	1.393	251	0	0	0
2015	31	0	0	0	467	4	1	0	10
2016	36	6	165	0	6.738	29	9	2	0
2017	26	0	153	0	413	8,7	46,6	10,4	0
2018	22	0	70	0	610	0,5	208,5	0,3	0,7
2019	15	0	0	0	66	13,5	40,5	0,1	0

<u>Source</u>: Greek fire brigade, <u>https://www.fireservice.gr/el/synola-dedomenon</u>

The largest fire in the area had occurred in 2013 in Agia Marina on the island of Serfou (with a burnt area of 13000 hectares. Grassland and 87 stremma Forest land).

8.10 Trends in the development of the environment

8.10.1 Assessment of trends in the area's environment

Electricity adequacy

In the near future, the existing system in Attica and the Cyclades with the SES Serifou, Milos, Thira and Lavrio is expected to face significant and growing capacity problems due to Directives 2010/75/EU and (EU) 2015/2193 if no measures are taken to meet the requirements of these Directives.

This takes into account the very high variable production costs due to the use of oil in local production plants, which is reflected in a very significant burden on consumers to cover public utilities (over 300 million. EUR 1 000 000 per year). Given the high annual growth rate of island loads, these costs are expected to increase over time, increasing energy costs for consumers while reducing the level of reliability of supply, especially in cases of damage to the production system.

Penetration of RES

The penetration of RES in the electricity mix of the islands to date is rather limited, despite their rich wind and solar potential, which is due to the considerable stability problems that the high penetration of RES in an isolated electricity system such as the islands may cause.

If the project is not implemented, the problems of RES penetration in the electricity transmission system will persist, preventing the energy and climate objectives of the European Directives for 2020, 2030 and 2050, which are set out below.

Targets for 2020:

- reducing greenhouse gas emissions by at least 20 % compared to 1990 levels
- abstraction of 20 % of energy from renewable sources
- improving energy efficiency by 20 %.

Targets for 2030:

- 40 %reduction in greenhouse gas emissions
- at least 27 % EU energy from renewables
- increase energy efficiency by 27-30 %
- 15 % electricity interconnection (i.e. 15 % of electricity generated in the EU can be transported to other EU countries)

Objective for 2050: An 80-95 % cut in greenhouse gases compared with 1990 levels.

In view of all the above, it is concluded that, without implementing the project under consideration, the electricity adequacy of the islands under study and the achievement of the national RES targets are called into question.

8.10.2 Thematic changes and trends over time

The table below presents thematically changes and trends in the environment of the study area, without the project under study.

	Trends in the development of the environment							
Environmental Modules	Study area at the Regional Unit of Lavreotikos	Study area on the island of Serof	Study area on the island of Milos	Study area on the island of Foleganros	Study area on the island of Thira	Study area on the island of Naxos		
Climate — bioclimate — Formatology — Landscape	0	0	0	0	0	0		
Geology — Soil	0	0	0	0	0	0		
Natural environment	_	0	0	0	0	0		
Marine environment	0	0	0	0	0	0		
Anthropogenic environment	0	+	+	+	+	+		
Social — economic environment	0	+	+	+	+	+		
Atmospheric — acoustic environment	_	0	0	0	0	0		
Electromagnetic fields	0	0	0	0	0	0		
Water resources	0	0	0	0	0	0		

0: Neutral trends

—: Downward trends

+: Trends of improvement

9. ENVIRONMENTAL IMPACT ASSESSMENT AND EVALUATION

9.1 Methodological requirements

This section describes, assesses and evaluates the likely significant effects that the project is likely to have on the environment in both the construction and operational phases. The assessment/evaluation of the environmental effects produced shall take into account three main aspects of the environmental impact assessment/assessment:

- Location of the project under consideration. This parameter concerns the species and sensitivity —
 vulnerability of environmental media expected to be under environmental pressures from the
 project under study.
- Technical operational characteristics of the project. It concerns the type, size and mode of operation of the project under consideration.
- Techno-economically feasible measures to prevent, address environmental impacts and restore the environment.

The effects caused shall be assessed in both the construction and operational phases of the project, in terms of the following sub-environmental characteristics:

- Impact nature (positive negative neutral). It refers to the type of effects/effects.
- Magnitude of impacts (significant, moderate, weak). This designation is directly related to the examination of the above-mentioned assessment/environmental impact assessment parameters.
- Duration of impacts (short-term, long-term). It refers to the duration of the impact.
- Reconstructability by physical processes (reversible, partially reversible, irreversible). It relates to the potential to curb the environmental impacts caused by natural processes.
- Possibility of dealing with artificial means (addressable, partially manageable, unaddressable). It
 relates to the potential to address the environmental impacts caused by the construction of
 appropriate technical works/applications (anti-pollution technologies, environmental rehabilitation
 projects, etc.).
- Geographical reference level for environmental impact assessment/assessment (local level, study
 area level, wider area level). It refers to the geographical reference level for which environmental
 impacts are assessed assessed.

The following is followed by an assessment/evaluation of the effects caused by the construction and operation of the proposed project, broken down by environmental instrument, and the individual response measures proposed in this study are presented in Chapter 10.

9.2 Impacts related to climatic and bioclimatic characteristics

9.2.1 Effects on microclimate and bioclimatic characteristics are assessed and assessed

The project under consideration is not expected to have any significant adverse effects on the climate and microclimatic characteristics of the design area, both in the construction and operational phases.

The **construction** of the projects under consideration is not related to the clearing of forest vegetation or drying areas covered by surface water, which could result in changes in the microclimate of the area. Details of these procedures are set out below:

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- During the construction of the new water bodies, deforests and earthworks will be carried out, involving interventions of limited surface area within the land of the water bodies.
- The underground project in all the individual study areas in both the Regional Unit of Lavreotikos and the islands of Serphos, Milos, Foleganro, Thira and Naxos is provided for along the existing road network and there will be no deforesting of existing natural vegetation.

In conclusion, the construction of the project under consideration is not related to the deforestation of a single area of significant area covered by natural vegetation or emissions of significant amounts of gaseous or particulate pollutants, which may have an impact on the microclimate and the bioclimatic characteristics of the study area.

The **operation** of the projects under consideration is not related to the increased production of gaseous pollutants or to the significant increase in ambient temperature.

9.2.2 Emissions of hot or cold gases or significant changes in thermal capacity

The construction and operation of the proposed projects is not related to significant hot or cold gas emissions or significant changes in thermal capacity. In the construction phase of the proposed projects, gaseous pollutants are expected to be produced by the machinery and vehicles to be used in the construction. The duration of the construction of the project will be limited and due to the nature of the project, the sites will be sited close to and along the project and will each include a limited number of machinery and vehicles and therefore emissions of gaseous pollutants will be limited.

On the other hand, according to ADMIE's planning, with the connection of the southern and western islands to the ESMIE, the final objective of Phase D Interconnection of the Cyclades "...is to enable the cold reserve of all the GFCs operating on the Cyclades islands whose interconnection is proposed by the project in question, namely the islands of Thira, Milos and Serifs, and to initiate their gradual dismantling. In this way, the maximum cost savings to be borne by the Public Utility Services (SGI) due to the operation of oil units and the reduction of gaseous pollutants shall be achieved."

Therefore, the effects on emissions of hot or cold gases in the **construction phase** are estimated to be **neutral**, while in the **operational phase** of the project they are estimated to be **moderate positive** and **long-lasting** from the moment when the Hunt, Milos and Serif PSDs are placed in cold reserve.

9.2.3 Greenhouse gas emissions from the construction and operation phases of the project

The normal gas and particulate pollutants associated with **construction** sites will be produced in the construction phase of the projects. The assessment of the pollutants to be produced was presented in Chapter 6 of this Study. The construction of the project under consideration is not related to significant greenhouse gas emissions. The construction of the project under consideration will be carried out in several parts and a limited number of machines will be used. The individual sections of the project will be assembled and welded in the project area, but they will be constructed in their production plant.

The **operation** of the proposed projects is related to the reduction of greenhouse gas emissions because, as mentioned in the previous paragraph 9.2.2, the islands of Thira, Milos and Serfos may be electrified by the Transmission System (ESMIE) with a stream produced by less stringent means such as RES and the combustion of natural gas, unlike the current use of PPP plants (which emit significant amounts of CO₂ due to the combustion of fuel oil).

Therefore, the effects on emissions of hot or cold greenhouse gases in the **manufacturing phase** are estimated to be weak, **negative** and **short-term**, **partially reversible** and **partially manageable**, and concern only the **local level**. In the **operational phase** of the project, they are estimated to be **moderate positive** and **long-lasting** from the moment when the LDCs of Thira, Milos and Serif are placed in cold reserve.

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¹ ADMIE, 'Ten-Year Transmission System Development Plan 2019-2028, Plan to RAE' (Athens, March 2018)

9.3 Impact on morphological and ecologic characteristics

9.3.1 Changes in the image of the wider region

The changes in the image of the wider area and of the project area are set out below, broken down by part of the project and an overall assessment of the image of the wider area.

9.3.1.1 Construction phase

D.Lavretica D.C.

During the construction phase of the underground sections of the project at the Regional Unit of Lavreotikos, no significant impact on the landscape of the study area is expected. The underground project shall be constructed for a length of 907 m. The works will be limited along the existing road network and will not affect areas of particular aesthetic value, since the entire project is located within or around the Lavrio Energy Centre (AES) plot.

Municipality of Serifou

Construction work will be carried out for the construction of the new Sirfou Water Station in an area of around 17 hectares, where deforesting, excavation and infiltration will be carried out to configure the area and then construction works for the installation of the equipment. To the west of the area of the water/C, the agglomeration of Livadi is present at a distance of approximately 900 m (this distance concerns the boundary of the agglomeration, while the distance of the water/body from the centre of the agglomeration exceeds 1 500 m). The project is located in the middle of poor areas in the north-east of EYL Serifou, so that no significant impact on the aesthetic environment of the settlement is expected from the construction works in question.

No significant impact on the landscape of the study area is expected during the construction phase of the Underground Unit of the Serifou Regional Unit. The underground project is constructed for a length of 1539 m. The works will be limited along the existing road network and will not affect areas of particular aesthetic value.

Municipality of Milos

Construction work will be carried out in an area of approximately 13.6 hectares for the construction of the new Milos water body, where deforesting, excavation and inflammation will be carried out to configure the area and then construction works for the installation of the equipment. To the west of the area of the water body, the agglomeration of Kanavas is present at a distance of approximately 500 m. The project is located amid crops, 250 m to the east of the MIL and therefore no significant impact on the aesthetic environment of the settlement is expected from these construction works.

No significant impact on the landscape of the study area is expected during the construction phase of the underground Unit of North Milos. The underground project shall be constructed for a 7 500 m length. The works will be limited along the existing road network, which passes through grassland, shrubs and cultivated areas with dispersed residential construction and will not affect areas of particular aesthetic value.

No significant impact on the landscape of the study area is expected during the construction phase of the underground Unit of the Southern Milos. The underground project is constructed for a 6 650 m length. The works will be limited along the existing road network, which passes through shrubs and cultivated areas with dispersed settlements and will not affect areas of particular aesthetic value.

Municipality of Folegandrou

Construction work will be carried out in an area of around 17 hectares for the construction of the new Folegander Water Board, where clearing, excavation and inflammation will be carried out to configure the

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area and then construction works for the installation of the equipment. The project is located in the midst of meadows and crops south-east of the water/Board area, the settlement of Karavostase is present at a distance of about 300 m. According to the information provided, no significant impact on the aesthetic environment of the agglomeration is expected from the construction works in question.

No significant impact on the landscape of the study area is expected during the construction phase of the underground Unit of Folegandrou. The underground project is constructed for a length of 2 038.74 m. The works will be limited along the existing road network, which passes through grassland and cultivated land, but also through the settlement of Karastatase (for a section of approximately 1.5 km) and will not affect areas of particular aesthetic value.

D.E. Hunting

For the construction of the new Hunting water, construction work will be carried out in an area of around 21 hectares, where clearing, excavation and infiltration will be carried out to configure the area and then construction works for the installation of the equipment. The new Hunting water will be installed within the conurbation of monolith (the distance of the water/body from the centre of the agglomeration is more than 500 m). The project is located in the middle of poor areas in the north-west of the APS Thira, so that no significant impact on the aesthetic environment of the settlement is expected from the construction works in question.

No significant impact on the landscape of the study area is expected during the construction phase of the underground GM of Thira. The underground project is constructed for a small section of 718 m in length. The works will be limited along the existing road network and will not affect areas of particular aesthetic value.

Naxos D.E.

No significant impact on the landscape of the study area is expected during the construction phase of the underground GM of Naxos. Construction of the underground project is carried out for a very small section, with a length of only 528 m. The works will be limited along the existing road network and will not affect areas of particular aesthetic value as the route passes through shrubs, well away from the nearest settlement.

Submarine Project

During the laying phase of the submarine sections of the transmission line, no significant negative effects on the aesthetic environment of settlements are expected since the cable routing zone is more than 1 km from the nearest inhabited islands which will not be interconnected (Paris and Kimolios). The cable route passes very close to the island of Macron (at 400 m), but due to the specific nature of the island and the absence of settlements, no negative effects are expected.

In conclusion, the impact on the landscape in the **construction phase** of the project is estimated to be **moderate negative** and **short-term**, **partially manageable** by appropriate measures, **partially reversible**, also taking into account the fact that the construction phase will be limited in time).

9.3.1.2 Operation phase

In the operational phase of the underground and underwater part of the project, the impact on the landscape is neutral, as the project and impacts will not be visible only and if maintenance work is required, which will be short-term.

As regards the visual disturbance that may arise in the settlements close to the project as a result of the construction of the new water bodies on the islands of Serphos, Milos, Fologrou and Hunt, it is worth noting that their construction will follow the local architectural specifications in order to harmonise them as much as possible in the circular landscape.

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In conclusion, it is estimated that the impact on the project's **operational phase** in the aesthetic environment is **weak**, **negative** and **long-lasting**, **partially manageable** and partially reversible by appropriate measures.

9.3.2 Possibility of breaking the line of horizon/natural shapes/landscape paints

By study area and in its entirety, the project under study is not expected to break the line of the horizon and the natural shapes and colours of the landscape. The underground and submarine parts of the project are not related to relevant potential impacts. As regards the construction of the four water bodies/C, their design and the colours to be used help to avoid breaking the landscape colours in the area where the proposed projects are located.

9.3.3 Compatibility of the forthcoming changes with regard to the European Landscape Convention, ratified by Law 3827/2010 (GG I 30)

As already mentioned above, the projects under study are not expected to have a significant negative impact on the landscape of the study area or the wider area, so there is no question of incompatibility of the changes to the landscape caused by the implementation of the proposed projects in relation to the provisions of the European Landscape Convention, which was ratified by Law 3827/2010 (GG I 30).

9.4 Effects related to geological, tectonic and soil characteristics

9.4.1 Alteration, fragmentation of the external surface of rocks

9.4.1.1 <u>Construction phase</u>

The potential changes related to alteration/segmentation of the external surface of the rock present in the location area of the project under study are related to:

- construction work for young water bodies on the islands of Serof, Milos, Foleganro and Hunt.
- work on drilling the cantons where the underground part of the GM will be installed and laying the cables of the underground part of the project;
- work on the setting of the submarine section of the G.M.,

For the works planned for the construction of the proposed water bodies on the islands of Serphos, Milos, Fologrou and Hunt, an area of approximately 68.6da must be occupied, which is located amid meadows, crops and residential construction.

As regards the soil balance of the project under consideration, please note the following:

- For the construction of the new Sierfou water body, the excavation volume of the site is approximately 25 000 m³⁽ for a 55 m level), while the volume of infusions is approximately 4 000 m^{3.} There will therefore be a surplus of material volume of around 21 000 m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.
- For the construction of the new modulus, the excavation volume of the site is approximately³ 000 m³ (for a level of 7 m), while the volume of infusions is approximately 300^{m³}. There will therefore be a surplus of material volume of around 2.700 m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in

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landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.

- For the construction of the new Folegandro bath, the excavation volume of the site is approximately 6 000 m³ (for a 55 m level), while the volume of infusions is about 13 000 m³. There will therefore be a surplus of material volume of around 7 000m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.
- For the construction of the new Hunting water, the excavation volume of the site is approximately 9 500 (3 500+ 6 000)m³, while the volume of infusions is approximately 11 300 (11 000+ 300) m³ for an equilibration level of 13.5 m in the eastern part of the substation and 20 m in the west. Consequently, there will be no surplus of materials, but there will be a need for additional infiltration of approximately 1 800 m³which will be covered either by the construction of cable cheques or by alternative CDE management systems.
- As regards the underground parts of the project, please note the following:
 - In the Regional Unit of Eastern Attica, the volume of excavation material was estimated at⁴ 000 m³-5 000 m 3, of which 25 % will be reused (i.e. 1 000 m³ -1 250 m³material). Surplus material of a volume of about 2.750 m 3– 4 000 m³ will therefore arise⁻
 - In the Milos Regional Unit, the volume of excavation materials was estimated at⁴⁸ 000 m³52 000 m 3, of which 25 % will be reused (i.e. 12 000 m³ -13 000 m³materials). Surplus
 material of a volume of around 35 000 m 3 to 40 000 m³ will therefore arise.
 - o In the Regional Unit of Hunting, the volume of excavation material was estimated at 8 000 m³ -9.500 m 3, of which 25 % will be reused (i.e. 2 000 m³ -2.375 m³material). Surplus material of a volume of about 5 525 m 3-7.500 m³ will therefore arise.
 - In the Regional Unit of Naxos, the volume of excavation materials was estimated at 1 500 m³
 -2 000 m 3, of which 25 % will be reused (i.e. 375 m³ to 500 m³materials). Thus, surplus material of a volume of about 1 000 m³ 1.625 m³ will arise.
 - o In the Superfou Regional Unit, the volume of excavation materials was estimated at 5 000 m³-7 000 m³, of which 25 % will be reused (i.e. 1 250 m³-1 750 m³). Therefore, surplus material of a volume of around 3 750 m³-5 250 m³ will occur.
 - In the Folegandrou Regional Unit, the volume of excavation materials was estimated at 7 000 m³-9 000 m³, of which 25 % will be reused (i.e. 1 750 m³-2 250 m³). Therefore, surplus material of a volume of around 5 250 m³-6 750 m³ will occur.

On the basis of the above, the total quantity of excavated material from the project for re-use or removal and tipping amounts to $53.3755~\text{m}^3-65.125~\text{m}^3$.

The excess material that will arise during the construction phase and cannot be used in the construction works shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials can be used in inactive quarries or through alternative management systems.

Account should also be taken of the legislation in force, namely Ministerial Decision No 36259/1757/E103/2010 onmeasures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (Government Gazette, Series II, No 1312, 2010), as amended

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by Law No 4030/2011 on anew way for the issuing of building permits, building controls and other provisions (Government Gazette, Series I, No 249, 2011), according to which (Article 40on matters relating to waste from excavation, construction and demolition (Government Gazette, Series I, No 249)):

- 1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
- Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Account will also be taken of Law 4014/2011 on the environmental authorisation of projects and activities, arbitrariness in connection with the creation of an environmental balance and other provisions falling within the remit of the Ministry of the Environment(Government Gazette, Series I, No 209) and, more specifically, Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity':

- Paragraph 2 states that: 'The installations and works resulting from the technical design of projects or activities at a stage following the issue of a DAEC, such as construction sites, depots, car service stations, centres for the servicing and maintenance of works or activities, toll stations, noise protection projects, specification of technical measures and terms of the DAEC of the project, shall be approved by submission and evaluation of a Technical Environmental Assessment (Technical Environmental Assessment) to the authority responsible for the environmental permit, by decision of its Director-General. The following conditions are necessary for the submission and approval of TEMM: a) the general assessment of the impact and the provision of general and/or specific conditions and restrictions for such installations and works in the DAEC and b) the express provision in the DAEC of the project or activity of the possibility to submit and approve TEMM.'
- Paragraph 4 provides that: 'For projects or activities, the use as a storage chamber of an area already extracted and inactive on forest or reforestation land shall be permitted for the sole purpose of restoring it and integrating it into the natural surroundings of the area. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.'

With regard to the total occupation area of the project under consideration, please note the following:

- In the construction phase, the area of occupation of the project under consideration is 462.28da.
- In the operational phase, the permanent occupation area of the project concerns **69.82da** and concerns the new substations to be built. The underground parts of the project will have been rehabilitated. Land covered by grassland and crops will be occupied mainly and to a lesser extent located in settlements.

The table below shows in detail the total occupation area of the project under study.

Table Error! No text of specified style in document.-1 Total area occupied by project under study

Sub-parts of the project	Occupation area in the construction phase (m²)	Occupation area in the operational phase (m²)
Thira substation	21.151	21.151
Milos substation	13.609	13.609

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Sub-parts of the project	Occupation area in the construction phase (m²)	Occupation area in the operational phase (m²)
Folegandrou substation	16.808	16.808
Serifou substation	17.026	17.026
Underground project in the Regional Unit of Eastern Attica	2.102	24
Underground project in the Regional Unit of Thira	1.214	0
Underground project in the Regional Unit of Milos (including wells)	28.429	384
Underground project in the Regional Unit of Naxos (including wells)	1.055	0
Underground project in the Regional Unit of Serifos (incl. wells)	2.787	48
Underground project in the Regional Unit of Folegandros (incl. wells)	3.775	96
Link shafts in Lavrio	56	56
Liaison shafts in Serif	112	112
Link shafts in the Milos	112	112
Association shafts in Folegandro	224	224
Link shafts in Hunting	112	112
Connection shaft in Naxos	56	56
Submarine section of Lavrio — Serifou	109.390	0
Submarine section of Serifou-Milou	46.790	0
Underwater section of Milos-Folegandrou	55.290	0
Submarine section of Folegandrou-Thira	59.990	0
Submarine Department of Thira-Naxou	82.190	0
Total total	462.28	69.82

During the period of operation, only the occupation of the bathing ground and the junction manholes of the cables located in the land sections shall be considered as occupation.

Please note that the following areas were not counted in the above table, as they do not concern additional occupation:

- Lavrio Hotspot 26 622.04 m 2⁽ an existing project)
- H/S of Naxou 22 783.31 m $2^{(1)}$ this is an existing substation)

In conclusion, effects related to alteration/spreading of the outer surface of rocks are assessed as **moderate negative**, **short-term**, **partially manageable** and partially reversible by appropriate measures.

9.4.1.2 Operation phase

The operation of the proposed project, due to its nature, will not lead to significant changes in the morphology of the area where it is developed.

In the operational phase of the underground sections of the project at the Regional Unit of Lavreotikos and on the islands of Serphos, Milos, Fologanros, Thira and Naxos and the relevant submarine sections, no noticeable effects are expected related to the alteration, fragmentation of the external surface of the rock. The intervention area of the underground sections of the project (which is the existing road network) will be restored once the construction works have been completed. As regards the submarine cable, it is placed from the foreshore and up to 30 m from the coastline initially in a 2.5 m wide pit with a depth of 2 m covered with a concrete. After this, and up to a depth of 15 metres, the cables are placed in a pit with a depth of 2 m and a width of approximately 1 m. Then, for the rest of the journey, the cable is placed in a 1 metre depth pit. In the case of a rocky seabed, this pit should be at least 1 and 0.5 m deep respectively, unless a depth of 0.5 m cannot be reached, in which case cables shall be protected by the use of cement bags, pig iron covers or any equivalent method of protection, depending on the conditions.

In conclusion, in the operational phase of the proposed projects, the effects on the morphology and soil characteristics of the study area are assessed as **neutral**.

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9.4.2 Possible destruction of specific geological features

Due to their nature, the projects under consideration are not expected to cause the destruction of specific geological characteristics, since the proposed interventions concern surface projects which should be based on the ground and not underground projects.

9.4.3 Possible occurrence of geological phenomena of special significance

9.4.3.1 <u>Construction phase</u>

The construction of the proposed projects is not related to the construction of trenches or embankments of significant size, which may cause unstable situations on the ground of the location of the projects. In more detail, please note the following with regard to the projects under study:

- A volume of approximately 25 000 m³ (for a 55 m level level) is provided for in the new Sierfou area, while the volume of infusions is approximately 4 000^{m³}.
- A volume of approximately 3 000 m³ (for a level of 7 m) is provided for in the area of the new water/piece body, while the volume of infusions is approximately 300^{m³}.
- Excavations of a volume of about 6 000 m³ (for a level of 55 m) are provided for in order to shape the area of the new body/body, while the volume of infusions is approximately 7 000^{m³}.
- For the construction of the new Hunting water, the excavation volume of the site is approximately 9 500 (3 500+ 6 000)m³, while the volume of infusions is approximately 11 300 (11 000+ 300) m³, for an equilibration level of 13.5 m in the eastern part of the substation and 20 m in the west. Consequently, there will be no surplus of materials, but there will be a need for additional infiltration of approximately 1 800 m³which will be covered either by the construction of cable cheques or by alternative CDE management systems.
- In the underground sections of the project, the transport line is located along the existing road network, in a net with a typical depth of about 1.7 m and a typical width of about 1.9 m. In the submarine part of the project, the transport line is initially located from the coastline and up to 30 m distance in a 2 m and 2.5 m deep canteen. After this and up to a depth of 15 metres, the cables are placed in a pit of 2 m depth and approximately 1 m wide. Then, for the rest of the journey, the cable is placed in a 1 metre depth pit. In the case of a rocky seabed, this pit should be at least 1 and 0.5 m deep respectively, unless a depth of 0.5 m cannot be reached, in which case cables shall be protected by the use of cement bags, pig iron covers or any equivalent method of protection, depending on the conditions.

Consequently, the projects under consideration are surface projects and not underground projects and it is therefore considered that if the construction phase complies with the requirements of good construction practice, the excavations and foundations of the projects cannot give rise to phenomena of special importance, such as subsidence or landslides.

9.4.3.2 Operation phase

The operation of the proposed projects is not related to the application of significant loads on the ground of the location of the projects, which may lead to unstable situations. As a result, no relevant negative impacts are expected.

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9.4.4 Impact on the quality characteristics of the soils in the study area

9.4.4.1 Likelihood of soil contamination

9.4.4.2 Construction phase

In the construction phase of the projects under consideration, it is envisaged to generate the usual liquid waste generated in construction projects, taking into account that the poles, but also the underground and underwater parts of the project consist of pre-constructed sections, which are not built in the project area.

Chemical toilets will be installed for the collection of urban waste water generated by the staff working on the construction of the projects. Assuming a construction site of 10-12 people, a waste water supply is estimated to be equal to:

50 lit/person/day x 10-12 individuals = $500 \text{ lit/day or } 0.5^{\text{m}}3/\text{day}$.

The waste water collected will be disposed of through licensed companies which will manage the waste water appropriately. Used Lubricant Oil Waste (PFL) resulting from the machinery and construction equipment will be collected and stored in a temporary storage of liquid waste until it is delivered to approved waste water collectors. The construction machinery is not to be washed or maintained in the construction area, as this will be done either in specialised workshops.

For the disposal of liquid waste, Health Decree No E1 β /221/1965 (GG II 138) on waste water disposal and industrial waste, as amended by Nos Γ 1/17831/07.12.1971 (GG II 986), Γ 4/1305/02.08.1974 (Government Gazette, Series II, No 801) and Δ .Y Γ 2/ Γ . Π . oik. 133551/30.09.2008. Law 4042/2012 on criminal protection of the environment — harmonisation with Directive 2008/99/EC — Waste generation and management framework — Harmonisation with Directive 2008/98/EC — Regulation of matters relating to the Ministry of the Environment, Energy and Climate Changeis also in force.

The collection and rational management of waste water from the construction site ensures that the possibility of pollution of the soils in the study area is minimised. Measures shall be taken to prevent soil contamination in the event of leakage of fuel and machinery oils. Both during construction and at the end of the works, waste materials will be removed and care will be taken to avoid soil contamination by leaking machinery, etc.

9.4.4.3 Operation phase

During the operational phase of the project under consideration, any liquid waste resulting from the maintenance of the equipment will be collected and delivered to companies authorised to manage it.

A watertight tank will be constructed for the drainage of the proposed new water bodies on the islands of Serphos, Milos, Fologanro and Hunta, if it is not possible to connect to the relevant municipal sewage network. The watertight tank will be evacuated at regular intervals by a licensed company, which will manage the waste water appropriately.

During the operation of the projects, solid waste will be generated periodically from the maintenance work of the equipment of the project. Such waste, if hazardous, will be delivered to authorised companies for appropriate disposal. If they are not hazardous, they will be either recycled or recovered (e.g. metallic materials) or if they fall within the category of municipal waste they will be disposed of in landfills.

Finally, during the operational phase of the project, no adverse effects related to soil pollution are expected, either due to leaks of lubricants or dust emissions from the operation of the machinery to be used for the maintenance of the GMM. Both during and after these works, care will be taken to avoid soil contamination from possible leaks of machinery.

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9.4.4.4 Deterioration of soil quality

In the context of the planned projects, no negative effects are expected due to the long-term deposition of materials in the form of piles. More specifically, with regard to the earths estimated for the implementation of the proposed projects:

- For the construction of the new Sierfou water body, the excavation volume of the site is approximately 25 000 m³(for a 55 m level), while the volume of infusions is approximately 4 000 m³. There will therefore be a surplus of material volume of around 21 000 m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.
- For the construction of the new modulus, the excavation volume of the site is approximately³ 000 m³ (for a level of 7 m), while the volume of infusions is approximately 300^{m³}. There will therefore be a surplus of material volume of around 2.700 m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.
- For the construction of the new Folegandro bath, the excavation volume of the site is approximately 6 000 m³ (for a 55 m level), while the volume of infusions is about 13 000 m³. There will therefore be a surplus of material volume of around 7 000m³. The surplus of materials that cannot be used in the construction of the project shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials may be used in inactive quarries or through alternative management systems.
- For the construction of the new Hunting water, the excavation volume of the site is approximately 9 500 (3 500+ 6 000)m³, while the volume of infusions is approximately 11 300 (11 000+ 300) m³, for an equilibration level of 13.5 m in the eastern part of the substation and 20 m in the west. Consequently, there will be no surplus of materials, but there will be a need for additional infiltration of approximately 1 800 m³, which will be covered either by the construction of cable cheques or by alternative CDE management systems.
- As regards the underground parts of the project, please note the following:
 - o In the Regional Unit of Eastern Attica, the volume of excavation material was estimated at 4 000 m³-5 000 m 3, of which 25 % will be reused (i.e. 1 000 m³ -1 250 m³material). Surplus material of a volume of about 2.750 m 3– 4 000 m³ will therefore arise
 - In the Milos Regional Unit, the volume of excavation materials was estimated at⁴⁸ 000 m³-52 000 m 3, of which 25 % will be reused (i.e. 12 000 m³ -13 000 m³materials). Surplus material of a volume of around 35 000 m 3 to 40 000 m³ will therefore arise.
 - In the Regional Unit of Hunting, the volume of excavation material was estimated at 8 000 m³ -9.500 m 3, of which 25 % will be reused (i.e. 2 000 m³ -2.375 m³material). Surplus material of a volume of about 5 525 m 3-7.500 m³ will therefore arise.
 - In the Regional Unit of Naxos, the volume of excavation materials was estimated at 1 500 m³
 -2 000 m 3, of which 25 % will be reused (i.e. 375 m³ to 500 m³materials). Thus, surplus material of a volume of about 1 000 m³ 1.625 m³ will arise.

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- In the Superfou Regional Unit, the volume of excavation materials was estimated at 5 000 m³-7 000 m³, of which 25 % will be reused (i.e. 1 250 m³-1 750 m³). Therefore, surplus material of a volume of around 3 750 m³-5 250 m³ will occur.
- In the Folegandrou Regional Unit, the volume of excavation materials was estimated at 7 000 m³-9 000 m³, of which 25 % will be reused (i.e. 1 750 m³-2 250 m³). Therefore, surplus material of a volume of around 5 250 m³-6 750 m³ will occur.

On the basis of the above, the total quantity of excavated material from the project for re-use or removal and tipping amounts to $53.3755 \text{ m}^3 - 65.125 \text{ m}^3$.

The excess material that will arise during the construction phase and cannot be used in the construction works shall be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials can be used in inactive quarries or through alternative management systems.

Account should also be taken of the legislation in force, namely Ministerial Decision No 36259/1757/E103/2010 onmeasures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (Government Gazette, Series II, No 1312, 2010), as amended by Law No 4030/2011 on anew way for the issuing of building permits, building controls and other provisions (Government Gazette, Series I, No 249, 2011), according to which (Article 40on matters relating to waste from excavation, construction and demolition (Government Gazette, Series I, No 249)):

- 3. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
- 4. Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Account will also be taken of Law 4014/2011 on the environmental authorisation of projects and activities, arbitrariness in connection with the creation of an environmental balance and other provisions falling within the remit of the Ministry of the Environment(Government Gazette, Series I, No 209) and, more specifically, Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity':

- Paragraph 2 states that: 'The installations and works resulting from the technical design of projects or activities at a stage following the issue of a DAEC, such as construction sites, depots, car service stations, centres for the servicing and maintenance of works or activities, toll stations, noise protection projects, specification of technical measures and terms of the DAEC of the project, shall be approved by submission and evaluation of a Technical Environmental Assessment (Technical Environmental Assessment) to the authority responsible for the environmental permit, by decision of its Director-General. The following conditions are necessary for the submission and approval of TEMM: a) the general assessment of the impact and the provision of general and/or specific conditions and restrictions for such installations and works in the DAEC and b) the express provision in the DAEC of the project or activity of the possibility to submit and approve TEMM.'
- Paragraph 4 provides that: 'For projects or activities, the use as a storage chamber of an area already extracted and inactive on forest or reforestation land shall be permitted for the sole purpose of restoring it and integrating it into the natural surroundings of the area. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-

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General of the Decentralised Administration following a recommendation from the competent Forestor.'

9.4.4.5 Erosion of soils

Increased soil erosion is expected in areas where existing vegetation is predicted to be cleared for the needs of the project. As already mentioned above:

- In the construction phase, the occupation area of the project under consideration for the construction of the substationsconcerns ~ 68.6da. The area in question concerns the location of the new water bodies on the islands of Serphos, Milos, Fologrou and Thira. Areas covered by grassland, agricultural crops and, to a lesser extent, residential construction will mainly be occupied.
- The following were not counted towards the total occupation of the project:
 - The underground sections of the project in all the individual study areas in both the Regional Unit of Lavreotikos and the islands of Serph, Milos, Falangrou, Thira and Naxos because they are located on existing roads
 - The occupation of the submarine part of the project.
- In the operational phase, the permanent occupation area of the project concerns ~ 69.82da**relating** to substations and cable pitches.

In the construction phase, it is estimated that the projects under consideration will have weak negative effects related to soil erosion, compaction and sealing, taking into account the limited extent of occupation of the works. The above-mentioned effects are **assessed as negative**, **short-term**, **partially manageable** and partially reversible by appropriate measures.

During the operational phase of the works, the planned restorations will have been carried out on the substations and the transit area of the underground project. It should be noted that in the areas of the substations the deforests will take place within the proposed intervention area, while the existing vegetation will be maintained around. Therefore, **neutral** effects related to soil erosion are expected in the operational phase of the projects, as the surface of the project area will have been stabilised by the implementation of appropriate technical measures.

9.5 Impact on the natural environment

9.5.1 Impact on flora, fauna and ecosystems

Impact on vegetation categories and flora species

The main impacts expected on ecosystems, vegetation and flora species are mainly due to the occupation of the proposed projects and are related to the following works:

- the works required to open the proposed temporary access zones result from the occupation of part of the territory of the area where the works are located;
- the operation of the construction sites, the machinery for transporting, assembling and laying the underground transmission line and the other substructures of the project;
- the underground transport line is constructed along the existing road network, within the limits of its expropriation. As far as possible, construction shall be carried out on a deck, at the back or side of the road. If it is necessary to clear vegetation roadsides for construction purposes, it will be restored once the construction works have been completed. After completion of the construction works, the intervention area will be restored to the previous condition. The construction of the sub-section of the

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underground project may alter the vegetation roadside locally and on a very small scale. Thus, the direct impact of the construction of the project under consideration may be classified as temporarily weakly unfavourable to any vegetation developed on either side of the existing road network, but limited locally in the area of occupation of the planned technical project.

- o the installation of the underground transmission line,
- o work on drilling the cantons where the underground part of the GM will be installed and laying the cables of the underground part of the project;
- o work on the setting of the submarine section of the G.M.,
- o the construction works for the implementation of the extension projects to existing bathing facilities
- The individual parts of the project and their occupation area in the construction and operational phase are shown in the table below.

Due to the nature of the project, the habitat types and vegetation categories of the areas where the project is proposed to be located will not be further affected during its operational phase. The project affects, as thoroughly examined in the MEA accompanying this study (see Annex II), the terrestrial habitat types in the following Natura2000 sites.

SAC/SPA GR4220004

The direct impact of the construction of the project under consideration on the habitats and ecosystems of the ROP and the study area within SAC GR4220004 results from the occupation of part of the land in the area where the technical works for the project are located. The area covered by the works concerns the substation site (which is outside the Natura 2000 site), the area of the underground cable and the submarine cable area.

The construction of these projects will alter the natural state of the vegetation and the habitats on which they are developed locally and on a very small scale, as they require clearance and land formation within their catchment area.

Thus, the direct impact of the construction of the project under consideration may be classified as temporarily weakly detrimental to ecosystems and habitats, but locally limited to the immediate area of occupation of the proposed technical works, especially for those which are underground in the terrestrial environment or buried on the seabed for the marine environment.

However, it should be noted that the routing of the underground cable was designed to make the most of the existing road network in order to reduce as far as possible the occupation of ecosystems or other uses.

According to the assessment/assessment of impacts on the habitat types and species of flora examined in the META, the following results are found:

- The project is to occupy a total of 1.93 str. within SACs corresponding to 0.003 % of the total area of the SAC and 0.1 % of the area of the MIP.
- Of the projects, areas of 0.25 m² will be affected by four natural habitats and 1.67 m² in three human-induced land uses.
- Of the natural habitats, the largest areas occupied are habitat 5420 (0.08 str.) and habitat 1310 (0.03 str.). In particular, 0.007 % of the 5420 habitat and 3.1 % of 1310 are to be taken within the RIP.
- Smaller areas are occupied by habitats 21B0 (0.14 str.) and 1240 (0.01 str). In particular 3.2 % of the 21B0 habitat and 0.01 % of 1240 within the RIP are to be taken.

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- Most of the area occupied outside natural habitats concerns land use of 1025 (1.52 ha). Smaller areas are occupied by land use of 1050 (0.15 str.) and 1012 (0,003 str.).
- The areas covered by the project under consideration and located outside the SAC, i.e. part of the
 underground cable and the substation site, relate to areas with rusks for the substation, while the
 underground cable is located on the provincial road.
- The highest occupation rates are observed in habitats 21BO (3.2 %) and 1310 (3.1 %). Although the coverage rate is comparatively higher, due to the nature of the project the impact will be temporary and related to the construction phase. After the excavations for the laying of the cables, the drum will be filled with the appropriate material and the surface will be restored with material in place before the excavation. This will gradually allow the vegetation to re-cover the work area in habitat 1310. Type 21BO concerns beaches without vegetation, so restoration will be almost complete at the end of the works. Please note that habitat type 21BO is not included in Annex I to Directive 92/43/EU.

The above occupations result from the superimposition of the mapping of habitat types (NFCs) with the horizontal occupation of the project. Different scales of mapping and project design suggest that the project compares more areas of natural habitats. Considering that most of the project will be built on an existing road network, the above table's occupation estimates are considered to be the most unfavourable scenario of occupancy in natural habitats.

In view of the above, the effects on the habitat types of area GR4220004, as shown by MEAT, are classified as temporary and partially reversible.

SAC GR4220020

The direct impact of the construction of the project under consideration on the habitats and ecosystems of the ROP and the study area within SAC GR4220020 results from the occupation of part of the land in the area where the technical works for the project are located. The area covered by the works concerns the area of the substation, the area of the underground cable and the submarine cable area.

The construction of these projects will alter locally the natural state of the vegetation and the habitats on which they are developed, as they require clearance and land formation within their catchment area.

Thus, the direct impact of the construction of the project under consideration may be classified as temporarily unfavourable to ecosystems and habitats, but locally limited to the immediate area of occupation of the proposed civil works.

However, it should be noted that the routing of the underground cable was designed to make the most of the existing road network in order to reduce as far as possible the occupation of ecosystems or other uses.

The polygon of the total occupation of the project, followed by the total area required, was derived from the composition of all the components of the project. This reflected the areas of the substation, the underground cable zone and the submarine cable zone.

Part of the project under consideration falls within the area of SAC GR4220020 — 'Milos Island: Prophis Ilias — Wider Area'.

- The project is to occupy a total of 1.12 hectares within SACs corresponding to 0.002 % of the total area of the SAC and 0.3 % of the area of the MIP.
- The total area occupied (1.12 m²) concerns land use 1024 provincial roads.

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• The areas covered by the project under consideration and located outside the SAC, i.e. part of the underground cable and the substation site, relate to areas with rusks for the substation, while the underground cable is located on the provincial road.

In view of the above, and given that no areas are occupied within the natural habitat types, during the construction phase the habitat types of the MIP will not be significantly affected. **ABUSE OUTSIDE NATURA2000**

Table Error! No text of specified style in document.-2 Total area occupied by a project under consideration, outside Natura 2000 sites during the construction and operational phases.

Code	Name:	Occupation area in the construction phase	Occupation area in the operational phase
		(str)	(str)
		NAXOS	
TAA A	Bushes	1,02	
	Total:	1,02	0,056
		THIRA	
BOY	Arrows		
CAA	Agricultural crops A	22,38	
	Total:	22,38	21,263
		LOUNGE	
BOY	Arrows	0,48	
APK M	Juniper M	0	
CAA	Agricultural crops A	23,69	
GKE	Agricultural crops abandoned	0,98	
TMAS A	Shrubs A	2,45	
000	Housing development	0,51	
LIB	Meadows, sparse woody vegetation	2,33	
LFS	Other uses	0	
	Total:	30,44	14,105
		SERIFOS	
GKE	Agricultural crops abandoned	0,48	
LIB	Meadows, sparse woody vegetation	19,34	
	Total:	19,82	17,186
		NON-LAXITIC	
CAA	Agricultural crops A	0,08	
TMAS A	Shrubs A	0,9	
LIB	Meadows, sparse woody vegetation	0,6	
LFS	Other uses	0,27	
	Total:	1,85	0,08
		FOLIGANDROU	
CAA	Agricultural crops A	0,23	
GKE	Agricultural crops abandoned	7,98	
000	Housing development	0,42	

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Code	Name:	Occupation area in the construction phase	Occupation area in the operational phase
		(str)	(str)
LIB	Meadows, sparse woody vegetation	10,01	
	Total:	18,64	17,128
	TOTAL TOTAL	94,15	69,82

The occupation of the proposed project on the vegetation of the study area has been taken into account and concerns the following:

- For the Naxis during the construction phase, **1 02** ha and relates to areas occupied by shrubs. The permanent occupation during the operational phase of the project concerns the occupation of one connector well and amounts to 24^{m²}.
- For Hunt during the construction phase at 22.38 **str.**, it concerns arid land and agricultural crops. Permanent occupation during the operation phase of project 21.2 m² concerns the occupation of the substation of 21 159 hectares and two connector wells amounting to 48^{m²}.
- For the apple during the construction phase at **30.44** m², it concerns most of the agricultural crops, shrubs and arid areas. The permanent occupation during the operation phase of the 14.04 stremma project concerns the occupation of the substation of 13 608 hectares and 18 connector wells, which amounts to 0.432 ha.
- For Sieros during the construction phase at **19.82 m²**, it mainly concerns meadows, sparsely ligneous vegetation. Permanent occupation during the operational phase of project 17.098 str. concerns the occupation of the 17 026 stremma substation and three connector wells amounting to 72 m².
- For the Lavretic RD during the construction phase **1.85** m² and concerns shrubs, sparse grasslands, agricultural crops and other uses. The permanent occupation, during the operational phase of the project, concerns the occupation of two connector wells and amounts to 48^{m²}.
- In the case of Fleandro during the construction **phase** at 18.64 m², most of it concerns agricultural crops and sparsely ligneous meadows. The permanent occupation, during the operation phase of the 16.9 stremma project, concerns the occupation of the substation of 16.8 hectares and 4 connector wells, which amounts to 0.096 ha.

It is worth mentioning that the area covered also includes a part of the road network, as the works will be limited along the existing road network and on the roadside and are not expected to affect areas with natural vegetation.

Deforestation in the catchment area of the project under study is not a significant loss from the point of view of natural flora, as the species to be deforested are predominantly typical vegetation occurring in large areas within the wider area.

As the existing road network, which is the reference point of the project spreading along it. Interventions during the construction phase are linked to existing roads offering the desired accessibility to the proposed works from the wider area. These interventions are temporary in nature, will be used during the construction phase and will then be restored in agreement with the special plant engineering study to be carried out. During construction, construction materials, tools and machinery will be transported through these roads.

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In the construction phase of the underground sections of the project *Phase D of Electricity Interconnection* between the Cyclades and the Hellenic Interconnected Electricity Transmission System, no significant impact on vegetation and flora species in the study area is expected. The underground project is constructed in lengths ranging from 750 m to 950 m. The works will be limited along the existing road network and are therefore not expected to affect areas with natural vegetation.

As far as possible, construction shall be carried out on a deck, at the back or side of the road. If it is necessary to clear vegetation roadsides for construction purposes, it will be restored once the construction works have been completed.

In conclusion, the effects associated with the degradation of vegetation and flora species are assessed as **weak negative**, **short-term**, **partially manageable** and partially reversible by appropriate measures.

Impact on bird species

As mentioned above in this EIA, the overall project proposed to be carried out and examined in the project's EIA concerns the link of the GIS Lavrio Water/S via a 150 kV high voltage submarine/submersible AC system with the new water/system GIS Naxos.

The submarine and land line of the project under study and the substations under study are located <u>within</u> the following Natura 2000 SPAs and Bird Important Areas (IBAs):

- Some 10.5 km of the submarine cable passes within the Natura 2000 SPA area 'GR3000018 Canal Makronisos'.
- Part of the submarine cable approximately 1.1 km in length passes within the Natura 2000 SPA area "GR4220029 "Serfos: Coastal zone and islands of Sriphopoula, Piperi and Bos'.
- Some 5.8 km of the onshore cable on the island of Milos passes through the Natura 2000 SPA area GR4220030 'Western Milos, Antimilos, Polygos and Islands'.
- Part of the submarine cable of approximately 2.2 km in length passes within the Natura 2000 SAC/SPA area GR4220004 'Fologanro East to Western Sicino and Marine Area'.
- Part of the submarine cable approximately 15 km in length passes through IBA GR252 'Makronissos Pipeline'.
- Part of the onshore cable on the island of Milos, approximately 6 km long, passes through IBA GR152 'Western Milos, Isles of Adamos and Polygagos and Isles'.
- Part of the onshore cable on the island of Folegandro approximately 2 km long passes through the IBA area GR157 'islands of los, Skinos and Foleganros'.

In addition, parts of the submarine and land line pass <u>near</u> the following Natura 2000 SPAs and Bird Important Areas (IBA):

- Part of the onshore cable, the submarine cable and the planned substation on the island of Serph is located near (1.8 km the shortest distance) of SAC GR4220009 "Southern Serof".
- The submarine cable on Santorini ends approximately 3.6 km (closest distance) from SAC GR4220003 "Santorini: New and old Kamena Profitis Ilias'.
- The submarine cable connecting Santorini to Naxos passes very shortly (about 280 m) south-west from the boundaries of SAC GR4220036 "Kolombos Sea Area".

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- Part of the onshore cable on the island of Naxos is adjacent to SAC GR4220014 "Central and Southern Naxos: Za and Viglas to and including Mavrovouni and the sea area (Karades-Motsuna bays)'.
- The submarine transport line passes 1.35 km west of IBA GR155 "Micro Cyclades".

Part of the routing zone of the submarine transport line passes approximately 1 km to the east of IBA GR153 "Island of Paros, Island of Antiparos and Islands".

According to data from the Greek Ornithological Society, the study area is located within Greece's main migration corridors.

The following are the types of designation of the above SPA areas: Larus audouinii, Falco eleonorae, Emberiza caesia, Falco peregrinus (petrol) and Puffinus yelkouan.

Construction phase

During the construction phase of the project under consideration, it is not expected that there will be any significant impact on bird fauna species (the types of designation of the above SPA areas and on the other important species) as the longest length of the cable is underwater and the terrestrial parts of the cable will be built within the existing roads, so that there is no loss of habitats or disturbance of bird species in the transit areas. Also during the field work on the islands of Milos, Serof and Falangrou, no nesting point of an important species of bird was identified along the land crossing sections of the cable. For Santorini it is proposed to carry out a check for the presence of nests during the monitoring programme. In view of the above, no significant impact on bird species is expected for the entire project under consideration both within the terrestrial and within the sea areas through which it passes.

During the construction phase of the substations (S/S) on the islands of Serfos, Fologanros, Milos and Santorini, there is likely to be a weak and short-term impact on the bird fauna in the area (permanent or transiting) due to the nuisance, increased man-made presence in the area and due to the even small occupation of fauna habitats. However, no exclusive habitat of bird species is expected to be occupied during the construction phase of the substations. The total area occupied by the substations and the permanent wells on the islands of Serfos, Milos, Fologrou and Santorini (69.82 m²) represents a very small proportion (& 2 %) of the area of the study area and mainly concerns russeting, shrubs and agricultural crops. The species of flora to be deforested are predominantly typical vegetation occurring on large areas within the islands under study.

Larger-scale effects are expected in the initial phases of construction and in particular during earthmoving operations where natural vegetation is cleared. The bird species in the immediate vicinity of the project will be forced to move to nearby areas which are located on a large extent in the wider area and have similar habitat characteristics. At the end of the construction phase of the project, bird species will return to the area where interventions will take place and some of them (mainly small ostrich species) will be able to use the area for all their livelihoods.

As regards the types of classification of the SPAs under study, the effects are estimated to be negligible, as the cable does not pass and does not affect islands on which the goat owls nesting and does not pass through the cliffs on which Mavropetritis nesting. A similar assessment is made for Mycho, who feeds on the high seas and nests on the rocky coastlines that are not affected by the project. The fenugreek and the rock fee are not expected to be significantly affected during the construction phase, as the drilling of the land-based cable will follow the route of existing roads and therefore no significant loss of habitat for these species is expected.

As the construction phase is a limited process in time, the effects on bird fauna are generally assessed as weak, local, short-term and partially reversible.

Operation phase

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Since the terrestrial parts of the current transmission line under consideration are underground, there are no risks of collisions and electrocution of bird species on high voltage power lines. Therefore, no impact on bird species is expected during the operational phase.

Impact on other terrestrial fauna species

As explained in detail in a previous chapter of this study, the submarine and land line of the project under consideration and the substations under study are located within or near the following Natura 2000 SAC areas:

- Some 5.85 km of the submarine cable passes within the Natura 2000 SAC area 'GR3000017 Macronesos coastal and marine area'.
- Part of the onshore cable, the submarine cable and the planned substation on the island of Serph is located near (1.8 km the shortest distance) of SAC GR4220009 "Southern Serof".
- Some 0.5 km of the onshore cable on the island of Milos passes through the Natura 2000 SAC area "GR4220020 "The Milos Island: Prophis Ilias Wider Area'.
- Some 1.4 km of the submarine cable on the island of Milos passes within the Natura 2000 SAC area 'GR4220005 Coastal Zone of Western Milos'.
- Part of the submarine cable of approximately 2.2 km in length passes within the Natura 2000 SAC/SPA area GR4220004 'Fologanro East to Western Sicino and Marine Area'.
- The submarine cable on Santorini ends approximately 3.6 km (closest distance) from SAC GR4220003 "Santorini: New and Old Kamena Prophis Ilias'.
- The submarine cable connecting Santorini to Naxos passes very shortly (about 280 m) south-west from the boundaries of SAC GR4220036 "Kolombos Sea Area".
- Part of the onshore cable on the island of Naxos is adjacent to SAC GR4220014 "Central and Southern Naxos: Za & Vila to Mavrovouni and the sea area (Karades-Motsuna bay)".

The species listed in Annex II in the SDFs of the above SACs are as follows: Elaphe situla, Mauremys rivulata, Tursiops truncatus, Callimorpha quadripunctaria, Chelonia mydas, Elaphe quatuorlineata, Myotis blythii, Myotis emarginatus, Rhinolophus blasii, Rhinolophus ferrumequinum and Rhinolophus hipposideros.

Construction phase

The effects that may occur on terrestrial fauna in the construction phase are distinguished from those resulting from the occupation of biotopes and those causing nuisance to terrestrial fauna species living in the immediate area of the project being studied on each island.

As regards the impact of the project under consideration on terrestrial fauna species other than bird fauna, these are estimated to be small-scale, local and limited in time during the construction phase. In particular, the impact is related to the disturbance of the habitats of reptile and mammalian species mainly from earthworks and construction works of the other infrastructure (moulding points, substations, etc.).

At local level and during the construction phase, it is possible for some of the existing terrestrial fauna species in the area to be temporarily removed from the project area, due to their nuisance from noise and human presence, without any further impact.

As mentioned above, the land sections of the project under consideration (land underground cables and substations) fall within the area of SAC GR4220020 — "Milos*Island: Prophis Ilias — Wider Area.*' The MEA (Annex II to this study) has assessed the impact on animal species present within this SAC area. It should be

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noted that in the Milos emphasis is placed on the priority species Macrovipera schweizeri, whose critical habitats do not overlap with the alignment of the underground interconnector, nor with the location of the Mile substation.

Based on MEA data, it is not expected that there will be a change in the assessment of the habitats of fauna species within the Natura 2000 site.

The temporary nuisance to most terrestrial fauna (other than bird) species during the construction phase is estimated to be fully reversible for underground and submarine cable transit areas. Permanent occupation exists only in the areas of water bodies. No noticeable effects are expected in these areas, on the one hand because they are not important habitats and on the other hand because of the relatively small-scale occupation. In addition, it is worth noting that the works will be implemented in several stages, so that any nuisance found in different locations during the works, thereby further reducing its significance.

At the end of the construction phase, it will be possible to physically re-agglomerate almost the whole area which has been disturbed and is not occupied by civil engineering works. Moreover, taking into account the wide range of most species in relation to the limited extent of the projects to be built on each island, it can safely be concluded that the related impacts during the construction phase of the project will not be significant for most terrestrial fauna species (except bird fauna).

In conclusion, the impact on fauna species of the construction of the proposed project is assessed as **weak**, **negative**, **short-term**, **partially manageable** and partially reversible by appropriate measures.

Operation phase

At the end of the construction phase and during the operational phase, it will be possible to physically reagglomerate almost all areas which have been disturbed and are not occupied by civil engineering works. Moreover, taking into account the wide range of most species spread on each island in relation to the limited area, which will capture the works to be built, it can safely be concluded that the associated impacts will not be significant for most terrestrial fauna species (except bird fauna).

In more detail, during the operational phase, the deforested land (during the construction phase) will have been rehabilitated, except for the areas of the substations.

In the operational phase of the underground sections of the project on Serif, Milos, Foleganros, Santorini and Naxos, no noticeable effects related to the alteration of vegetation are expected. The intervention area of the underground sections of the project (which is the existing road network) will be restored once the construction works have been completed.

In conclusion, in the operational phase of the proposed projects the impact on fauna species in the study area is assessed as **weak**, **negative and long-lasting**, **manageable** with appropriate measures and locally limited.

9.5.2 Impact on the areas of the national system of protected areas

The following paragraphs analyse the effects on the areas of the national system of protected areas located in the vicinity of the proposed project and are expected to be affected by it.

<u>Special Area of Conservation — SAC (Directive 92/43/EEC as amended by 2006/105/EC)</u>

Sections of the underground (on the existing road network) and the submarine line of the project pass, as mentioned above, **within** the Natura 2000 SAC areas:

 SAC GR3000017 — "Makronos Coastal and Sea Area" (part of the submarine cable approximately 5.3 km),

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- SAC GR4220020 "MilosIsland: Prophis Ilias Wider area" (land cable approximately 0.55 km),
- SAC GR4220005 "Western Milos Coastal Zone" (submarine cable over 1.35 km) and
- SAC/SPA GR4220004 "Folkander East to West Sicino and sea area" along 2 km of submarine and onshore cable.

According to MEA data for the sub-section of the submarine cable falling within SAC GR3000017:

• The part of the project that passes through the area is submarine, so any nuisance limited to the laying phase of the cable will not affect the habitat of the Mediterranean seal (submarine caves, distant beaches). An important habitat for seals is 8330 'flooded or partially flooded marine caves' which can host breeding shelters for the species. Habitat type 8330 is developed exclusively on the rocky coastline of the Macronos and is therefore not related to the area of implementation of the project under consideration.

According to the information contained in the technical description of the project, the width of the burial pit is expected to be 1 m in this intermediate section of the routing of the submarine cable. The total occupation within the SAC is thus expected to be450^{m²}. On the basis of the information available, the cable route within SAC GR 3000017 doesnot operate on areas for the development of angiosperm underwater meadows and therefore there is no evidence of a potential impact of the project on the priority habitat 1120 'Poseidon submarine meadows'. Therefore, the integrity of the Natura 2000 site of SAC GR3000017 — "Makronos*Coastal and Marine Area" is not expected to bea*ffected.

According to MEA data for the sub-section of the underground project falling within SAC GR4220020 — "MilosIsland: Prophis Ilias — Wider Area", it is stated that:

- The biotope of *Mauremys rivulata* is not expected to be occupied. The same is true for the other 2 species of *Zamenis situla* and *Macrovipera schweizeri*, since the land section of the project under consideration which crosses the SAC is underground and is built along the existing road network.
- With regard to Mediterranean Fogs, during the field survey, nowhere on the coastline of the study
 area was sea cave that had the typical morphological characteristics that might be used as a
 shelter/terrestrial habitat by people of Mediterranean seals (for breeding or resting). Therefore, the
 impact of the construction of the electricity interconnection project on the important species of
 marine fauna SAC GR4220020 will not be significant.
- The project is to occupy a total of 1.12 hectares within SACs corresponding to 0.002 % of the total area of the SAC and 0.3 % of the area of the MIP.
- The total area occupied (1.12 m²) concerns land use 1024 provincial roads.
- The areas covered by the project under consideration and located outside the SAC, i.e. part of the
 underground cable and the substation site, relate to areas with rusks for the substation, while the
 underground cable is located on the provincial road.

In view of the above, and given that small areas are occupied within the habitat types in relation to their total area in the SAC, the habitat types will not be significantly affected during the construction phase and therefore the integrity of the Natura 2000 SAC site GR4220020 — "Theisland of Milos: Prophis Ilias — Wider Area.'

According to MEOA's data on the submarine part of the project falling within **SAC GR4220005** — 'Western Milos Coastal Zone', it is stated that:

• The total habitat occupancy during the construction of the submarine electricity interconnection within SAC GR4220005 amounts to 1.48da, corresponding to 0.003 % of the total area of the SAC.

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The occupation for areas of Poseidonian meadows is 400 m², corresponding to 0.006 % of the total area of this habitat type. This corresponds to the percentage of the area occupied by marine angiosperm (sandy areas with Cymodocea nodosa and Posidonia meadows) compared to the estimated area of this type of substrate in the SAC. Similarly, the estimated occupation for rocky areas and habitat type 1170 is small.

- The project cannot damage marine reptiles such as the Caretta caretta sea turtle. In particular, the construction and operation of the project do not affect the spawning grounds of the species, as sandy coasts are not affected. Moreover, the characteristics of the laying vessel of the cable, which is large in size and running slowly, are not similar to those of high-speed vessels or fishing vessels which usually cause the killing of such animals at sea.
- It is not likely that the rudderfin (*Tursiops truncatus*) willbe present in the laying zone of the cables during the construction of the project.
- During the field survey, no sea cave was found at any point on the coastline of the study area with the typical suitable morphological characteristics that might be used as shelter/terrestrial habitat by people of Mediterranean seals (for breeding or resting). However, it should be noted that there is a complex of small 'dried' beaches and small caves in the eastern part of the mussel of the Provaa bay. Although these formations do not have the typical features of a 'shelter' of the species and are unlikely to be used by seals, it is proposed to ensure that they are not disturbed and maintained as natural formations located within the boundaries of a NATURA 2000 area, mainly for reasons of landscape protection.

In view of the above, it is estimated that the impact of the construction of the electrical interconnection project on the important marine fauna species and marine habitat types of SAC GR4220005 "Western Milos Coastal Zone" will not be significant, will be limited in time to the laying phase of the marine cable and spatially in the very narrow cable deposition zone and the landing points, and therefore the integrity of the Natura 2000 site is not expected to be affected.

According to MEOA's data on the submarine and terrestrial part of the project falling within the SAC/SPA GR4220004 — 'FologandrEast to West Sicino and sea area', it is stated that:

- The construction of the planned submarine electricity interconnection is estimated to result in habitat in the marine area of the SAC/SPA GR4220004 totalling 2.3da. This area represents a very small proportion of the total maritime area of the SAC. The estimated occupation is expected to affect 900 m² areas in Posidonia beds (habitat type 1120) and 660 m² rocky areas corresponding to habitat type 1170. The remaining 740 m² corresponds to sandy floors without vegetation. These uptakes do not exceed 0.2 % of the area of the habitat type concerned based on the BIOMAP mapping. The corresponding percentage, taking into account the detailed mapping of Topouzelis et al, 2018 for marine angiosperm meadows, corresponds to 0.02 %.
- The land section of the project under consideration which crosses the SAC is underground and is built along the existing road network. No significant part of the habitats of the species are expected to be occupied during the construction of the project under consideration. The duration of construction works is expected to be limited, therefore no significant disturbance to fauna is expected. The impact on reptile fauna in general and on Elaphe quatuorlineata in particular is expected to be negligible.
- During the field survey, no sea cave was found at any point on the coastline of the study area with
 the typical suitable morphological characteristics that might be used as shelter/terrestrial habitat by
 people of Mediterranean seals (for breeding or resting). However, it should be noted that there is a
 small semi-submerged sea cave in the southern part of the coast of the Mountain Livadi. It is
 proposed to ensure that this formation is maintained as it belongs to category 8330 of habitats of
 Community importance.

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In view of the above, it is estimated that the impact of the construction of the electrical interconnection project on the important marine fauna species and the marine habitat types of the SAC/SPA GR4220004 — "Fleangerou*East to West Sicino and sea area*" will not be significant, will be limited in time to the laying phase of the marine cable and spatially in the very narrow cable deposition zone and the landing points, and therefore it is not expected that the integrity of the Natura 2000 site will be affected.

<u>Special Protection Areas — SPAs (Directive 2009/147/EC)</u>

Parts of the underground (on the existing road network), the submarine line of the project and the substation of Serifos are located, as mentioned above, **within** the Natura 2000 SPA areas:

- Part of the submarine cable approximately 11 km long passes within the Natura 2000 SPA area GR3000018 'Kali Makronisos'.
- Part of the submarine cable approximately 1.1 km in length passes within the Natura 2000 SPA area GR4220029- "Serfos: Coastal zone and islands of Sriphopoula, Piperi and Bos.'
- Some 5.8 km of the onshore cable on the island of Milos passes through the Natura 2000 SPA area GR4220030 'Western Milos, Antimilos, Polygos and Islands'.
- Part of the submarine and onshore cable of approximately 2.2 km in length passes within the Natura 2000 SAC/SPA area GR4220004 'Fleandros east to western Sicino and marine area'.

According to MEOA's data on the sub-section of the submarine cable falling within the **SPA** 'GR3000018— *Canal Makronisos'*, it is stated that:

- During the construction phase of the project under consideration, patients and short-term effects
 are expected, especially if the period of work coincides with the migration period of Mycho (*Puffinus yelkouan*).
- A unique habitat of bird species is not expected to be occupied during the construction phase as the part of the project under study in the area is underwater.
- During the operational phase of the project, the impact on bird fauna is expected to be negligible.

In view of the above, it is estimated that the impact of the construction and operation of the electricity interconnection project on the important bird species of the SPA 'GR3000018 — Canal Makronisos' will be **weak**, limited in time to the period of migration of the Mychos and spatially into the very narrow cable deposition zone and the landing points. The integrity of the Natura 2000 site is therefore not expected to be affected.

According to MEA data for the sub-section of the submarine cable falling within SPA GR4220029 - "Serfos: Coastal zone and islands of Sriphopoula, Piperi and Bos" refer to the following:

- The project under study will use the existing road network to route the underground cables, while the facilities of the water body will be located near the island's urban waste water treatment plant. Given the very low occupation and the extent of the project, the impact on bird fauna is expected to be **weak**.
- Due to the nature of the project, most of it is underground or submarine, so no exclusive habitat of bird species is expected to be occupied. It also does not require staff to operate, so that there will be no further nuisance. Therefore, no impact on the area's bird species is expected during the operational phase.

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In view of the above, it is estimated that the impact of the construction of the electricity interconnection project on the important bird species of SPA GR4220029 - "Serfos: Coastal zone and islands of Serifopoula, Piperi and Bos" will be **weak**. The integrity of the Natura 2000 site is therefore not expected to be affected.

According to MEOA's data on the sub-section of the terrestrial cable falling within SPA GR4220030 — 'Western Milos — Adamos, Polygos and Isles', the following is stated:

- Given that most of the area is underground and will use the existing road network for its route and the facilities of the water body are located outside the SPA, the occupancy of bird habitats will be small. Low nuisance effects are expected during construction, but they are of a short-term nature.
- During the operational phase of the project, no impact on the bird fauna of the area is expected as the entire part of the project under consideration within the SPA is underground.

In view of the above, it is estimated that the impact of the construction and operation of the electricity interconnection project on the important bird species of SPA GR4220030 — 'Western Milos — Antimilos, Polygos and Islands' will be weak. The integrity of the Natura 2000 site is therefore not expected to be affected.

According to MEAG data on the sub-section of the submarine and terrestrial cable falling within the Natura 2000 SAC/SPA of the Natura 2000 network *GR4220004* — 'Fleandros east to western Sicino and marine area':

- The project under study is located in an area of residential development and anthropogenic activities. The routing of the underground cable follows the existing road network and the location of the water body is located outside a Natura 2000 site next to a small livestock unit alongside the road connecting the port with Greece. During the construction phase of the project it is expected that there will be weak and short-term effects on the bird fauna in the area (permanent or transiting) due to nuisance, increased anthropogenic presence in the area and due to the even small occupancy of fauna habitats.
- No exclusive habitat of bird species is expected to be occupied.
- As regards other ecological functions, such as seeking and finding food, it is estimated that there will be a small-scale individual impact due to the availability of corresponding habitats in the wider area.
- In the operational phase of the project, the impact will be neutral as the project is underground and built along the existing road network. It also does not require staff to operate, so that there will be no further disturbance to bird species.

In view of the above, it is estimated that the impact of the construction and operation of the electricity interconnection project on the important bird species of the Natura 2000 SAC/SPA GR4220004— *'Folangerou East to West Sicino and sea area'* will be **weak**. The integrity of the Natura 2000 site is therefore not expected to be affected.

Important Bird Areas (IBAs)

As mentioned above, parts of the underground (on the existing road network) and of the submarine line of the project and the Folegandro substation are located, as mentioned above, within the following Important Bird Areas (IBAs):

- Part of the submarine cable approximately 15 km in length passes through IBA GR252 'Makronissos Pipeline'.
- Some 6 km of the onshore cable on the island of Milos passes through IBA GR152 'Western Milos, Adamos and Polygos Islands and islands'.

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• Part of the onshore cable on the island of Folegandro approximately 2 km long passes through IBA GR157 'islands of los, Skinos and Foleganros'.

The impact of the proposed project on bird species has been analysed in the above paragraph on SPAs. No significant impact on these IBAs is expected.

Wild Life Shelters

As stated by MEOA, the project under study falls within the wildlife shelter K519 "Gournado—*Prison"* on the island of Milos. In the vicinity of the project there are also wild life shelters K481 'Country — Agios Sunday' on the island of Serof, and K526'Rachid pitches' in Fleangrou.

Taking into account the limited takeover from the construction of the underground line within the Folegandros KA in the habitats of species of fauna and the fact that it will be of a local nature and limited in time during the construction phase, the impact of the proposed project on the species and habitats of the wildlife shelter is assessed as weak, is local in nature and limited in time during the construction phase. During the operational phase, as the line is underground and will not require frequent human presence, it is estimated that the impact on this LCA will be negligible.

Ramsar Convention

There is no wetland area included in the list of wetlands of international importance protected by the RAMSAR Convention in the location area of the project under consideration, so no impact is expected on this category of protected areas.

Wetlands

As stated in a previous chapter of this EIA, no part of the project under consideration is located within any island wetland of the islands under study (Milos, Serphos, Fologanros, Santorini and Naxos). The only island wetlands adjacent to the project, i.e. the wetlands on the island of Serphos, Milos and Naxos, are at a relatively safe distance either from the cable or from the substations under study and are therefore not expected to be affected by the project. In particular:

There is <u>the</u> small island wetland 'Elos Tsipaki' — Y422SER001 on the island of Serphos approximately **30 metres** from the landing point of the submarine cable and the underground routing of the terrestrial cable. Given that both the landing point and the terrestrial cable will be underground and the planned measures will be respected during the construction phase, this island wetland is not expected to be affected.

On the island of <u>Milos</u>, both the Provasa marshes and Achivadolinm are located at a safe distance (> 400 m) from the route of the underground cable, its landing point and the Moul substation and are therefore not expected to be affected by them.

On the island of <u>Naxos</u>, the land cable and the substation on Naxos are located approximately 400*metres* from the 'Elos Agios Prokopi Naxos' and approximately 1.8 km from the wetland of Alykis Naxos. Therefore, in this case too, these wetlands are at a safe distance from the parts of the project and are therefore not expected to be affected by them.

Overall, therefore, the impact on wetlands from the project is estimated to be **negligible** if appropriate measures are implemented during the construction phase mainly in the case of Serif.

National Parks

There is no National Park in the location area of the project under consideration and therefore no impact on this category of protected areas is expected.

Proposed landscapes of special natural beauty (TFIK)

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As mentioned in a previous chapter of this study, six TFIKs are found in the study area on the islands of Milos, Serifs, Fologanros, Santorini, Ios and Naxos, according to the Filotis database (*Hellenic Nature Database*, https://filotis.itia.ntua.gr/), of which in 3 the project under study, namely, sub-sections of the land line on Serfos, Fologanros and Santorini, as well as the Santorini, Sierfou and Fologron substations are located within them. In particular, these areas are as follows:

- "Island of Serifs" AT5010088
- 'Fleandra Island' AT5011014
- 'Island of Thira or Santorini' AT5011063

Taking into account the limited take-up of the underground line within these TFIs and the fact that it will be local and limited in time during the construction phase, the impact of the proposed project on these TFIIs is assessed as weak, local and limited in time during the construction phase. During the operational phase, as the line is underground and will not require frequent human presence, it is estimated that the impact on this LCA will be negligible. Weak effects on them are assessed by the construction of the substations which will cause nuisance to some species of fauna. However, this nuisance will be temporary, small and limited in time. During the operation phase of the substations no impact on these TFIIs is assessed as their operation will be relatively silent and attract very few staff.

Biotopes Corine

The project under study, in particular the underground sub-section of the cable and the substation on the island of Folegandro, passes through the area "Viotopoe CORINE — Voiotope CORINE A00040075 - "Fologanro Islands, Sicinos, Alfolia, Kardiotissa and good giants. Since the underground transport line is built along the existing road network (as far as possible, construction takes place within a deck, at the base or side of the road) no impact is expected on either the construction and the operational phase in the area in question. With regard to the Folegandrou substation, weak effects are estimated from construction that will cause nuisance to some species of fauna. However, this nuisance will be temporary, small and limited in time. During the operation phase of the substations no impact on these TFIIs is assessed as their operation will be relatively silent and attract very few staff.

Other Voiotope

The project under study, namely the sub-section of the onshore cable on the island of Naxos, only passes through an area of 'Other Viotopo', according to the FILOTIS database (Hellenic Nature Database, https://filotis.itia.ntua.gr/). This is the area 'Elos Agios Prokopi Naxos' — AB5090022. Since the underground transport line is built along the existing road network (as far as possible, construction takes place within a deck, at the base or side of the road) no impact is expected on either the construction and the operational phase in the area in question.

9.5.3 Summary of MEAM impact assessment and evaluation

The META accompanying this EIA examines the effects of the construction and operation of the sub-assemblies of the land and submarine cable and substations located within Natura 2000 sites.

In particular:

- Part of the submarine cable approximately 11 km long passes within the Natura 2000 SPA area GR3000018 'Makronissos Canal'.
- Part of the submarine cable approximately 1.1 km in length passes within the Natura 2000 SPA area GR4220029 "Serfos: Coastal zone and islands of Sriphopoula, Piperi and Bos.'

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- Some 5.8 km of the onshore cable on the island of Milos passes through the Natura 2000 SPA area GR4220030 'Western Milos, Antimilos, Polygos and Islands'.
- Part of the submarine cable approximately 2.2 km long passes within the Natura 2000 SAC/SPA area GR4220004 'Fleandro East to West Sicino and marine area'.
- Part of the submarine cable approximately 5.85 km long passes within SAC area GR3000017 —
 "Makronos Coastal and Sea Area",
- Part of the terrestrial cable over a length of approximately 0.5 km passes through SAC GR4220020 —
 "MilosIsland: Prophis Ilias Greater area",
- Part of the submarine cable over a length of 1.4 km passes within SAC GR4220005 "Western Milos Coastal Zone".

During the construction and operation phase of the planned sub-parts of the land and submarine project, it is estimated that the habitat types, species of flora and species of fauna and flora of the above Natura 2000 sites are not adversely affected. This is substantiated by the following:

- The underground transport line is built along the existing road network (as far as possible within a deck, at the back or side of the road).
- As regards the types of classification of the SPAs under study, the effects are estimated to be negligible, as the cable does not pass and does not affect islands on which the goat owls nesting and does not pass through the cliffs on which Mavropetritis nesting. A similar assessment is made for Mycho, who feeds on the high seas and nests on the rocky coastlines that are not affected by the project. The fenugreek and the rock are not expected to be significantly affected during the construction phase, as the drilling of the land-based cable will follow the route of existing roads and therefore no significant loss of habitats for these species is expected.
- As the construction phase is a limited process in time, the effects on bird fauna are generally assessed as weak, local, short-term and partially reversible.
- During the operational phase of the project, as the project is either underground or underwater, it does not affect terrestrial fauna and bird species and substations occupy a negligible area of the habitats of the species. The impact on the operational phase for terrestrial fauna and bird species is therefore assessed as weak, local, short-term and reversible.
- The total occupation of SAC/SPA GR4220004 from the sub-section of the land and submarine project is 4.24 str. within SACs, corresponding to 0.06 % of the total area of SAC GR4220004 (70470.02 str.). Out of a total of 4.24 str., 1.67da relate to human-induced land use.
- The total occupation of SAC GR4220020 from the sub-section of the land project is 1.12 str within SACs, corresponding to 0.002 % of the total area of SAC GR4220020 (52420.79 str). Most of the area occupied concerns land use 1024 provincial roads. The areas covered by the project under study and located outside the SAC, i.e. part of the underground cable and the substation site, concern areas with rusks for the substation, while the underground cable is located on the provincial road.
- The total takeover of SAC GR4220005 from the sub-section of the submarine project is 1.48 str. within SACs, corresponding to 0.003 % of the total area of SAC GR4220005 (52420.79 str.). The occupation related to areas of Posidonia meadows is 400 m² and corresponds to 0.006 % of the total area of this habitat type based on the BIOMAP mapping.
- The total takeover of SAC/SPA GR4220004 from the sub-section of the submarine project is 2.3 str. within SACs, representing a very small percentage of the total marine area of the SAC. The estimated occupation is expected to affect 900 m² areas in Posidonia beds (habitat type 1120) and 660 m²

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rocky areas corresponding to habitat type 1170. The remaining 740 m² correspond to sandy floors without vegetation

As regards SAC GR 3000017 'Makronos*Coastal and Marine Area*', as mentioned in a previous chapter, the area was added to the Natura area network during the last revision of the national list (Joint Ministerial Decision 50743, Government Gazette, Series II, No 4432/15.12.2017) with the main object of protecting the populations and breeding sites of Mediterranean seals (*monachus monachus*), which is a priority species under Annex II to Directive 92/43/EEC. Although there is no evidence of mapping of habitat types in GR 3000017, it is known that an important habitat for seals is 8330 "*flooded or partially flooded*marine caves" which can host breeding shelters for the species. Habitat type 8330 is developed exclusively on the rocky coastline of the Macronos and is therefore not related to the area where the project is implemented. Therefore, the construction and operation of the sub-assemblies under study of the underground, submarine cable and substations of the project is not expected to affect the integrity of the Natura 2000 sites in terms of occupation in habitat types and species of flora, due to the very small area occupied mainly on the existing road network. It is not expected that there will be a significant reduction in the area or deterioration in the nature, representativeness, structure and conservation conditions of natural habitat types and flora species within Natura 2000 sites.

It is also not expected that the habitats of species of fauna and bird species will deteriorate, so the integrity of the Natura 2000 areas of the SACs and SPAs concerned by the projects is not expected to be affected, also with regard to fauna and bird species.

9.5.4 Impact on the marine environment

9.5.4.1 <u>Effects on benthic habitats</u>

The main impact of the construction of the electrical interconnection under study on the marine environment results from the installation of the submarine cable on the seabed, which is expected to change the morphology and composition of the substrate and thus affect locally the benthic habitat types. The resulting habitat occupancy depends on the surface footprint of the cable, as well as on the means of securing and protecting the cable against natural factors (streams, waves) and anthropogenic activities (e.g. fishing with towed gear). The methods of protection shall be decided at the final stages of the technical and economic study of the project on each section of the cable route, taking into account detailed oceanographic data and information on the use of maritime space. In this context, the methods of installing the cable may vary from simple depositing on the bottom, use of metallic joints applied to the cable before its deposition, burial of the cable or coating of the cable with protective plates, etc.

Burial of the cable is the most commonly used and preferred method where there are no grounds for using alternative methods. It is therefore the method by which the habitat abstractions resulting from the construction of the project are quantified. This method is carried out by special machines moving on the seabed behind the setting vessel. On soft substrates, the burial pit is opened by jetting, and on hard substrates using special trenching machines. The operation of the burial machine ensures that the ditch is opened in sequence, the cable is placed in it and the cable is coated with the excavation material. These procedures shall be carried out at the point where the machine is operated at any time. Thus, the disturbance of the bottom concerns a narrow burial zone which is formed once along the cable route.

Based on the elements mentioned in the Technical Description Chapter of the project, the width of the burial pit is estimated at 1 m over its entire length except for the first 30 m for which the excavation width is expected to be 2.5 m. Thus, the project's surface footprint is derived from the length of the planned route on the width of the ditch.

In addition, temporary habitat occupancy may occur indirectly due to the suspension of material during the burial process. In cases of fine sediments and especially mudbed, re-suspension of the material could have a greater impact on the conditions around the burial axis of the cable, temporarily increasing turbidity. The impact is estimated to be minor for deep depths and low hydrodynamic areas. However, in shallow areas and in the case of areas with strong currents, as well as during weather events favouring the movement of

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suspended material, the impact may increase the magnitude of the disturbance. Depending on the conditions, the suspended material is estimated to settle on the bottom less than one day. Thus, the impact is estimated to change the structure and functions of the benthic habitats in the area adjacent to the burial to a small extent and only temporarily.

The temporary disposal of excavation materials on either side of the trench, especially in cases of rocky parts of the cable route, could increase the width of the estimated occupation in those sections for which burial will be chosen as a means of protecting the submarine cable. This impact is estimated to be of a temporary nature as the excavation materials will be used to refill the punched trenches immediately after the operation at each site.

In any event, it should be noted that the areas affected, after the construction of the project, will become a new substrate that will again settle marine organisms from adjacent locations. It should be noted that this applies both to the burial of cables and to the simple deposit of cables on the seabed, where the monitoring results of already implemented submarine interconnection projects show that both the pipeline itself and the adjacent areas are once again colonised within a short period of time by marine organisms.

The significance of the impact of habitat occupancy also depends on the habitat type. It is estimated to be small in cases of sandy habitats without vegetation or with angiosperm vegetation with relatively rapid growth and shallow root system such as Kymodocea nodosa. It is estimated that these habitats will quickly return to the previous situation after the completion of the cable burial works. The same applies to the effect of the project on areas with rocky formations. In these locations, disruption may be significant in the first period after construction, but it is estimated that the pace of re-integration will restore the structure and composition of the biocommunities to the pre-disturbance situation within a period of 1-2 years.

By contrast, the opening of the cable burial pit can have more permanent characteristics in areas with Poseidonian vegetation and in areas with biogenic formations such as calcined roses (tragna). These habitats due to their slow development and their important ecological role are assessed as the most important habitat types likely to be affected by the project along the electricity interconnectors route.

The quantitative estimate of the occupation resulting from the construction of the submarine cable for each part of it is calculated on the basis of the assumptions set out above (2.5 m occupation for the first 30 m of the landing points and 1 m for the remaining length) in the following table:

Table 9.5.4.1-1: Estimated habitat occupancy based on the width of the cable burial pit in the different sections of the submarine interface of the project under study

Submarine Interconnection Section	Length (Km)	Habitat occupancy (str)
Lavrio — Serifs	109,3	109,4
Serifos — Milos	46,7	46,8
Milos — Foleman	55,2	55,3
Fologanros — Hunting	59,9	60,0
Hunting — Naxos	82,1	82,2
Total total	353,2	353,7

As shown in the table above, the construction of the project is expected to result in a total occupancy of 353.7 hectares. This area for the 3 sections for which data from the oceanographic bottom survey (Foleganros, Fologanros — Hunt and Hunt — Naxos) are available can be allocated on the basis of the data in the tables in Chapter 8.5.2 to the different habitat categories concerned. For the remaining sections (Lavrio-Serfos and Serifs — Milos) taking into account available marine angiosperm mapping data (Topouzelis et al, 2018), which mainly concern areas of Posidonia meadows, the occupation of this habitat type can be calculated. On these two sections, a route on Posidonia beds is located at the catchment point of Serifou (for 481 m on the final section of the Lavrio-Serifos interconnector and 442 m on the initial section of the Serifo — Milos interconnector) and in the area of the landing position of the Northern Milos (at a distance of more than 30 m from it and 596 m).

The above is summarised in the following table:

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Table 9.5.4.1-2: Allocations by habitat category in the sections of the submarine electricity interconnection of the project under study on the basis of available data

	Habitat o	Habitat occupations (strands)/submarine interconnection section				
Habitat class	Lavrio — Serifs	Serifos — Milos	Milos — Foleman	Fologanros — Hunting	Hunting — Naxos	Total* (str.)
Rocky substrate			5,7	2,9	8,6	17,2
Sand with vegetation			0,6	0,0	0,0	0,6
Sandy bottom	108.9	45,7	24,2	15,6	41,2	80,9
Muddy bottom		.5,.	6,9	37,9	25,1	69,8
Biogenic formations (Tragana)			17,1	2,4	6,5	26,0
Posidonia bed	0,5	1,1	0,9	1,3	0,9	4,6
Total total	109,4	46,8	55,3	60,0	82,2	353,7

^{*}Sum of areas of habitat categories for which such assessment is available on the basis of available data

The following conclusions are drawn from the above table:

- Most of the occupation estimated to be caused by the construction of the electrical interconnection in marine habitats under study concerns sandy or mudbed areas. Although in locations these areas may host species and populations of ecological interest, the wide availability of the habitat in question and the relatively sparse presence but wide distribution of benthic fauna and/or flora species make these areas of minor importance. In any event, after the cable has been set, it is estimated that these areas will quickly return to the previous state by allowing the morphological and ecological restoration of the disturbed area to its previous functionality.
- Areas with Poseidonian vegetation are estimated at about 5da. The small area is the result of the linear nature of the submarine interconnector project which crosses the areas of the meadows along the cables in coastal areas to and from the landing sites. This habitat occupancy is assessed to be minor taking into account the extent of that habitat even around an island. For example, on the basis of the mapping of the Topouzelis et al around Folegandro, approximately 3 614 stremmata are found, i.e. the total take-up of Posidonia beds caused by the project under study constitutes around 0.1 % of the area of this habitat type around Flegandro.
- The rocky substrate areas estimated to be affected by the project amount to 17.2da for those parts of the project where the oceanographic study has been completed. They are mainly found in the rocky areas of the coastline but also in deeper areas with a thin sand covering. Although it is expected that the morphology of rocky areas will be influenced locally by the opening of the burial pit, this effect is expected to be spatially limited to the width of the burial zone and over time during the construction of the interconnection in those sections. The excavation refill material in these sections will come from the original substrate so that the areas progressively affected will be rehabilitated by marine organisms and restored to a situation similar to the original one.
- As regards areas with biogenic formations (26 hectares in the last three parts of the submarine electricity link), natural restoration is estimated not to restore the land to a similar situation to the original one, taking into account the very slow development of the organisms that form the basis for the construction of the habitat in question. The occupation in this case is expected to have more permanent characteristics. Although there are no aggregated data on the distribution of the habitat type in question in larger marine zones or in the Greek seas, data from different sources show large local coverage especially at depths of up to 110 m. For example, the results of recording marine habitat types around the island of Yavro (LIFE12NAT/GR/000688 programme estimate coverage of 24Km2 by biogenic formations of calcinated algae). The estimated enclosure represents 0.02 % of this area. Thus, the limited extent of the operation to create the cable burial ditter will not compromise the overall presence of this sensitive habitat in the wider area.

As regards possible effects on the habitat types of Natura SAC sites for which marine habitat types are protected, these are thoroughly examined in the Special Ecological Assessment (MEA) study annexed to this

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EIA. The following tables summarise the relevant observations on the section of the submarine electricity interconnection 'Mios-Fologrou' which operates within SAC GR4220005 "Western Milos Coastal Zone" and the sections of the routing of the submarine cables to and from the Fologandros within the SAC/ZEP GR4220004 "Folangerou East to West Sicino and sea zone". Taking into account the sizes given in the technical description of the project with regard to the width of the cable burial pit, the estimated habitat occupancy per section of the submarine route is calculated.

Table 9.5.4.1-3: Summary of estimated habitat catches from the construction of the submarine electricity interconnection by habitat type compared to the total area of habitat types in SAC GR4220005 "Western Milos Coastal Zone"

Habitat type	Habitat occupancy (str)	Area in SAC (BIOMA) (St.)	% take/area in SAC (BIOMAP)	Area under Topouzelis et al in SAC — str.	% occupation/Exte nt in SAC (Topouzelis et al)
119A Floy bottom without vegetation	0,31	44.416,71	0.001 %		
1170 rocky substrate — Bulk	0,13	2.233,85	0.006 %		
119B Sandy bottom with Cymodocea nodosa vegetation	0,60	ı	I	18.077	0.006 %
1120 Poseidonian Lisbon	0,44	6.937,93	0.006 %		
1150 Coastal lagoons	0	63,81	0 %		
Total total	1,48	53.652,30	0.003 %		

Table 9.5.4.1-4: Summary of estimated habitat catches from the construction of the submarine electricity interconnector by habitat type compared to the total area of habitat types in SAC/SPA GR4220004 "Foletander East to West Sicino and Marine Area"

Habitat type	Habitat occupancy (str)	Area in SAC/SPA (BIOMAR) (St.)	% occupation/area in SAC/SPA (BIOMAP)	Area under Topouzelis et al in SAC/SPA (st)	% occupation/area in SAC/SPA (Topouzelis et al)
119A Floy bottom without vegetation	0,74	20.418,38	0.004 %		
1170 rocky substrate — Bulk	0,66	2.723,60	0.024 %		
119B Sandy bottom with Cymodocea nodosa vegetation	ı	34,29	0.010 %	4.890 0.018 %	
1120 Poseidonian Lisbon	0,90	362,39	0.247 %		
Total total	2,30	23.538,66	0.010 %		

Taking into account the data in Table 9.5.4.1-3 rd total habitat occupation during the construction of the submarine electricity interconnection within SAC GR4220005, it amounts to 1.48da, corresponding to 0.003 % of the total area of the SAC. The occupation for areas of Posidonia meadows is 400 m, corresponding to 0.006 % of the total area of this habitat type based on the BIOMAP mapping. This corresponds to the percentage of the area occupied by marine angiosperm (sandy areas with Cymodocea nodosa and Posidonia meadows) compared to the estimated area of this type of substrate in the SAC. Similarly, the estimated occupation for rocky areas and habitat type 1170 is small. Thus, it is estimated that the impact on the habitat types and thus on the species they host will be of low intensity, limited spatially in the narrow burial zone of the cable and in time during the construction phase of the project. It is therefore considered that the implementation of the project under consideration is not expected to significantly affect the objects to be protected and the overall integrity of SAC GR4220005.

Accordingly, as shown in Table 9.5.4.1-4 above, the construction of the planned submarine electricity interconnection is estimated to result in habitat in the marine area of the SAC/SPA GR4220004 totalling 2.3da. This area represents a very small proportion of the total maritime area of the SAC. The estimated occupation is expected to affect 900 m^2 of areas of Posidonia beds (habitat type 1120) and 660 m^2 of rocky

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areas corresponding to habitat type 1170. The remaining 740 m² correspond to sandy floors without vegetation. These uptakes do not exceed 0.2 % of the area of the habitat type concerned based on the BIOMAP mapping. The corresponding percentage, taking into account the detailed mapping of Topouzelis et al, 2018 for marine angiosperm meadows, corresponds to 0.02 %. Thus, in the case of SAC/SPA GR4220004, no significant impact on the habitat types and thus on the species of flora and fauna developed therein is assessed. The project does not appear to have a significant effect on the subject matter to be protected and thus on the overall integrity of the SAC.

As regards SCI GR3000017 'Makronos Coastal and Marine Area', as mentioned in a previous chapter, the area was added to the Natura site network during the last revision of the national list (Government Gazette, Series II, No 4432/15.12.2017) with the main object of protecting the populations and breeding sites of Mediterranean seals (Monachus monachus), which is a priority species under Annex II to Directive 92/43/EEC. Although there is no evidence of mapping of habitat types in GR3000017, it is known that an important habitat for seals is 8330 "flooded or partially flooded marine caves" which can host breeding shelters for the species. Habitat type 8330 is developed exclusively on the rocky coastline of the Macronos and is therefore not related to the area of implementation of the project under consideration.

The planned routing of the submarine cable passes within the SCI for a length of 5.85Km on the section of Lavrio — Serif, where it runs parallel to the west coast of the island of Macronos. The minimum proximity of the coasts is approximately 450 m. Given the shooting speed of the submarine pipeline, the setting operations are not expected to last more than one day. This or otherwise the Macronos channel is an area with strong maritime traffic and therefore the presence of the cable laying vessel is not expected to have a significant effect on the current situation. Given the relatively long distance from the coastline of the island, the construction of the project cannot directly affect the breeding habitats of the monk seals, and the nuisance at the sites concerned is estimated to be negligible even if they are located at the closest point to the passage of the cable.

Based on the elements of the technical description of the project, the width of the burial pit is expected to be 1 m in this intermediate section of the route of the submarine cable. The total occupation within the SCI is thus expected to be 450 m². On the basis of the information available, the cable route within SCI GR3000017 does not operate on areas for the development of angiosperm underwater meadows and therefore there is no evidence of a potential impact of the project on the priority habitat 1120 'Poseidonia submarine meadows'.

In view of the above, it is estimated that the impact of the construction of the submarine interconnection will not have a significant impact on the status of the protected habitat types of the Natura 2000 sites through which it passes. The effects on marine habitat types, in the areas identified, are characterised as low in intensity and limited in scope. They concern the narrow burial zone of the submarine cable and are limited in time to the construction phase during the burial process of the electrical pipeline. Thus, it is clear that the implementation of the project cannot alter the conservation status of the protected habitat types and have a significant effect on the species they host.

In view of the above, the effects on benthic habitat types are assessed as **patients of a negative, short-term** and **local** nature. In the operational phase of the project the impact on this area of environment can be considered practically **non-existent** (neutral).

9.5.4.2 <u>Impact on benthic fauna and fish fauna</u>

No significant impacts related to the disturbance of marine fauna communities are expected in the construction phase. Taking into account the linear nature of the route of submarine cables and the way in which they are set, it is estimated that the distribution of existing species will not be significantly affected. Any nuisance created will be temporary during the construction phase and reversible as the surfaces affected for the burial or protection of cables will naturally be reoccupied by marine organisms.

In the construction phase, the potential impact on fish fauna will be of a temporary nature (temporary disturbance, re-suspension of sediments, probably release of past precipitated natural and/or chemical

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pollutants) and concern a limited, almost linear area around the cable routing line. The creation of turbidity will be locally limited and cannot cause problems to fish populations. The manufacturing phase is related to patients and short-term disorders, which focus spatially on a very small scale, over a short period of time and are directly dependent on the species and sensitivity of the body concerned.

The impact of the project under study on fauna species is estimated to be of a **weak, short-term** and **local nature** during the construction phase and characterised as partially **reversible** and largely **manageable**. In particular, the impact of the project on both fish fauna and mainly on benthic organisms will be of a small and temporary nature. The megabenthic organisms on the foot of the shoe will be shifted to a small extent from its effect only once and in a small range. The effect of the shoe machine on benthic organisms is therefore considered to be extremely small.

No impact from the project is expected during the operational phase of the project.

9.5.4.3 <u>Impact on marine mammal species — cetaceans</u>

The potential environmental impacts in terms of marine mammals populations during the **construction phase** of the proposed project include: the increase in noise levels, the risk of collision, changes in the benthic and pelagic biotopes, changes in the food networks and pollution from increased vessel traffic.

Spill-over effects on cetacean populations, which are relevant to the habitat and to the smooth and may occur, include:

- emissions of suspended matter and sediment;
- avoiding the area from fish and other organisms and hence from marine mammals as top predators,

During all phases of the project the main source of noise emissions is the operation of the engines of the floating (or submarine) means of laying the submarine cable.

Data on noise impact on marine mammals and on the marine environment in general are given in the following paragraph.

Taking into account the linear nature of the project and the way in which the marine infrastructure required (routing of marine electrodes) is constructed, it is estimated that any disturbance to marine mammal species will not be significant. The likelihood of collision of marine mammals with vessels or cables is particularly low taking into account the specific bathing capacities of most mammals, as well as the slow movement of shooting vessels and the continuous-line nature of electric links. In the worst case, there will be a temporary small movement of any populations in the area around the point intervention, while the site can normally be used immediately after the works.

According to the Natura 2000 Standard Data Sheet for the SAC/SPA area GR4220004 'Fleandro east to West Sicino and marine area' and in the area of SCI GR3000017 'Coastal and marine area of Makronos', a species of mammalian belonging to Annex II to Directive 92/43 is found in part of the project under consideration. This is the Mediterranean seal (Monachus monachus). The species during the on-the-spot investigation was not detected at any point on the coastline. There were also no caves along the coastline on either side of the stalling points with the typical appropriate morphological characteristics to suggest that they could be used as a refuge/terrestrial habitat by individuals of monk seals (for reproduction or resting). However, it should be noted that there is a small semi-submerged sea cave in the southern part of the Mountain Livadi coast (see MEA Figure 2.1.2.4-2). Although this formation does not have the typical characteristics of a 'shelter' of the species and is not considered likely to be used by seals, care should be taken to preserve it as it belongs to category 8330 of the habitats of Community importance.

In this context, the relative effects on marine mammal species are assessed as **poorly negative**, **temporary** and **naturally reclassified in** a short period of time.

In the **operational phase** of the project **no impact on** marine fauna species is expected.

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9.5.4.4 Underwater Noise Effects

Sound is extremely important for many marine animals and plays a key role in communication, navigation, orientation, feeding and tracing of predators. The distinctive properties of underwater sound and of limiting other consciousness, such as vision, touch, taste and odour in the marine environment in relation to the extent and speed of signal transmission, indicate that sound is the preferred sensory medium for a large group of marine animals. Almost all marine mammals rely to some extent on sound for a wide range of biological functions (UN Environment Programme — CBD, 2012).

Marine mammals use sound as an essential means of underwater communication and perception. They emit sounds for communication for the presence of danger, food, animal of the same or other species and also for their own location, identity and reproductive or spatial condition. The sounds range from the 10 Hz low-frequency hammers of the blue seas to the super-acoustic clicks of the over 200 kHz of some offshore dolphins. The emission levels of 'click' sounds used by bellows in navigation and noisy may reach 235 dB re 1µPa peak at peak. Fungals use low frequency sound for long-distance communication of hundreds of kilometres. The majority of the dentists emit three main types of sounds: tonic sounds, towing hammers, pulsed sounds of short duration used for sound detection and less clean pulsed sounds such as crisps, muzzles or voices. The clicks to detect by sound of the toothers are pulsed sounds with strong forward direction, high intensity and frequency. Some species of seal produce strong underwater sounds that can spread over long distances.

Many other marine taxonomic groups are also regularly based on sound, including rituals and invertebrates, such as decapod crustaceans. Fish use sound to navigate and select habitat, mating, avoid predators and detect smoothness and communication. Hindering the ability of fish to listen to biologically related sounds may be implicated with these critical functions. Many marine fish species produce sounds for communication. Low frequency sounds generated by fish can contribute significantly to environmental noise.

Fish produce sounds individually but also in groups and the increase in low sound frequency can be as high as 20-30 dB in the presence of these fish groups.

Although the study of the sound detection of invertebrates is still somewhat limited, based on the information available, it is evident that many marine invertebrates are sensitive to sounds and related stimuli. However, the importance of sound for many marine taxonomic groups is still not fully understood and requires significant research.

Marine noise generated by human activities can affect different marine mammals. In general, low-level sound perceived by the animals may not have visible effects, but the higher the level, the more disturbance may be caused and other changes in the behaviour of the affected animal caused. A wide range of effects of increased sound levels on marine fauna have been documented both in laboratory and field conditions. Effects may range from mild behaviour responses to total avoidance of the affected area, concealment of important acoustic signals and in some cases to serious bodily injury or even death. Low sound levels may be insignificant for some animals. But as sound levels rise, increased background noise can disturb normal behaviour and lead, for example, to a less efficient diet. The concealment of important audio signals may reduce communication between representatives of the same kind and may be involved in the orientation of the larvae and this may affect their integration.

Some marine mammals have tried to compensate for increased levels of background noise by making changes in the way they communicate. High levels of exposure to sound can cause injury to tissues and organs of marine animals and lead to death. Fatal damage to individual cetaceans found in non-standard wetting situations on land has been recorded. Lower sound levels have been shown to cause permanent or transient hearing loss in marine mammals and fish. Behavioural responses, such as a strong avoidance of the source of sound, may lead to a move from the habitat. Some marine animals, such as zips, are particularly prone to anthropogenic noise and there is a decline in some populations for years after a rubbing event on the coast caused by sonar.

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Animals which, for any reason, cannot avoid the source of noise may be exposed to acoustical conditions likely to cause adverse effects ranging from concern and stress to hearing loss, temporary or permanent (CIBRA, 2010).

As mentioned above, the studies have shown that, depending on subclassification (buffet or tooth), cetaceans use sound in different ways for different biological functions and react to anthropogenic noise with behavioural reactions that vary according to the intensity and frequency of perceived sounds (Simmonds et al., 2004).

In general, the larger the animals, the smaller the frequencies. For example, fungi (Mysticeti) produces dominant signals below 1 kHz, while small tooths such as Stenella coeruleoalba and Delphinus delphis use signals even higher than 80 kHz. Medium-sized toothfish (Tursiops truncatus) produce sound with frequencies between 40 and 80 kHz (Roussel, 2002).

Sound generation in marine mammals is an integral part of species ethology and interference with communication functions is therefore considered to be particularly negative.

Anthropogenic sound can be acute and pulsed (e.g. caused by soar test, geophysical search or pile driving) or widespread and continuous (e.g. caused by maritime traffic or by the sum of many sources that are constantly in motion) and can cause many different effects on cetaceans. The table below summarises the main types of these effects (Jasny et al., 2005 at the Institute for Environmental Protection and Research [ISPRA], 2012).

Table 9.5.4.4-1: Possible Noise Effects on the Marine Environment (Jasny et al., 2005 at the Institute for Environmental Protection and Research, 2012)

EFFECT	TYPE OF HARN	1		
	Non-audiotic	Destruction of body tissue (internal haemorrhage, lung burglary) Embolism (and other symptoms consistent with depressurisation disease or 'diversion disease')		
		Severe failure of the acoustic system (perforation of the ellipsoidal or round window (membrane) of the inside ear may be fatal, piercing of the acoustic drum)		
Normal	Earphone	Abundant effects (leading to vertigo, imbalance or orientation) Permanent hearing loss (known as permanent threshold exceeding or NRM) Temporary hearing loss (known as a temporary threshold or AHR)		
	Result of	Disturbed animal viability		
	pressure	Immune suppression and disease susceptibility		
	(anchor)	Reduction of reproductive rate		
	Rubbing incide	Rubbing incidents on the beach and beaching		
	Interruption of normal behaviour such as nutrition, reproduction and care			
Behavioural	Loss of effectiveness (diving to find food is less productive, spawning call is less effective)			
	Competition with other animals			
	•	from the area (short-term or long-term)		
	Coverage of co	mmunication with other members of the same type		
Sensory sensors	Coverage of other biologically important sounds, such as predators' call			
Sensory sensors	Interference with the audible interpretation of the environment			
	Interpolation b			
		d synergistic effects		
Years		ess, deterioration of other effects		
		n pushing animals to stay close to destructive sound levels		
Indirect effects	lirect effects Habitat quality degradation and availability Reduced availability of smooth			
	Reduced availa	וטווונץ טו אוווטטנוו		

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Reference values for marine mammals

Table 9.5.4.4-2 shows the species with their acoustic functionality (Southall et al., 2007). The species that may be present in the project area are underlined in the table.

Table 9.5.4.4-2: Sub-division of marine chewings according to Acoustic Functional Capacity (Southall et al. 2007)

Audio Function Team	Bandwidth	Genera (Number of species/subspecies)
Low-frequency sensitive cetaceans (MLF)	7 Hz — 22 kHz	Balaena, Caperea, Eschrichtius, Megaptera, Balaenoptera (13 species/subspecies)
Cetaceans sensitive to medium frequencies (MMF)	150 Hz — 160 kHz	Steno, Sousa, Sotalia, Tursiops, Stenella, Delphinus, Lagenodelphis, Lagenorhynchus, Lissodelphis, Grampus, Peponocephala, Feresa, Pseudorca, Orcinus, Globicephala, Orcaella, Physeterer, Delphinapterus, monodon, Ziphius, Berardius, Tasmacetus, Hyperoodon, Mesoplodon (57 species/subspecies)
High frequency sensitive cetaceans (Mhf) 200 Hz — 180		Phocoena, Neophocaena, Phocoenoides, Platanista, INIA, Kogie, Lipotes, Pontoporia, Cephalorhynchus (20 species/subspecies)
Pinnipeds in water	75 Hz to 75 kHz	Arctocephalus, Callorhinus, Zalophus, Eumetopias, Neophoca, Phocarctos, Otaria, Erignathus, Phoca, Pusa, Halichoerus, Histriophoca, Pagophilus, Cystophora, Monachus, Mirounga, Leptonychotes, Ommatophoca, Lobodon, Hydrurga, and Odobenus (41 species/subspecies)

According to the studies, the minimum exposure criteria related to harm are those for which a single exposure event can cause a single acoustic loss (Permanent Threshold Overshooting — NSU).

Table 9.5.4.4-3 shows threshold values set for permanent loss (MSL) and temporary loss (PHC) of acoustic sensitivity (Southall et al., 2007).

Table 9.5.4.4-3: Threshold values for marine Mammals — Noise capable of causing Temporary Threshold Exceeding (TIR) and

Permanent Threshold Overshooting (MRV)

(Southall et al., 2007; ISPRA, 2012)

		NOISE TYPOLOGY				
	One pulse		Many pulses	Non-palmic		
		LO'	W FREQUENCY SENSITIVITIES			
	DAS	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)		
	ICES	198 dB re: 1 μPa2-s	198 dB re: 1 μPa2-s	215 dB re: 1 μPa2-s		
		SENSIT	IVITIES TO MEDIUM FREQUENCY			
	DAS	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)		
NSU	ICES	198 dB re: 1 μPa2-s	198 dB re: 1 μPa2-s	215 dB re: 1 μPa2-s		
ž		HIG	SH FREQUENCY SENSITIVITIES			
	DAS	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)	230 dB re: 1 μPa (front) (level)		
	ICES	198 dB re: 1 μPa2-s	198 dB re: 1 μPa2-s	215 dB re: 1 μPa2-s		
	Nutrients (in water)					
	DAS	218 dB re: 1 μPa (front) (level)	218 dB re: 1 μPa (front) (level)	218 dB re: 1 μPa (front) (level)		
	ICES	186 dB re: 1 μPa2-s	186 dB re: 1 μPa2-s	203 dB re: 1 μPa2-s		

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		NOISE TYPOLOGY				
		LOW FREQUENCY SENSITIVITIES				
	DAS	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)		
	ICES	183 dB re: 1μPa2-s	183 dB re: 1μPa2-s	195 dB re: 1μPa2-s		
		SENSIT	IVITIES TO MEDIUM FREQUENCY			
	DAS	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)		
PSU	ICES	183 dB re: 1μPa2-s	183 dB re: 1μPa2-s	195 dB re: 1μPa2-s		
δ.	HIGH FREQUENCY SENSITIVITIES					
	DAS	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)	224 dB re: 1μPa (front) (level)		
	ICES	183 dB re: 1μPa2-s	183 dB re: 1μPa2-s	195 dB re: 1μPa2-s		
	Nutrients (in water)					
	DAS	212 dB re: 1 μPa (front) (level)	212 dB re: 1 μPa (front) (level)	212 dB re: 1 μPa (front) (level)		
	ICES	171 dB re: 1 μPa2-s	171 dB re: 1 μPa2-s	183 dB re: 1 μPa2-s		

Table 9.5.4.4-4 below (amended by Southall et al., 2007) reports levels that cause behavioural changes, expressed in the form of sound pressure level (SCP), intensity measured at the receiver (receiver level — IC) or noise exposure level.

<u>Table 9.5.4.4-4: Threshold values for different noise sources capable of causing the first significant behavioural response to marine mammals (Southall et al., 2007; ISPRA, 2012)</u>

Threshold values for noise of a pulse
Cetaceans: Level of exposure to noise: 183 dB re: 1 µPa²-s
Pinnipeds in water: Level of exposure to noise: 171 dB re: 1 μPα²-s
Threshold values for multi-pulse noise
Low-frequency sensitive cetaceans: 120 dB re: 1 µPa IC (RMS/pulse duration)
Low-frequency sensitive cetaceans: 90-180 dB re: 1 µPa IC (RMS/pulse duration)
Cetaceans susceptible to high frequencies Cetaceous: not applicable
Pinnipeds in water: 190 dB re: 1 µPa IC (RMS/pulse duration)
Threshold values for non-polluted noise
Low-frequency sensitive cetaceans: 100-110 dB re: 1 µPa RMS RMS
Cetaceans sensitive to medium frequencies: 110-120 dB re: 1 µPa RMS RMS
Cetaceans sensitive to high frequencies: 140-150 dB re: 1 µPa RMS RMS
Pinnipeds in water(1): 90-140 dB re: 1 µPa RMS RMS

Reference values for other Marine Organisations

Other marine organisms sensitive to marine noise include:

- sea turtles;
- fish,
- marine invertebrates.

Sea turtles

Sea turtles in particular are sensitive to low-frequency noise in the range 100-1 000 Hz (maximum sensitivity between 200 and 400 Hz). The available literature studies for these organisms refer to short-term exposure to sources of sounding devices (airgun). Most of these studies show a strong initial avoidance response in arrays of sounding devices at a power of 175 dB re 1μ Pa RMS or more, while samples in limited

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environments have shown a lower response to subsequent stresses, which may be due to a decrease in their sensitivity (PRS). For example, in one turtle 15 dB was found and the turtle recovered two weeks later. One study estimated that a typical array of sounding devices operating at a depth of 100-120 m of water could cause behavioural changes at a distance of ~2 km and avoid around 1 km for sea turtles. A recent monitoring assessment showed that 51 % of the turtles were submerged at the nearest or earlier approach point in a block of sounding devices (UNEP-CBD, 2012).

Long-term exposure to high levels of anthropogenic noise at low frequencies in coastal areas constituting their habitat could affect the behaviour and ecology of these animals.

For lower noise levels, turtles remaining in areas affected by activities may exhibit non-normal behaviours that reduce their ability to feed. In any case, there are no studies on the long-term effects of these non-normal behaviours (UNEP-CBD, 2012).

Fish

As regards fish, research into the effects of anthropogenic noise, especially for naturally occurring fish, has not been developed at all compared to the corresponding survey on marine mammals. As a general rule, marine fish are sensitive to the same range of noise that can cause effects on cetaceans, although noise perception mechanisms differ substantially.

The effect of high intensity noise in periods of short duration has been studied in terms of subsequent physical injuries and behavioural changes. It should be borne in mind that in the case of fish, noise effects on eggs and larvae should also be considered.

Overall, responses to stress caused by underwater noise in fish may consist of the following (UNEP-CBD, 2012):

- injury and physical effects,
- disturbance of behaviour,
- internalisation.

Physical effects may be related to reduced acoustic sensitivity (inner ear and lateral line), bladder damage and embolism due to exposure to high intensity noise. For example, temporary hearing disturbances are reported as a result of prolonged exposure to noise from ferry or small craft; the loss of sensitivity appears to be related to the noise intensity in relation to the threshold sensitivity at this frequency. At frequencies where fish are more sensitive, greater disturbance is caused by widespread continuous noise.

Permanent hearing damage is reported in case of exposure to sources of sounding devices. In particular, a field study using fish in a cage exposed to a sounding device showed that some sensing hair cells in the inner ear have been severely damaged without signs of recovery after 58 days.

Some studies in marine fish eggs and larvae have shown a decrease in egg viability, an increase in foetal mortality or a decrease in larvae growth when exposed to a sound level of 120 dB re 1 Pa. Turbot larvae (Scophthalmus maximus) have been damaged in brain cells and lateral-line neurobloods. Neurobloods are believed to play an important role in the avoidance responses for many larvae species and in the subsequent avoidance of predators. Injuries and increased mortality were detected due to exposure to a sounding device less than 5 m from the source. The most frequent and serious injuries occur within 1.5 m and fish at a fish stage are the most vulnerable. Juveniles and spaws have less inertial resistance to the movement of a passing sound wave and therefore may be at a higher risk of tissue damage than non-sensitive adult fish.

The response of fish behaviour to sounds may range from no change to mild sound 'perception' or aphobic response (but no otherwise behavioural change), to small temporary movements during the sound and larger movements that may shift fish from their normal locations for short or longer periods of time.

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Finally, exposure to noise can affect fish by intervening in their acoustic communication or by internalising important acoustic features of the environment. Most fish species detect sounds below 50 Hz to 500-1 500 Hz with most communication signals in fish in the frequency range between 100 Hz and 1 kHz, which overlaps with low frequency navigation noise. Fish are also known to produce sounds (during territorial dominance fights, when they compete for food, when attacked by a predator, for questioning needs and at spawning concentrations). Consequently, the internalisation of sounds produced by fish for partner detection and identification or for the aggregation of reproductive groups can have significant consequences for the health of populations. Some fish communities located in busy navigation lines or in noisy coastal areas may be constrained in their ability to detect and respond to acoustic signals.

Anthropogenic noise may also interfere with the detection of smooth or predators in marine fish. Avoiding predators in fish may depend on the species' ability to listen or trace the source of specific sounds. It has been expressed that predators using sound as a tool for hunting may be restricted due to noise conditions, through the lower availability of suitable foraging areas (housing displacement) and lower fishing yields. The latter element has recently also been demonstrated for visually-based fish predators to capture their smoothness, and has been attributed to the fact that the sound interferes in the catchment area of the fish, distracting their attention from feeding.

Anthropogenic internalisation of natural acoustic traits that are important for the orientation of marine fish can also occur in coastal environments. Noise produced by (coralogeneous) reef communities in temperate or tropical climates is one of the attributes used by pelagic continental fishes at larval stage for orientation before installation. It has also been shown that fish larvae return to the reef of their birth, most likely using acoustic and chemical features to locate the facility habitat. Indeed, it appears that anthropogenic noise has the potential to negatively affect the integration of fish larvae into temperate or tropical coral systems. But this remains to be verified.

Acoustic attraction studies on 18 species of coastal and oceanic sharks showed that individuals were approaching underwater loudspeakers transmitting unstable low frequency pulsed sounds at a distance of several hundred metres. Some non-avoidance behaviour studies showed that suddenly strong sounds (20-30 dB above the ambient noise level) reproduced as soon as a shark was close to a site, placarding the shark and causing it to be removed from the area. In most cases of attraction and pushback, sharks were familiar with stimuli after some tests.

Elasmobranchs (sharks, rays) do not have a navigating bladder or any other air filling cavity, which means that they are not able to detect sound pressure. Therefore, the movement of particles is considered to be the only acoustic stimulus that can be detected. The hearing bandwidth of elasmobranchs has been measured between 20 Hz and 1 kHz, with similar threshold values in all items above 100 Hz. It appears that elasmobranchs are not as sensitive to sound as the late fish when measuring in a comparable way. However, the current knowledge about the hearing of elasmobrasses is based on data from only a few of the hundreds of species, therefore caution is needed when formulating generics for an entire subcategory of fish based on these data.

Anthropogenic noise sources that have the potential to influence elasmobranchs are considered to be pile driving, wind turbines and noise generated by vessels.

Marine Invertebrates

For other marine invertebrates, the few studies available on the use of sounding devices do not allow clear conclusions to be drawn.

High background noise tends to alter the acoustic environment of marine invertebrates. Anthropogenic noise at low frequencies may, for example, cover shellfish communication. The coverage of important acoustic signals used by invertebrates in the orientation and installation of larvae may also be an issue in coastal areas, leading to dissatisfactory behaviour that reduces the success of integration. In noisy environments (increased stress), more minor physiological changes may occur: for example, grey shrimp (Neograngon communis), when exposed to background noise increasing for about three months, showed a

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significant decrease in growth and reproduction rates. Shrimp has proven to be even more aggressive with higher mortality and a decrease in nutrition. In invertebrates, these symptoms are often associated with stress.

The propagation and damping of sound is influenced by many factors, including variations or heterogeneity in temperature, salinity and depth. Noise can be spread in water either directly or through several reflections between the water surface and the bottom, through the rocks of the bottom on the water surface at a certain distance from the source. Refractive and absorption also enhance the deformation of acoustic waves, causing variation in a highly complex waveform during propagation.

There are no clear indications that underwater noise caused by the installation of submarine cables presents a high risk of harm to marine fauna (Richardson et al, 1995 research on behavioural reactions of cetaceans during dredging emitting comparatively higher levels of underwater noise). However, it is not clear whether behavioural reactions are due to noise levels or species physiology.

Appropriate planning of cable laying activities will minimise the potential for such impacts on sensitive species (e.g. marine mammals or turtles). Suspending activities if sensitive species are found is a possible mitigation measure.

In addition, proper planning will minimise vessel movements and avoid as much as possible the simultaneous presence of many vessels in the area, thus minimising noise levels.

Consequently, the project is expected to have a relatively small impact on marine fauna caused by noise generated.

Considering that the project does not include large-scale construction works, it is estimated that in the construction phase of the project the potential impacts on marine mammalian species — cetaceans are assessed as **weak negative, locally limited, short-term, manageable and reversible upon completion of the construction phase**. During the laying phase of submarine cables, every effort will be made to avoid any impact on marine organisms in the setting area.

During the operational phase, potential effects relate to magnetic fields created in some cases that could potentially influence the orientation of fish and marine mammals. In any case, a survey of 24 interconnection projects2 showed that the electromagnetic fields produced by submarine cables are limited locally.

In conclusion, the impact of the project under consideration on marine mammal species during the construction and operational phase is estimated to be **small-scale**, **local** and **limited** in time during the construction phase and are characterised as **partially reversible** and **largely manageable**during the operational phase.

9.5.4.5 <u>Effects of light pollution at sea</u>

Project activities are planned to take place 24/7. A night-lighting system on board vessels is therefore necessary to ensure the operating conditions for the crew.

Light pollution can be seen as a change in natural light in the night-time landscape caused by the introduction of artificial light from the lighting equipment. This lighting may be caused by disturbance of marine organisms near the area of operations and, in particular, in the most superficial part of the water column.

One of the main effects is a slight increase in photosynthetic activity of phytoplankton in surface water layers, with the consequent increase in self-cleaning capacity. In addition, the presence of light may change the biorates of some zooplankton organisms that are usually located in dark areas. In the long term,

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² Study 'EFFECTS OF EMFS FROM UNDERSEA POWER CABLES ON ELASMOBRANCHS AND OTHER MARINE species Final Report' (May 2011), prepared by the U.S. Department of the Interior, the Bureau of Ocean Energy Management, Regulation and Enforcement and the Pacific OCS Region.

disturbance can become a stress factor for the organisms and cause a decrease in the organic production of plankton.

Even birds can be affected by night lighting and behavioural issues (due to the change of photoperiod) and migrations (for species carrying out circular displacements). Birds migrate according to specific routes that may be subject to "derogations" caused by the presence of powerful light sources.

Research activities are expected to take place throughout the 24-hour period. Vessels (laying vessel and support and escorting vessel) must therefore be equipped with appropriate artificial lighting to facilitate operations on board and to ensure the safety of navigation.

In particular, in the case of lighting outside areas necessary for the activities of the project, they will be limited to the areas of interest, in terms of safety conditions and in accordance with the law, thus avoiding nuisance particularly in relation to night fauna.

Accordingly, in view of the location of the activity, the period allowed for carrying out the activities and the mobile nature of the vessel's activities, the effects on flora, fauna and birds may be regarded as **small**, **temporary** and **reversible**.

9.5.4.6 Electromagnetic fields and heat

The field emitted to the marine environment by both AC and AC cables is the magnetic field. During the operational phase, potential effects relate to magnetic fields created in some cases which may affect the orientation of fish and marine mammals within a short distance from the cables. Table 9.5.3.6-1 below shows the magnetic fields produced along the submarine cable, which is buried at a depth of 1 m. The magnetic field generated by a DC transfer line is reduced by increasing both the vertical and horizontal distance from the source.

Table 9.5.4.6-1: Direct current magnetic fields (μ T) reflecting mean values from 8 direct current projects at intervals above and horizontally along the seabed, assuming 1 m burial of the line

/ \	Magnetic Field Intensity (μΤ)			
Distance (m) Above Seabed	Horizontal distance from cables (m)			
Above Seabed	0	4	10	
0	78,27	5,97	1,02	
5	2,73	1,92	0,75	
10	0,83	0,74	0,46	

Source: "Effects OF EMFS FROM UNDERSEA POWER CABLES ON ELASMOBRANCHS AND OTHER MARINE species — Final Report" (May 2011)

It is safely estimated that throughout the underwater installation of cables the magnetic field will be far from the $100 \, \mu T$ limit value.

In any case, a survey of 24 interconnection projects3 showed that the electromagnetic fields produced by submarine cables are limited locally. In the operational phase of the project under consideration, electric and magnetic fields are produced along the individual sections of the transfer line. According to the existing studies, the levels of these fields are lower than the limit values according to the Greek legislation. In any event, during both the construction and the operational phases of the project under consideration, the provisions of Joint Ministerial Decision No 3060 (Φ) 238 on measures to protect the public against the operation of low-frequency electromagnetic field emission devices (Government Gazette, Series II, No 512 2002) shall be complied with.

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³ Study 'EFFECTS OF EMFS FROM UNDERSEA POWER CABLES ON ELASMOBRANCHS AND OTHER MARINE species Final Report' (May 2011), prepared by the U.S. Department of the Interior, the Bureau of Ocean Energy Management, Regulation and Enforcement and the Pacific OCS Region.

It is generally known that when HVDC cables are more than 5 m apart, then in the vicinity of the cables the magnetic field depends only on the value of the field strength that leaks into the nearest conductor.

In the case of the project under consideration, it is easy to see from the Ampere B = Mol/2r Law that, for a current which leaks from a current of 1000 A, the limit of 40 000 μT is exceeded for distances of less than 5 mm from the pipeline. Therefore, based on existing studies in any case the values of the electric and magnetic field are below the limit values. In the operational phase of the projects, weak negative effects, related to electric and magnetic fields along the transfer line, are expected to be addressed by appropriate measures and long-term measures.

In the operational phase of the proposed projects the impact on the marine environment and marine fauna species in the study area is assessed as weak, negative and long-lasting, manageable by appropriate measures, partially reversible and locally limited.

Thermal radiation from submarine cables has become an issue of growing concern over recent years. When electricity is transported, a certain amount is lost as heat, leading to an increased temperature of the cable surface and subsequent ambient heating.

Important factors determining the degree of temperature increase are the characteristics of cables (cable type), transmission velocity and ambient characteristics (thermal conductivity, sediment thermal resistance, etc.). In general, heat loss is expected to be more significant for AC cables than for HVDC cables at equal transmission rates.

The field study carried out so far at the Nysted wind farm did not provide any conclusions (Meißner et al., 2007). The temperature increase must not exceed 1.4 °C at a depth of 20 cm above the cable, but the capacity of the cable was only 166 MW. Moreover, it was not possible to establish a correlation between temperature increase and power transmission due to the lack of data.

There are indications that various marine organisms are reacting sensitive to an increase in ambient temperature. For example, Atlantic cod populations (Gadus morhua) decrease with rising water temperatures (Drinkwater, 2004) and mortality rates of some gastropods increase due to rising temperatures (Newell, 1979). Nevertheless, field studies on the operation of submarine cables are almost completely missing.

Experiments by the Commission's laboratory OSPAR (2009) revealed that the polychaet worm (Marenzellaria viridis) shows a tendency to avoid areas of sediment with an increased temperature, while Corophium volutator corals do not (Borrmann, 2006).

Due to the lack of field data, the effects of artificial temperature increase on benth are difficult to assess. An assumed permanent increase in seabed temperature may lead to changes in the physiology, reproduction or mortality of some benthic species at a very short distance from the cables. The temperature increase of the upper layer of the bottom inhabited by the majority of the benthos depends, inter alia, on the burial depth of the cable. In any case, these impacts are of limited scale as they are located in a small area around the pipeline and there is no evidence of concern about far-reaching changes in benthic ecosystem elements based on the available data.

9.6 Impact on anthropogenic environment

9.6.1 Implications for spatial planning and land use

The land uses of the transit area of the project under study are presented in the table below.

Table Error! No text of specified style in document.-2 Land Uses found in the location area of the project under study

Project section under study Land uses in the area where the project is located	Labels for point uses
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Transmission system		
Project section under study	Land uses in the area where the project is located	Labels for point uses
Underground section	Industrial space, shrubs and agricultural	Most of the GM is located within the Lavrio
150 kV Attica in Lavrio	crops.	Energy Centre (EES), a small part of which passes
		through shrubland and agricultural crops.
Underground section	Meadows, sparse woody vegetation and	
150 kV Serifou G.U.	abandoned agricultural crops	
New S/S Island of		The lead of the many vector is leasted within
	Meadows, sparse ligneous vegetation	The land of the new water is located within
Serifos		meadows with sparse woody vegetation. At the
		south-west boundary of the land of the water
		body is the Sierfou EYL.
Underground section	Agricultural crops with residential land,	The U.S. is located on existing roads which pass
150 kV B.Milou	meadows (grown woody vegetation)	mainly through agricultural crops with
	and shrubland.	residential land. 370 m southeast of the G.M. in
		the N. Milos are located on the surface mines of
		bentonite.
New Island of Milos	Agricultural crops with residential land.	The land of the new water/S is located within
		agricultural crops with residential land. 240 m to
		the west of the water plot is located in the PPC's
		PPC.
Underground section	Agricultural crops with residential land	The U.S. is located on existing roads which pass
150 kV N. Milos	and scrubland.	mainly through agricultural crops with
		residential land. 150 m southeast of the
		Southern Milos G.M. is located at Milos Airport.
		In addition, a quarrying region is located around
		the Achivadolinna campsite in the N. Milos and
		further southerly, 250 m to the east of the G.M.
		in the south of Milos.
Underground section	Residential land, meadows (grown	The G.M. is located on existing roads which pass
150 kV Folegandrou	woody vegetation) and agricultural	through residential areas. The Livadi campsite is
130 Kt / Gregariarea	crops.	located 100 m from the landing point at
	- 61 Op 51	Fologandro.
New body of the island	Meadows (grown woody vegetation)	_
of Folegandrou	and agricultural crops	
Underground section	Residential land.	_
150 kV Hunting	Residential land.	
New Island of the island	Residential land.	The land of the new Hunting water is located
of Thira	Residential land.	within residential areas. On the south-eastern
o, 111114		boundaries of the land, the PPC Thira is located
		and 250 m south-west of Hunting is located at
		Thira Airport.
Underground section	Shrublands	·
_	Sili ubidilus	The GI is located on existing roads which pass
150 kV Naxos		through shrub areas and end up in the existing
		water/system of Naxos.
Submarine cable parts	Marine environment	-

The total occupation of the project in the construction phase was estimated at **462.28da**, whereas in the operational phase it was estimated **469.82da**. These are mostly areas covered with grassland, agricultural crops and residential construction.

With regard to approved spatial planning plans issued and in force in the area covered by the project, please note the following:

According to the ZE of Lavreotikos (Government Gazette 125/D/27-2-1998), most of the
underground cable (392 m) in the Attica area falls outside specific town planning plans. 362 m of the
cable are located in Area I2 and 153 m are in Area B2. In Area I2 (industrial, industrial, industrial and
PPC installations) the following shall apply:

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- '1. It is an area of industrial and artisanal installations, where professional installations which are not particularly nuisance, as defined in the table in the Article, are permitted. Presidential Decree 81/1984 (Government Gazette, Series I, No 33).
- 2. PPC installations are allowed
- 3. The provisions of Presidential Decree of 31 January 1987 (Government Gazette, Series I, No 303) shall apply to building conditions and restrictions.'

For area B2 (medium protection areas for landscape and archaeological sites):

- '1. The following uses are permitted in the above areas: housing, rural warehouses, public and municipal cafés and refreshments).
- 2. The conditions and restrictions on the construction of permitted uses shall be as follows:
- a. For residential buildings: Maximum total permissible coverage and area of the building one hundred (100) m^2 , maximum number of floors of the buildings: one (1) with their maximum permissible height: four (4) metres and the construction of more than one building inside the stadium is prohibited.
- b. For agricultural warehouses: Maximum total permissible surface area of the building of thirty (30) m^2 , maximum permissible height of the buildings: two and half (2.5) metres.
- C. For public and municipal sedentaries and refreshments: Maximum percentage of coverage: three per cent (3 %), building factor: Maximum total permissible surface area of the building two hundred (200) m^2 , maximum number of floors of buildings: one (1) with their maximum permissible height: four (4) metres and the construction of more than one building inside the stadium is prohibited.
- d. above the maximum permissible height of the buildings, a roof with byzantine or Greek-Hellenic tiles must be constructed, the height of which does not exceed two (2) metres.
- 3. Articles 28 and 29 of Law 1947/1991 (GG I 70) and the provisions of Presidential Decree 93/87 (Government Gazette, Series I, No 52) shall not apply to the above regions.'
- The island of Serif applies 'Special terms and restrictions on building in settlements and non-planned areas on the island of Serifou' (Government Gazette, Series I, No 930 of 24.10.2002). Article 3 reads as follows: 'The following shall apply to the non-projected and outlying agglomerations on the island of Serifou: (...) 21. Buildings of general interest or cultural activities may be constructed by way of derogation from the provisions of this Law following approval by the Minister for the Aegean following an opinion of the SSP of the Ministry of the Aegean, provided that they are integrated harmoniously into the environment and comply with local traditional architectural standards.'
- The entire project on the island of Thira falls within Area III of the ZE Thira & Thirasia (Government Gazette, Series I, No 139/19.3.1990, amending Government Gazette, Series I, No 144 of 30 April 2012). In particular, Article 2 reads as follows: *C. Areas with element III:*
 - 1. It includes all areas outside the boundaries of the agglomerations and outside the areas referred to in points I and II above, the area of the islands of Thira and Thirasia and outside archaeological sites.
 - 2. The following uses are permitted in the area: a. Residence, shops
 - b. tourist facilities c. public utility buildings
 - d. agricultural warehouses, greenhouses, pumping installations, tanks
 - e. non-nuisance artisanal installations. (...)
 - E. General provisions
 - (...) I. Where construction of buildings of general interest is permitted, the definition of such spaces and the building conditions and restrictions shall be carried out in accordance with Article 26 of Law 1337/83 (Government Gazette, Series I, No 33), as in force.
- The entire project on the island of Naxos falls within Area 2a2 of ZE Naxos (Government Gazette 846/D/24-11-1988). According to Article 2(E) 'Areas 2a1 and 2a2':

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- 3. In both areas 2a1 and 2a2 construction is permitted for dwellings, shops, tourist facilities, organised campsites, recreation centres, sports facilities, pumping facilities, water reservoirs, wells, buildings of general interest.
- 9. The conditions and restrictions on the construction of public utility installations and the other conditions and restrictions on building the other permitted uses are those referred to in the Presidential Decree of 6 October 1978 (Government Gazette, Series I, No 538), as amended by Presidential Decree of 20 January 1988 (Government Gazette, Series I, No 61) and of 24 May 1985 (Government Gazette, Series I, No 270/D).

In view of the above, it is considered that the project under consideration is compatible with the planning and planning provisions in force in the study area.

In conclusion, the **construction phase** of the project is expected to have a **moderate negative impact** on the land uses of the study area due to the occupation of land for the need for the construction of the project. These effects are **short-term**, **partially manageable** and reversible by appropriate measures.

In the operational phase of the project no additional occupation is foreseen and the impact on the land uses of the study area will only concern the land uses in the proposed water/system and the connection wells of the cable G.M. and are therefore assessed as practically neutral.

Particular attention is required in both the construction and operational phases, with regard to the submarine cable (information of competent authorities) to unlock activities from the cable transit zone.

If there is a need to protect the cable, the need will be explored and the necessary steps will be taken to place floating markings at specific locations of the submarine cable.

9.6.2 Structure and operations of the man-made environment

Construction phase

The following agglomerations are found in the project area:

- In the municipality of Lavreotikos:
 - o 800 m to the east of the project is located in the Syri agglomeration
 - \circ 2 km south of the project is located in the agglomeration of Lavrio (Government Gazette 1260/ Δ /1993, 374/ Δ /1995).
 - 2 km south-west of the project is located in the Noise agglomeration.
 - 2 km to the west of the project is located in the settlement of Paylakaraza
 - o 2 km of the project is located in Panorama Microlimano
- In the municipality of Serifou
 - \circ Approximately 0.9 km to the west of the agglomeration of Livadi (Government Gazette, Series I, No 1373/ Δ /1986-12-31)
 - 2 km north-west of the project is located in Serifos (Country) (Government Gazette 1373D/1986-12-31).
- In the municipality of Milos

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- The agglomeration of Pachaina is located to the east of the bottling point of B. Milos.
- The underground unit of V. Milos passes through the agglomeration of Mytikas.
- The agglomeration of Adamada is located in 1 km to the east of the underground metropolitan area of V. Milos.
- The settlement of Kanna is located in 250 m to the east of the underground GM of the N.
 Milos.
- o The agglomeration of Zefyria is located 1.2 km east of the new Milos water/body.
- The settlement of Kipi is located at 700 m west of the landing point in the N. Milos.
- The agglomeration of Provas is located 1 km east of the landing point in N. Milos.

In the Municipality of Folegandrou

- The agglomeration of Karavostase (Government Gazette, Series I, No 1373, 1986-12-31) is located to the south-east of the new water.
- \circ 2 km north-west of the project is the agglomeration of Foleganros (Country) (Government Gazette, Series I, No $605/\Delta/1988-08-22$).
- o Km to the east of the landing point is the agglomeration of Livadi.

• In the municipality of Thira

- Part of the project (Government Gazette, Series I, No 351/1989) passes through the statutory boundaries of the conurbation of monolithos (Government Gazette, Series I, No 351/1989).
- 0.9 km north-west of the project under study is located in the agglomeration of Eexo Gilo Kardterádou.
- \circ 2 km to the west of the project is the agglomeration of Kardterida (Government Gazette, Series I, No 820/ Δ /1987-08-27)
- 2 km to the north-west of the project under study is located in the agglomeration of EExo
 Giunta
- o 2 km south of the project is located in Agia Paraskevi.

• In the municipality of Naxos

- o 800 m north-east from the project under study is the agglomeration of Strida.
- The agglomeration of Agios Prokopios is located in the south-east of the project.
- 1.9 km south-east of the project is located in the agglomeration of Agia Anna (Government Gazette, Series I, No 264/1986).

Finally, the existing Lavrio hotspot is located in an area of institutionalised industrial uses (ZE Lavreotikos (Government Gazette 125/D/27-2-1998), the new Sierfou water station is located in the middle of grassland and agricultural crops adjacent to the EYL Serifou, the new water/system of Milos is located in the middle of agricultural crops with residential construction. next to the Mileo ATP, the new Folegandro bath is located in the middle of grassland and agricultural crops, the new water/shunt is located within the boundaries of the

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monolithic settlement (Government Gazette, Series I, No 351/1989), alongside the Thira ASP, and the existing water/shit is located amid shrub areas outside settlements or a town plan.

According to the data in the permanent list of declared archaeological sites and monuments of Greece by the Ministry of Culture and Sport/http://listedmonuments.culture.gr/search_declarations.php), there are five (5) agglomerations in the project area which have been declared as traditional:

- Serifos (Country) in the Municipality of Sirfo(Government Gazette, Series I, No 594/13.11.1978)
- Fologanros (Country) (Government Gazette, Series I, No 594/13.11.1978, Government Gazette, Series I, No 402/17.05.2002, Government Gazette, Series I, No 920/23.10.2002) and Karavostase (Government Gazette, Series I, No 504/14.07.1988, Government Gazette, Series I, No 920/23.10.2002), in the Municipality of Folegandrou
- Kardteridas (Government Gazette, Series I, No 504/14.07.1988) and Egos Gonia (Government Gazette, Series I, No 504/14.07.1988), in the municipality of Thira

In view of the above, it is estimated that the construction of the proposed projects is not expected to cause the urban and extra-urban areas to be broken down. During the construction phase of the projects, all necessary measures will be taken to limit the emission of noise and gaseous or particulate pollutants, which may adversely affect the environment of the agglomerations present in the study area. In conclusion, the effects of the construction of the proposed projects on the structure and operations of the anthropogenic environment are **weak negative** and **short-term**, **partially manageable and partially reversible** by appropriate measures.

Operation phase

In the operational phase of the projects, no significant adverse effects on the structure and operations of the man-made environment of the study area (**neutral effects**) are expected, taking into account that the overhead line of the project under consideration is not immediately adjacent to residential areas and that the underground part of the project is located along the existing road network and the operational phase of the projects will have fully restored the intervention area.

Positive effects are expected from the fact that the islands on which the projects will be built will gain stability in meeting current and future electricity needs. This will also have significant positive effects on the productive sectors.

9.6.3 Impact on cultural heritage

Two parts of the project are located within the boundaries of the following declared archaeological sites:

- The underground General Unit of the Lavreotikos Regional Unit shall:
 - The landing point is located within the Agios Nikolaos Mountain, which has been established as an archaeological position (Ministerial Decision 2258/4-2-1966, Government Gazette, Series II, No 175//26-3-1966, Presidential Decree 17-2-1998, Government Gazette 125/D/27-2-1998).
 - The land route of the line, which is located alongside the road network, passes through the boundaries of the 'A Archaeological Area of Lavrio' (Ministerial Decision 25666/984/30-5-1957, Government Gazette, Series II, No 184//8-7-1957, Ministerial Decision 25666/984/30-5-1957, GG II 265//1-10-1957, Ministerial Decision 21220/10-8-1967; Government Gazette, Series II, No 527/24-8-1967, Ministerial Decision 2717/Π-102/91/2-10-1991, GG 946/Δ/23-12-1991, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ02/6690/376/21-11-1994, Government

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Gazette, Series II, No 927/14-12-1994, Presidential Decree 17-2-1998, GG 125/Δ/27-2-1998)

- The underground GM on the island of Naxos:
 - O The entire project on the island of Naxos falls within Zone B of the archaeological site in Strida with residues from the processing of flint during prehistoric times (cores, flakes, etc.), the foundations of a circular tower of the 4th B.P.C. and the granite quarries (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/DGAPK/ARX/A1/Φ21/32793/2143/28-4-2004); GG II 966, 29.6.2004, Ministerial Decision ΥΠΠΟ/DGAPK/AX/A1/Φ21/32793/2143/28-4-2004 (Government Gazette, Series II, No 140/4-2-2005)

As regards other archaeological sites in the vicinity of the project, please note the following for the project design area at the Regional Unit of Lavreotikos:

- The submarine line passes 700 m south from the sun's archaeological site in the sea area of Cape Vrysaki Thorikos, where there is a shipwreck of Byzantine years (Government Gazette, Series II, No 2069/21-09-2015).
- Within the study area, 1.5 km north of the project's land route and the Lavrio hotspot are located at
 a sunal archaeological site in the sea area of the Turmolimno Thorikos Bay, in South Evia, where two
 shipwrecks: a classical time and a sinking of Roman times. The A & B sections of the site are classified
 as open to the public for underwater surveys (Government Gazette 2069B/21-09-2015 and
 2655B/09-12-2015).

As regards the planning area of the project in the municipality of Serifou, Regional Unit of Milos, please note the following:

- To the west of the new Serif and the underground transport line of Serifou, a distance of more than 400 m lies in the settlement of Livadi where the sites 'Historical conservation monument the building owned by M. Chrysoloras in Livadi Serifou' (Government Gazette, Series II, No 900/13-12-1993) are located (Government Gazette, Series II, No 900/13-12-1993), 'An art project in need of special State protection for the house owned by Artemisia Hatziathanasios in Livadi Serifou' (Government Gazette, Series II, No 967//26-09-1980).
- To the south-west of a new Sierfou water station and the underground transport line, at a distance of approximately 1 km, the I. Agios Georgios Temple of Necetos in Livadi Serifou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31303/684/31-7-1987 (Government Gazette, Series II, No 466/28-8-1987) is located.
- The sea area from Cape V. Platotos to the bay of Psiliamos in Serifos, which has been designated as a sea area for submarine activities with breathing apparatus, deep-boat or other means of bottom surveying (Ministerial Decision of the Ministry of the Environment, Energy and Climate Change/AX/A1/Φ41/88711/4369/22-10-2005 (Government Gazette, Series II, No 1610//22-11-2005)) is located north of the new Serifs' Water Management Plan at a distance of approximately 1 km.
- The settlement of the country of Serif, which is located approximately 1.8 km north-west of the new Sierfou water body, has been designated as a traditional settlement and a site of special natural beauty requiring special State protection (Government Gazette $594/\Delta/13-11-1978$, 274/B/24-05-1983, $345/\Delta/02-06-1989$ and $930/\Delta-24-10-2002$).
- To the west of the new Serif and the underground transport line of Serifou, more than 1.5 km is located by I. Brigadier General of the country of Serifos (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810//20-10-1989)

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- The Serif Castle is located approximately 1.8 km north-west of the new Sierfou water body. The following monuments are located within the site:
 - The ruins of the Serif Castle (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Ioannou Theologos in Chios Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Agios Eleftheriou in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Touros Profitos Daniel in the country of Serifou (Ministerial Decision 6505/293 e.e./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - I. Church of Panagia in the country of Serifou (Ministerial Decision 6505/293 p./2-2-1972, Government Gazette, Series II, No 126/11-2-1972)
 - O I. Church of Christos in the Serif Castle (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/31304/685/31-7-1987, Government Gazette, Series II, No 459/21-8-1987)
 - House of Georgios Lefikos in the Serif Castle (Ministerial Decision 6922/291 e.e./12-2-1972, Government Gazette, Series II, No 148//17-2-1972)
- To the north-west of a new water/Sierfou, approximately 1.7 km away, in the village of Kalličos, I. Timios Stavros Thimiou is located (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/27948/571/10-8-1989, Government Gazette, Series II, No 810/20-10-1989).

As regards the planning area of the project in the municipality of Milos, Regional Unit of Milos, please note the following:

- Approximately 700 m of the underground transport line of the southern Milos passes through Zone B of the Archaeological site in the Provasia Milos (Romanic and PaleoChristian remains), (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/26587/12393/25-6-1990, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG 140/B/18-2-1999).
- To the west of the landing point of southern Milos, approximately 1.1 km is the archaeological site at the 'Kipi' of Milos (two churches and an anti-Christian painter) (Royal Decree 24-7-1936, Government Gazette, Series I, No 332, 6-8-1936).
- To the east of the new Milos bath, approximately 1.3 km is the historic memorial I. Church of Christou in Zefyria Milos (Ministerial Decision 18429/808/13-2-1954, Government Gazette, Series II, No 60/26-3-1954).
- To the south-east of the new Mileium, around 1.4 km is the historic memorial of Agios Charalambous in Zefyria Milos (Government Gazette, Series I, No 332, 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series II, No 935/10-10-1996).
- To the south-east of the new Mileium, around 1.4 km is the historically preserved monument I.
 Theattokos Prefectural Church (Portiani) in Zefyria Milos (Government Gazette, Series I, No 332,
 6.8.1936, Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/12115/382/20-9-1996, Government Gazette, Series
 II, No 935/10-10-1996)

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- To the north-east of the northern landing point of the island of Milos, the historic memorial I. Agios Konstantinos Temple in Pachaina Milos (Ministerial Decision of the Ministry of the Environment, Regional Planning and Public Works/B1/Φ27/1544/58/1-2-1985, Government Gazette, Series II, No 94/21.2.1985) is located approximately 350 m away.
- To the north-east of the northern landing point of the island of Milos, there is approximately 1.1 km of the archaeological site of the fencopis Milos, with the ruins of the ancient guillopi, its cemeteries and a monumental calorific grave of the traditional cords second half of the 4th BC⁽ Ministry of Rural Development and Food/A1/Φ21/26587/12393/25-6-1990), Ministerial Decision 3888/21-2-1967, Government Gazette 168/B/9-3-1967, Ministerial Decision ΥΠΠΠ/ΑΧ/Α1/Φ21/58434/2938/16-11-1979, GG 209/B/29-2-1980, Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, GG II 1193/19-11-1998, Ministerial Decision ΥΠΠΟ/DGA/ΑΧ/Α1/Φ21/58772/3934/9-10-2002; Government Gazette, Series II, No 1348/17-10-2002, Ministerial Decision ΥΡΑΡΟ/DGAPK/A1/Φ21/58772/3934/9-10-2002 (Government Gazette, Series II, No 1690/2-12-2005)
- To the east of the underground transport line of the northern Milos, approximately 600 m is located on the border of the archaeological site in the Milos gypsyna (lack of Greek and Roman settlement) (Ministerial Decision ΥΠΠΟ/ΑΧ/Α1/Φ21/46840/2155/29-9-1998, Government Gazette, Series II, No 1193/19-11-1998).

As regards the planning area of the project in the Municipality of Folegandrou, Regional Unit of Thira, please note the following:

- To the north-west of a new Folegandro bachelor, approximately 1.4 km away, there is the historic memorial I. Thetotokos Prefecture Temple of Foleganros (Ministerial Decision 10976/16-5-1967, Government Gazette, Series II, No 353//31-5-1967)
- Greece is located 1.7 km north-west of the new water/body and the Folegandro underground transport line. Within Greece, the following monuments are located:
 - \circ Greece has been declared a historical site and special natural beauty (Ministerial Decision A/ \oplus 31/5760/571/24-4-1973, Government Gazette, Series II, No 526/8-5-1973).
 - Historic monument I. Temple of Taxi Commander in the country of Folegandrou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)
 - Historic monument I. Agios Antonios Temple in the country of Folegandrou (Ministerial Decision ΥΠΠΟ/ΑΧ/Β1/Φ27/9686/196/3-3-1988, Government Gazette, Series II, No 219//22-4-1988)

As regards the project area in the Regional Unit of Thira, Municipality of Thira, Regional Unit of Thira, please note the following:

• The archaeological site of Monolithos, with archaeological residues dating from prehistoric times to late seniority (Ministerial Decision No ΥΠΠ/ΑΧ/Α1/Φ21/77169/3858/30-1-1980, Government Gazette, Series II, No 300/24-3-1980, Presidential Decree 16-2-1990, Government Gazette, Series II, No 139/19-3-1990, Government Gazette, Series II, No 300, 24.3.1980, Presidential Decree 16.2.1990, Government Gazette, Series II, No 139/D/19-3-1990) is located southeast of the new Hunting and the underground transport line.

As regards the project area in the Regional Unit of Naxos, Municipality of Naxos and Micro-Kyclades, Regional Unit of Naxos, please note the following:

• To the east of the underground transport line, at a distance of approximately 300 m, there is the ancient monument I. Agios Prokopiou Temple in Agios Arsene Naxos (Ministerial Decision

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ΥΠΠΟ/ΑΧ/B1/Φ30/KHP/49013/1935/23-12-1998, Government Gazette, Series II, No 26/25-1-1999).

The declared archaeological sites and monuments found in the study area and the location of the project under study are set**out in the Land Use and Coverage Map**(Environmental Map: Annex 15 to this study.

Construction phase

In the construction phase of the proposed projects, all necessary measures will be taken to limit emissions of dust, gaseous pollutants and noise, which may adversely affect visitors to the monuments closest to the projects under study.

In view of the fact that the project under consideration will be built in parts and appropriate measures will be taken in the construction phase, it is estimated that the impact of the construction of the works on the historical/cultural environment of the study area will be neutral, since the project design did not give rise to negative opinions from the competent services.

In any case, the competent Antiquities Inspectorates will give an opinion on the proposed works and before the start of the construction works they will be informed so that the excavation and construction works can be carried out under the supervision of a competent official of the service.

Operation phase

In the operational phase of the proposed projects, no impact on the cultural environment is expected. The location area of the underground sections of the line will be restored upon completion of the construction works and is not related to the impact on monuments and archaeological sites in the operational phase.

It is therefore considered that the effects of the operation of the project under consideration are neutral.

9.7 Social — economic impact

9.7.1 Possible effects on the population

According to the assessment carried out above (§ 9.6.1 Impacts on spatial planning and landuse), please note the following:

- The construction of the proposed projects is not expected to cause the urban and extra-urban urban fabric to be broken down. During the construction phase of the projects, all necessary measures will be taken to limit the emission of noise and gaseous or particulate pollutants, which may adversely affect the environment of the agglomerations present in the study area. In conclusion, the effects of the construction of the proposed projects on the structure and operations of the anthropogenic environment are weak negative and short-term, partially manageable and partially reversible with appropriate measures and locally limited.
- During the operational phase of the projects, no significant negative effects on the structure and
 operations of the man-made environment of the study area (neutral effects) are expected, taking
 into account that the new water bodies on the islands of Serfo, Milos, Foleganro and Hunt will be
 built in accordance with local traditional architectural standards and the underground part of the
 project is located along the existing road network and the works will have fully rehabilitated in the
 operational phase.

During the **construction phase** of the project under study, **weak positive effects** are expected on the population of the agglomerations present in the study area, as the jobs created will be covered as far as possible by the population of the study area.

During the **operational phase**, no significant variations are expected in the employment conditions of the local workforce (**neutral effects**), although seasonal workers may be hired by the local workforce in the periodical maintenance of parts of the work, as the projects under consideration will not change the characteristics of the

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population (density, distribution, dispersion). However, it should be noted that with the operation of the project and the indistinct capacity of capacity, it is very likely that there will be an increase in new activities that will have a positive impact on employment, mainly in the tourism sector and therefore overall the effects are assessed as positive and long-lasting.

9.7.2 Impact on the structure of the local economy

The potential impact of the construction and operation of the projects under consideration on the local economy is related to the impact on production processes by industry.

The indirect positive effects on the productive tourism sector, as mentioned above, are likely.

Underground GOMs are located on the road network, so their impact on the structure of the local economy is expected to be neutral. The same applies to submarine parts of the U.S. which will be set in the marine environment.

Taking into account the relatively limited take-up of the project in relation to its scale (69.82da covered by the four substations) and the fact that it occupies predominantly grassland and a smaller percentage of agricultural crops, the owners of which will be compensated, it is estimated that

- During the **construction phase** of the projects under consideration, low **positive effects on** the local economy of the study area are expected;
- In the **operational phase** of the projects under consideration, no significant impact on the local economy of the proposed projects is expected, but they are assessed as positive.

Positive effects are expected from the fact that the islands of Serifs, Milos, Fleganros and Hunt will gain stability in meeting current and future electricity needs. This will also have significant positive effects on the further development of the local economy.

9.7.3 Jobs to be created

In the **construction phase**, jobs are expected to be created on the individual construction sites of the proposed projects. These jobs will be filled as far as possible by the potential of the study area.

In the **operational phase** of the proposed projects, it is estimated that the maintenance work on the individual sections of the proposed GMTS and the four new substations will be carried out by the staff of the project promoter and no new posts will be created.

9.7.4 Contribution of the project to the regional and national economy

As already explained in **Chapter 4** of this EIA:

- The implementation of European Commission Directives 2010/75/EU and (EU) 2015/2193, which
 impose very strict limits on air pollutant emissions from thermal stations (existing and new ones) and
 impose significant restrictions on the operation of local units in the Cyclades, and given that no new
 capacity is planned, leads to the prediction that a significant part of the loads cannot be covered for
 2019-2028.
- In order to address the above weakness in such a short period of time, in the context of the new 2019-2028 Transmission System Deployment Plan of ADMIE, it was planned to interconnect the Southern and Western Cyclades with the ESMIE (Phase D of Interconnection of the Cyclades) via submarine E.R. cables (alternative power), with a length of approximately 350 km and underground E.R. cables, with a length of approximately 20 km. It also includes the construction of four new substations (S/S) 150/20kV closed down GIS on the islands of Thira, Foleganro, Milos, Serif. The project aims to increase the reliability of supply to the interconnected islands and to reduce

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production costs (substitution of oil with other energy sources, depending on the evolution of the energy mix of electricity generation in mainland Greece).

Therefore, the implementation of the project under consideration will have **significant positive effects** on the economy of the Cyclades, as it will address the possibility of inability to meet the future electrical loads required, at least at the level of the islands of Serif, Milos, Folegandrou and Hunt for the next period.

9.7.5 Effects of the project on quality of life

During the planning of the project under consideration, efforts were made to ensure that, as far as possible, the construction works of the project under consideration were not adjacent to settlements. The only part of the project falling within the boundaries of an agglomeration is the construction of the new Water/Shunting, which is located within the conurbation, while other parts of the project that pass within settlement boundaries concern the underground G.M. and run along the existing road network.

Theimplementation of the project is therefore expected to have a **weak negative impact on** the quality of life of the residents of the study area during **the construction phase** of the project, which are **manageable in theshort term**, taking into account that all necessary measures will be taken to limit emissions of gaseous or particulate pollutants or noise, etc.

In the operational phase of the project there will be positive effects indirectly due to the closure of existing power plants on the islands concerned.

9.7.6 Likelihood of contradictions between development trends likely to be created by the project and directions supported by other programmes, plans or projects

As already explained above (in § 9.6.1 Impacts on spatial planning and landuse), the project under consideration is compatible with the planning and urban planning provisions in force in the study area. In addition, as explained in **Chapter 5** of this EIA:

- The project under consideration, concerning the interconnection of the electricity transmission system of the Western Cyclades with the continental system, is provided for in the *General Framework for Spatial Planning and Sustainable Development*.
- The project under consideration is compatible with the Regional Framework for Spatial Planning and Sustainable Development of the South Aegean Region (Government Gazette, Series II, No 1487 2003).

9.8 Impact on technical infrastructure

The Western Cyclades interconnection project includes the interconnection of the new water bodies on the islands of Serphos, Milos, Fologrou and Thira with the continental system from the terminal area of GIS Lavrio to the existing water body of Naxos, through the development of a network of submarines and underground sections of 150 kV G.U. with a total length of 353 km and 20 km respectively.

In the **construction phase**, negative effects are expected on the existing road network, on which the underground sections of the project are navigated at the Regional Unit of Lavreotikos and on the islands of Serphos, Milos, Foleganro, Thira and Naxos. The construction shall take place inside the road deck. After completion of the construction works, the intervention area will be restored to the previous condition. The underground project is constructed in lengths ranging from 750 m to 950 m. The construction consists of the following stages: excavation, cable traction and assembly of sections. The total duration of the above works, per section, was estimated at 18 days. The final stage of construction includes asphalting, which takes place upon completion of 3-4 cable-laying sections. In exceptional cases, where a road section is required to be directly assigned to traffic, the asphalting shall be carried out upon completion of the construction of a section. With regard to traffic arrangements required before construction starts, please note the following:

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- Before construction starts, a traffic study shall be carried out under the responsibility of the contractor, setting out all the necessary measures for the safe operation of the traffic and the routes to be used for the diversion of traffic.
- If the road on which the project is to be constructed comprises two lanes which, taking into account and the construction works, have a clear width of 4 m, then the works may be carried out without diverting the traffic by affixing the required safety markings. Otherwise, traffic is diverted to other roads or by rotation of vehicles in each of the two directions, according to the Traffic Study.

Therefore, the safety of traffic on the existing road network, during the construction of the underground sections of the project, is ensured by the preparation and implementation of the Traffic Study. In those sections that will require traffic diversion from existing roads for the construction of the project, negative effects related to delays in transport are expected but will be short-term. The roads where the underground sections of the project are located are as follows:

- At the Regional Unit of Lavreotikos, the underground GU moves along the local road network that passes through or around the Lavrio Energy Centre (AES) land.
- On the island of Serfos, the underground G.M. begins at the landing point in Ormos Tsilipakis and moves along a provincial road passing through grasslands and abandoned crops.
- On the island of Milos, the underground Message Department of V Milos starts from the bottling position on the beach of Alogomandra on the northern Milos and moves on a provincial road to the settlement of Mytakas, where it meets the acronym. FR. Trivasalo-Apulonia and travel on this road for 1 km. It is then followed again by the provincial road network up to the area of the settlement of Kanavas where the new water/station of Milos meets on the Adamada-Zefyria road. The underground Unit of the Prefecture of Milos departs from the waterside for approximately 3 km south-west, up to the area of Camping Ahivadlinis. From there, the road continues on the provincial road network to the south, through shrubs and crops, to the southern shore of Provasa where it is located.
- On the island of Fologandro, the underground G.M. begins at the landing point on the coast of Livadi
 and follows to the north-west the provincial road which ends up in the settlement of Karavostase.
 From there, it follows the road that drives in Greece for about 450 m, until the new Folegandros
 bachelor.
- On the island of Thira, the underground G.M. starts from the landing point on the Monolithos coast and follows the coastal road south-east for approximately 150 m and then moves south-west to a local road for a further approximately 100 m to the land of the new Water/Thira.
- On the island of Naxos, the underground G.M. starts from the landing point at Agios Prokopios Kavos and follows a local coastal road to the Naxos Water Station.

When connecting the proposed transport line to the existing Lavrio and Naxos hotspots, all the security measures provided for in the relevant regulations and standards will be respected.

Therefore, the **construction phase** of the project is expected to have a **moderate negative impact** on the existing technical infrastructure in the study area where works will be carried out, which are **short-term**, **manageable** and partially reversible by taking appropriate measures.

In the **operational phase** of the project, the roads along which the underground project is navigating will have been fully restored to the previous condition. Restoration in the access zones will also have taken place. In the operational phase, therefore, the impact on the existing infrastructure in the study area is **neutral**.

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The construction and operation of the projects under consideration are not related to needs for new technical infrastructure or reinforcement of existing ones.

9.9 Correlation with anthropogenic pressures on the environment

As regards the environment of the study area and the pressures it faces on the current situation, please note the following:

- In the Lavretic Regional Unit study area, the project is located within the industrial area of the Lavrio Energy Centre (AES), where the atmospheric and acoustic environment is affected. The Lavrio EYL is also located in the vicinity of the project. At the same time, there are small settlements and agricultural activities around the project under study. In conclusion, the environment of the study area in the Regional Unit of Lavreotikos is affected by several uses related to industrial, residential and agricultural activities.
- In the study area on the island of Serfo near the new bathroom, the LL Serifou is located. At the borders of the study area is also the Erfou thermal power station, two large agglomerations (Libya and the Country of Serifou), the port of Serfou and several hotel units. In conclusion, there are some human-induced uses that create moderate pressure on the region, mainly as regards the development of tourism activities.
- The project under study in the area of study on the island of Milos is adjacent to the Mileus ASD and to the island's airport. In addition, the study area has very strong quarrying/mineral activity, agricultural crops and several hotel units. In conclusion, there are a number of human-induced uses that create pressure on the region, mainly as regards the development of tourism activities but also of quarrying/mineral activities.
- In the study area on the island of Foleganros, the new landfill site on the island of Foleganros is located in the vicinity of the project under study, but also an inactive landfill site. In addition, the port of Folegandrou is located in the settlement of Karavostase where the underground G.M. passes, and there is a mild development of tourism. In conclusion, there are human-induced uses that create mild pressures on the region, mainly as regards the development of tourism activities and the management of solid waste.
- The project under study in the study area on the island of Thira is adjacent to the APS Thira and is
 located in close proximity to the island's airport. The study area is characterised by a residential
 building which reflects the strong tourist growth of Thira. In conclusion, human-induced uses related
 to the development of tourism activities dominate the region and create moderate pressures.
- In the study area on the island of Naxos, there are no anthropogenic uses that may cause significant
 pressures. The island's most important infrastructure is located outside the study area as the project
 is located in a provincial area. In conclusion, there are few human-induced uses which can create
 mild pressures on the area, particularly as regards residential construction and the development of
 tourism activities.

The project under study, by its nature, is not related to increased production of gaseous pollutants or solid or liquid waste, both in the construction and operational phases. In the construction phase, the individual parts of the project are constructed in parts and specifically installed, assembled or established in the area of the project, while they have been built in the individual factories. Therefore, the proposed projects are not expected to increase the anthropogenic pressures on the environment.

It should be noted that the operation of the projects will significantly reduce the impact (mainly due to air pollution) of the operation of the Sierfou, Milos and Hunting PPPs.

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As regards the marine environment where the submarine cable is located, measures should be taken to prevent engagement with pleasure boats that may be anchored in the area of the Cyclades and trawlers fishing in the coastal zone by routing the submarine cable.

Due to the nature of the project under consideration, its construction and operation is not related to the creation of significant new pressures on the environment, or the opposite during the operational phase, as documented in this Chapter, broken down by environmental medium.

9.10 Impact on air quality

9.10.1 Pollutant emissions

Construction phase

Poor air pollutant emissions during the construction of the works under study may result from an increase in the number of vehicles circulating in the project area (concerning heavy-duty vehicles and machinery needed for construction works as well as workers' vehicles), resulting in exhaust emissions from machinery and construction vehicles, as well as particulate matter from earthworks.

It should be noted that the project under study is being constructed in instalments and therefore emissions of pollutants into the air will be weak and locally limited, with appropriate measures being taken. The pollutant emissions to air from the construction of the project have already been presented in section '6.3.7 Pollutant emissions to air from the construction of the project' of this EIA, where its rate has been estimated as follows

Pollutant emission rate (gr/sec)	со	NOx	voc	SO ₂	TSP
Total total	2.151	0.746	1.097	0.263	0.614

Operation phase

In the operational phase of the project under consideration, no gaseous or particulate pollutants are produced, as it concerns the transmission of electricity and not the production, which is related to emissions of gaseous or particulate pollutants depending on the production process. On the contrary, it should be noted that a significant reduction in air emissions is expected in the project area (on the islands) due to the placing in cold reserve of the GFCs currently operating there. In the operational phase of existing roads from which access to the substations will take place gas and particulate pollutants will be produced due to vehicle traffic, but will not lead to significant emissions.

9.10.2 Concentrations of pollutants

According to the above, in both the construction and operational phases, no significant emissions of gaseous and particulate pollutants are expected. The concentrations of gaseous pollutants in the atmosphere due to the construction of the projects will be locally limited and zero in the operational phase of the projects.

9.10.3 Assessment of impacts on air quality

Construction phase

During the construction phase of the projects under consideration, the degradation of the air environment of the study area is mainly related to:

 Emissions of gaseous pollutants from machinery used in the construction work, such as trucks, excavators, loaders, etc. The amount of emissions is directly related to the location of the works, the type and size of the construction, the duration of the construction and the pollution management techniques adopted.

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- The following are considered to be the main air pollutants produced in the engines (combustion) of vehicles: carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), lead (Pb), carbon dioxide (CO2), sulphur oxides (SOx) and microparticles such as dust and smoke (PM).
- Production of dust from excavation and work on unpaved surfaces. Dust from the operation of the
 site comes from the following sources: excavation, tipping or loading of earthworks, the movement
 of vehicles on the site, the process of relaxing and loading excavated products, various installations
 on the site, the passage of vehicles with the necessary inert materials on the existing road network
 without the necessary cover.
- The effect of exhaust gases on human health is considered to be a cause of significant diseases or a significant aggravating factor (e.g. respiratory diseases), while some pollutants are also accused as carcinogens. Air pollution has an impact not only on human health, but also on the flora and overall state of the environment.

The impact on the environment during the construction phase of the projects under consideration is related to the construction of the four water bodies on the islands of Serphos, Milos, Foleganro and Hunt. They also relate to the work on the construction of the cantons where the underground parts of the project will be installed, as well as to the operation of the vessels to set the submarine cable.

In those parts of the project where excavations will take place, the production of dust and the increase in particulate matter concentration (PM_{10}) will be small-scale, local and immediately reversible upon completion of the project. In addition to vehicle traffic, it is estimated that the increase in pollutant concentrations will be practically insignificant. In the underground parts of the project located within the boundaries of agglomerations on the islands of Milos, Foleganro and Hunt, all necessary measures will be taken to limit dust emissions at source. The same applies to the works for the construction of the Hunting water located within the agglomeration of monolite.

As regards the submarine transport line, the only negative impact on the atmosphere will be the exhaust emissions from the vessels and machinery used to set submarine cables. This temporary impact can be minimised by proper maintenance of the construction machinery.

To sum up, it is estimated that there will be some increase in emissions of gaseous pollutants during the construction phase of the project under consideration, which may cause locally increased concentrations of pollutants. However, this impact:

- It is typical and expected for construction work.
- It can be minimised by complying with the applicable Greek and Community legislation on emissions from construction machinery and vehicles, by applying the required good site practice and by taking appropriate corrective measures during the construction phase.
- It is locally limited to the direct area of the projects.
- It is temporary and will not cause a significant irreversible degradation of the air environment in the immediate region.

In conclusion, the effects on the ambient environment of the study area are assessed as being **locally moderately negative** in areas where the underground parts of the project pass through residential areas and where the Hunting water is located, which are **short-term**, **partially manageable** by appropriate measures and **fully reversible**, due to the natural diffusion of gaseous and particulate pollutants into the atmosphere.

Operation phase

In the operational phase of the project, no negative impact on air quality (**positive effects**) is expected, as the project will not contribute to the production of gaseous emissions, but to the cold reserve and

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inoperability of the plants, as well as to the reduction of oil tanker traffic. Nor will it contribute to the release of dust or odour particles. Finally, any impact of vehicle movements to carry out maintenance or fault repair work is considered to be negligible. At the level of the South Aegean region, positive effects are expected due to the reduction of operational IAs.

9.11 Noise or vibration effects

9.11.1 Noise and vibrations at the nearest receivers

Construction phase

According to section '6.3.8 Noise and vibration emissions from the construction works of the project', the expected construction noise of the construction works has been analysed.

As already mentioned above, within agglomerations, parts of the underground G.M. are located on the islands of Milos, Fologanro and Hunta and the Water/Shira, which is located within the agglomeration of monolithos.

Operation phase

No significant noise or vibration levels are expected to be produced in the operational phase of the proposed projects. The operation of the substations and the transmission line is not related to increased noise emissions, while access to the works will take place at low frequency and speeds, so no increased noise emissions will be generated.

9.11.2 Evaluation of the impact on the acoustic environment

Construction phase

The noise expected to be generated during the construction phase of the projects under consideration mainly concerns:

- In the underground section of the line: the drilling of the canvas in which the cables are to be mounted, the installation of the cables and their refilling operations.
- In the construction of the new water bodies of Serifos, Milos, Folegandrou and Thira: work to clear
 existing vegetation, excavations and inflammation to configure the site and work on the construction
 of substations.
- In the submarine part of the project: the laying of the cable and the movement of the vessels to be used in the construction.

This noise comes mainly from:

- the operation of the machinery for excavation, configuration and assembly,
- the movement of heavy-duty vehicles,
- road traffic from staff movement
- the movement of vessels.

At local level, there may be little nuisance during the construction of the new water bodies of Serifou, Milos and Folegandrou. Also, moderate negative impacts are expected in the construction phase of the underground sections of the project passing through settlements in the study area. The same applies to the construction works of the Hunting water. At these locations, all necessary measures will be taken to limit the noise levels emitted and to limit construction works outside hours of common quiet.

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The noise generated during the construction phase of the projects under consideration will have a negative impact on the acoustic environment of the areas in the vicinity of the intervention area, but it is significantly weakened by increasing the distance from the project area (about 6 dB reduction for each doubling of the distance).

Therefore, the noise effects in the construction phase of the projects under consideration are estimated to be **moderately negative and locally** limited to those parts of the project that pass underground through residential areas, which are **short-term** and **partially manageable** by appropriate measures and **partially reversible**.

Operation phase

In the operation phase of the substations, the main sources of acoustic noise are power transformers, due to the operation of the cooling fans and the vibrations at their core. The noise level at the fence limits of the substations is lower than the maximum noise limits set in accordance with Presidential Decree 1180/06.10.81.

In the operational phase, any maintenance vehicles running in the project area will be driven at limited speed and at low frequency.

On the basis of the above, it is estimated that there are no noise effects as it is confined within the substations' plots and does not in any case cause human exposure to a high level of noise. Therefore, in the operational phase of the projects, the effects are assessed as **positive** due to the cold reserve and inoperability of the plants, as well as to the reduction in the traffic of oil tankers.

9.12 Effects related to electromagnetic fields

9.12.1 Substations of Serifou, Milos, Folegandrou and Thira and existing (Lavrio and Naxos)

The estimates of the electromagnetic radiation generated in the new water/S Serifou, Milos, Folegandrou and Thira are presented below.

The determination of acceptable values of EMF is the subject of **ICNIRP**, the *International Commission for the Protection of Non-Ionising Radiation*, a non-governmental organisation with scientists of all the necessary disciplines, recognised by the World Health Organisation (WHO), the International Labour Organisation (ILO), the European Union.

In 1998 ICNIRP published the Directive on the "Directive on limits of exposure to time-varying electric and magnetic fields" which set maximum limits for the continuous exposure of the general public to electromagnetic fields. All past and new research work and regulations have been examined and weighed up in the preparation of this Directive.

In 1999, the Council of the European Union Recommendation L199/519ECon the limitation of exposure of the general public to electromagnetic fieldswas published and fully adopted the limits of the ICNIRP Directives. The above limits were ratified by the Scientific Steering Committee of the European Union and integrated into the institutional framework of the Member States of the European Union. In Greece, **Joint Ministerial Decision 3060FOR238 (Government Gazette, Series II, No 512/25.04.02)** on measures to protect the public against the operation of low-frequency electromagnetic field emission devicesapplies.

In summary, the above limits for the frequency of 50Hz are set at 5 kV/m for the electric field and $100\mu T$ for magnetic induction.

These levels are not risk limits and contain large safety factors to address the uncertainties that exist about the effect of fields on biota and to meet the requirement to prevent adverse effects. It should also be noted that the above regulations specify the permissible levels of fields and under no circumstances lay down safety distances, as they appear from time to time in publications.

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In order to compare the values of electromagnetic fields present in the substations in operation with the reference levels of magnetic fields provided for in the regulations, measurements were carried out on the operating baths of 150 kV/MT of Syros and in other cases of baby (see Annex II). The values of the magnetic fields measured are minimal, especially at the limits of the fence of the substation where magnetic field values of 0.5 to 14.2 mg were measured which are well below the limits of the ICNIRP Directive and Joint Ministerial Decision 3060FOR238 (Government Gazette, Series II, No 512/25.04.02).

In addition, PPC commissioned the Department of Electrical Engineering and Computing Technology of the University of Patras (Prof. D. Chaakas and E. Mimos) to carry out a study on the level of electric and magnetic field in the surrounding area of the 150 kV/MT outdoor water bodies, which was carried out in November 2003. The above study shows that the requirements of the regulations for the protection of humans from electric and magnetic fields are fully met since the maximum possible values of these fields at the fencing limits of the substations are many times (tens and in many cases thousands of times) lower than the permitted limits.

A number of measurements were also carried out by the Greek Atomic Energy Commission (Hellenic Atomic Energy Commission) at operating substations of ADMIE. These measurements were carried out at the request of the respective municipalities on whose administrative boundaries these substations are located.

The above reports are consistent with all previous studies, as they also confirm that the measured values of magnetic induction B and electric field E are often lower than those permitted. For example, at the fence limits of Volos I, the values of magnetic induction B are between 61 and 563 times lower than the limit value of 100 μ T and the electric field E values are between 9.5 and 218 times the limit value of 5 kV/m, while for Agios V the values of magnetic induction B are between 117.4 and 512.82 times the limit value of 100 μ T and the E electric field values are between 13.2 and 277 times lower than the limit value of 5 kV/m.

It should be noted that the Greek Atomic Energy Commission is designated by Joint Ministerial Decision 3060 (Government Gazette, Series II, No 512/25.4.02) as the body responsible for carrying out measurements and monitoring compliance with the limits on safe exposure of the public to low frequency electromagnetic fields.

A comparative table is presented below with the limit values of the regulations and the actual values measured in substations, as indicated in the above-mentioned studies.

Table Error! No text of specified style in document.-3 Electromagnetic field values from measurements at PPC substations and regulatory cap values

	PRICES OF MOLECULES OF	TENSION			
STUDIES	Magnetic induction (μT)	Electric field intensity E (kV/m)			
Measurements at Syros RB (fencing)	0,13-3.96	_			
University of Patras study on electromagnetic field at 150/20kV substations	0,16-1.99	0,018-1,145			
EEAE report of the Ministry of the Environment and Energy on Substation Volos I	0,019-1.648	0,022-0.524			
EEAE report of the Ministry of the Environment and Energy on the Agios Vassiliou substation	0,195-0.852	0,018-0.379			
Ceilings set by the ICNIRP and set by Joint Ministerial Decision 3060 (Government Gazette, Series II, No 512)	100	5			

It emerged that the maximum electromagnetic field values at the fencing limits of the substations are not only much lower than the maximum permissible values, but are in many cases close to zero or to reach the sensitivity limits of the measuring instrument.

These prices are much lower than in the homes and are due to household electrical appliances (Report of the University of Patras).

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9.12.2 Underground sections of the project in the Regional Unit of Lavreotikos and on the islands of Serphos, Milos, Fologrou, Thira and Naxos

According to the technical report 'Reclassifications of the 150 kV network and new 400 kV lines in the prefecture of Achaia — electric and magnetic fields as environmental factors' (Department of Electrical Engineering and Computer Technology, University of Patras, 2009), in the 150 kV and 400 kV underground cable areas:

- The maximum value of magnetic induction occurs above 400 kV cables in the area of parallel routing of two 150 kV cable circuits and two 400 kV cable circuits. This maximum value is 7.66 μ T and is 13 times less than the permissible continuous exposure limit of the public Bor=100 μ T.
- The electric field strength in the surroundings of the cables is equal to zero due to the shielding of the wiring sheaths.

In a similar work done for Heraklion I, the measurements showed:

• The maximum value of the magnetic induction in the environment of the 150 kV cables, when both systems are leaked from their maximum operating intensity of 770 A , on the ground surface shall be 32.7 μ T.

It should be noted that the projects under consideration concern a 150 kV transmission line and not 400 kV and therefore the maximum magnetic induction value will be even lower than the above mentioned.

It is also stated that, for the measurement and study of the magnetic field caused by the 150 kV underground voltage cables of the low-frequency electricity transmission network (50 Hz), the technical report 'Measurements and study of the magnetic field of the 150 kV cable in the area of Nea Makris Attica' (EMP, 2016) was prepared.

- All magnetic field measurements in the surrounding area of ADMIE's 150 kV cable connection in Nea
 Makri are significantly below the limits for the unlimited duration of exposure of human organisms to
 a magnetic and electrical field set by existing national and international legislation.
- The measurements recorded at all magnetic field positions are an order of magnitude below the above-mentioned exposure limits.
- In particular, the measured magnetic induction values are equivalent to, or much lower than, those
 observed in typical domestic and working spaces, as well as close to normal electrical household
 appliances.

The measured magnetic induction values, as shown in the above technical report, are between 0.395 mT and 2.36 μ T (maximum possible 4.74 μ T) and are far from the permissible continuous exposure limit of the public north=100 μ T.

Therefore, it is estimated that also during the operation of the 150 kV underground transmission line, the magnetic induction value will be far from the limit value.

According to existing studies, measurements and experience so far are not expected to create a magnetic field close to the limit value.

9.12.3 Submarine G.M.

The field emitted to the marine environment by both AC and AC cables is the magnetic field. The table below shows the magnetic fields produced along the submarine cable, which is buried at a depth of 1 m.

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The magnetic field generated by an AC transmission line is reduced by increasing both the vertical and horizontal distance from the source.

Table Error! No text of specified style in document.-4 AC magnetic fields (μT) reflecting average values from 10 AC projects at intervals above and horizontally along the seabed, assuming 1 m burial of the line

	Magnetic Field Intensity (μΤ)					
Distance (m) from the bottom	Horizontal distance (m) from the cable					
	0	4	10			
0	7,85	1,47	0,22			
5	0,35	0,29	0,14			
10	0,13	0,12	0,08			

<u>Source</u>: "Effects OF EMFS FROM UNDERSEA POWER CABLES ON ELASMOBRANCHS AND OTHER MARINE species — Final Report" (May 2011)

It is safely estimated that throughout the underwater installation of cables the magnetic field will be far from the $100 \, \mu T$ limit value.

In any case, a survey of 24 interconnection projects⁴ showed that the electromagnetic fields produced by submarine cables are limited locally.

9.12.4 Conclusions

In the operational phase of the project under consideration, electric and magnetic fields are produced along the individual sections of the transmission line and at the substations. According to the existing studies, the levels of these fields are lower than the limit values according to the Greek legislation.

In any event, during both the construction and the operational phases of the project under consideration, the provisions of Joint Ministerial Decision No 3060 (Φ) 238 on measures to protect the public against the operation of low-frequency electromagnetic field emission devices (Government Gazette, Series II, No 512) shall be complied with.

Therefore, based on existing studies in any case, the electric and magnetic field values are below the limit values:

- In the construction phase of the projects, **neutral effects** are expected.
- In the operational phase of the works, **neutral effects** are expected on the electric and magnetic fields of the substations and the transmission line, as the levels are much lower than the limit values.

9.13 Impact on water

9.13.1 Impact on the issues set as targets in the River Basin Management Plan

Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (GR14) (Special Secretariat for Water, 2017)

The main objectives of the 1st revision of the River Basin Management Plan of the South Aegean Water District are:

• Maintain or restore good surface water and groundwater status by 2015 or beyond by 2021 (during the 1st revision of the Plan).

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⁴ Study 'EFFECTS OF EMFS FROM UNDERSEA POWER CABLES ON ELASMOBRANCHS AND OTHER MARINE species Final Report' (May 2011), prepared by the U.S. Department of the Interior, the Bureau of Ocean Energy Management, Regulation and Enforcement and the Pacific OCS Region.

- Consolidating and complementing the previous piecemeal European water legislation;
- Water resource management approach at the level of a water region, understood as consisting of
 one or more adjacent catchment areas together with associated groundwater and coastal waters,
 designating the competent authority for its exercise
- Exercise of management of water resources on the basis of programmes water region management plans.
- Ensure realistic pricing of all water-related services.

Specifically, the environmental objectives set for the 177 surface water systems or water bodies (WBs) and the 116 Groundwater Systems (WS) of the water body by 2021 are summarised below:

- For 71 WBs the objective is to maintain high ecological status
- > For 86 water bodies the objective is to maintain good ecological status
- For 13 HMWB the objective is to determine ecological potential by 2021 and to take measures (if necessary) to achieve good ecological potential by 2027
- For 174 WBs and HMWB the objective is to maintain good chemical status
- For 3 HMWB the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027
- For 88 WWBs the objective is to maintain good quantitative status
- For 28 WWBs the objective is to achieve good quantitative status whenever natural conditions allow it after 2027
- For 88 WWBs the objective is to maintain good chemical status
- For 28 WWBs the objective is to achieve good chemical status whenever natural conditions allow it after 2027

Please note the following with regard to the study area in the South Aegean Water Department:

River, lake or transitional water bodies are not present in the project area under study. The following coastal water bodies are found:

- 'EL1437C0063N Serif coast',
- 'EL1437C0076N Northern Eastern Coast of Milos'.
- 'EL1437C0077N Southern Western Coast of Milos'.
- 'EL1437C0080N Sicino-Folegandrou coasts'.
- 'EL1437C0084N Santorini calf exterior coasts'.
- 'EL1437C0066N Faculty Nice'.
- 'EL1437C0070N Koufonisia coast'.

The groundwater bodies found in the background of the study area, where the project under study is located, are as follows:

- 'EL1400690 Nothchia', Sirfou Island
- 'EL1400721 Zefyria (A)', 'EL1400722 Zefyria (B)' and 'EL1400730 Milos', Island of Milos

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- 'EL1400860 Folegandrou', Folegandrou Island
- 'EL1400872 Karari Friendon Merchant (B)', Island of Thira
- 'EL1400770 Central Naxos Kourou', 'EL1400760 meadow', Naxos Island

Approved 1st Revision of River Basin Management Plan of the Water District of Attica (GR06) (Special Secretariat for Water, 2017)

The main objectives of the 1st revision of the River Basin Management Plan of the Water District of Attica are:

- Maintain or restore good surface water and groundwater status by 2021.
- Consolidate and complement previous piecemeal European water legislation.
- A water resource management approach at the level of a water region (river basin district), which is
 understood as consisting of one or more adjacent catchment areas together with associated
 groundwater and coastal waters, designating the competent authority for its exercise.
- Exercise of water resource management on the basis of programmes/water region management plans.
- Ensuring social consensus by promoting participatory processes.
- Promote rational cost analyses.

In particular, the environmental objectives set for the 30 surface water bodies of the water bodies in Attica until 2021 are as follows:

- For 1 EWS the objective is to maintain high ecological status.
- For 7 EWS the objective is to maintain good ecological status.
- For 2 HMWB the objective is to maintain good ecological potential.
- For 17 EWS it is the achievement of good ecological status.
- For 1 HMWB it is the achievement of good ecological potential.
- ➤ For 2 HMWB the objective is to determine ecological potential by 2021 and to take measures (if necessary) to achieve good ecological potential by 2027. This objective concerns river HMWB where the situation could not be assessed in this management cycle.
- For 4 EWS the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027. This objective concerns 2 rivers and 2 coastal EWS where the situation could not be assessed in this management cycle.
- ➤ For 1 HMWB the objective is to determine chemical status by 2021 and to take measures (if necessary) to achieve good chemical status by 2027, as the status could not be assessed in this management cycle.
- For 1 HMWB the objective is to achieve good chemical status by 2027.
- > For a total of 24 surface water bodies the objective is to maintain their good chemical status.
- ➤ 22 NCOs fall under the exceptions set out in Article 4.4 and the objective set for them is to achieve good status by 2027.

River, lake or transitional water bodies are not present in the project area under study. There is the coastal water body 'EL0626C0003N Sea of Lavrio-Makronisos'.

In addition, underground water body 'EL0600170 — Lavreotikos' can be found in the background of the wider area where the project is located.

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The project under study does not conflict with the provisions of the approved management plans, in particular:

- Approved 1st Review of the River Basin Management Plan of the South Aegean Water District (EL14)
 (Special Secretariat for Water, 2017)
 - As regards the relationship between the location of the project and protected areas in the South Aegean Water District, please note the following:
 - In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.7 km.
 - On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1.3 km.
 - In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 3.5 km.
 - On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos — Profitis Ilias — Wider Area' over a length of approximately 700 m.
 - In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 13.5 km.
 - On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 — Western Milos, Antimilos, Polygos and Islands' over a length of approximately 7 km.
 - As regards the relationship between the location of the project and protected areas in the South Aegean Water Department that have been classified as recreational/penalty waters, please note the following:
 - 0.8 km west from the landing point of the submarine cable in the southern Milo is located near the 'Côte Provaa' (GRBW149287155), which in 2013-2018 is assessed as being of excellent quality.
 - 0.6 km west from the landing point of the submarine cable in western Naxos is located near Akti Agios Prokopios (GRBW149292181) which in 2013-2018 is assessed as being of excellent quality.
 - The project under consideration does not conflict with the actions envisaged in implementation of Community Directives proposed as measures for the South Aegean Water Department (EL14).
 - Furthermore, the project under consideration does not conflict with the additional measures provided for in the Southern Aegean River Basin Management Plan (EL14).
- Approved 1st Revision of River Basin Management Plan of the Water District of Attica (EL06) (Special Secretariat for Water, 2017)
 - o The project under consideration does not conflict with the actions envisaged in

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implementation of Community Directives proposed as measures for the Attiki Water Department (EL06).

o Furthermore, the project under consideration does not conflict with the additional measures provided for in the River Basin Management Plan for the Water of Attica (EL06).

The project under study is not related to:

- Increased abstraction of water from surface or underground water resources
- Increased production of liquid or solid waste which may affect surface or underground water resources.

9.13.2 Impact on surface water

Construction phase

In the construction phase of the project under consideration, there may be negative impacts on water resources, mostly related to the deterioration of their quality or quantitative status. These potential impacts are mainly related to:

- Any work to clear existing vegetation for the needs of the works, earthworks and excavation works, which will result in the release of dust and particulate matter, which may increase the opacity of surface water resources, especially where construction works are carried out in the vicinity of a surface water resource.
- With potential sources of pollution, due to the operation of machinery and man-made activities in the construction phase, such as:
 - The generation of municipal waste during the operation of the construction site;
 - The leakage of fuel or lubricants of cars and machinery as a result of an accident or inadequate maintenance.

It should be noted that the project under study is not adjacent to a river. Special attention is needed along the underground project on the island of Serphos, which is located on the existing road network which runs alongside a stream over a relatively long distance, as shown in the picture below, which ends up at the small island wetland site 'Elos Tsipakis' (Government Gazette 229 AQ 2012⁵) in its mouth. The figure below shows the location of the stream.

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⁵ 'Approval of a list of small island wetlands and laying down conditions and restrictions for the protection and promotion of small coastal wetlands included therein'.

Figure Error! No text of specified style in document.-1 Image positions passing through the study area



Note: the blue colour shows the stream, the work being studied in red and the small island wetland 'Elos Tsipaki' found in the mouth of the streams in blue.

Appropriate preventive measures (collection and appropriate management of the waste generated in accordance with the legislation in force) shall be applied to avoid deterioration of water quality due to the generation of municipal waste or the leakage of lubricants or oils or chemicals likely to be used on the construction site. It is therefore assessed that there is no risk of pollution of surface water resources due to the waste water generated on the construction site.

During the execution of the necessary earthworks for the construction of the four new water bodies on the islands of Serphos, Milos, Fologrou and Thira, and during the excavations that will be required for the drilling of the canvas where the underground project will be placed and during the refilling works, there is no expected impact on surface waters, except perhaps in the case of Serifos, where there is a stream near the plant and therefore all the necessary measures to limit any possible impact.

In the construction phase of the projects, the rules of good construction practice will be adopted as regards the management of solid and liquid waste and excavation materials. Provided that all necessary measures to protect water resources in the vicinity of the project are complied with, no significant impact on the quantitative and qualitative characteristics of the water resources in the study area, during the construction phase, related to dust emissions or any leakage of substances from the machinery to be used is expected. The beds of the streams will be protected against any infiltration or disposal of patches. The construction of the projects under consideration is not related to abstraction needs or to requirements for increased consumption of water reserves, in addition to the usual water requirements of a construction site.

In conclusion, in the **construction phase** of the projects under consideration, **moderate negative effects on** the surface waters of the study area are expected, due to the proximity of the project (only in the case of Serifou) with streams in the area. These effects are assessed as **short-term**, **manageable** by appropriate measures, **reversible** by natural processes and locally limited.

Operation phase

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The operation of the projects under consideration (transport line comprising underground sections and submarine section and four new substations) is not related to negative impacts on water resources in the study area.

High traffic loads related to the operation of the projects are not expected (as there is a limited number of employees in the operational phase and maintenance works to be carried out in scheduled periods). The impact on water resources is expected to be greater in the event of an accident and leakage of pollutants such as petroleum products. For this case the project promoter will have to draw up an emergency plan.

The impact on the water resources of the wider area from the operation of the proposed project is assessed as **neutral**

9.13.3 Impact on groundwater

Construction phase

The impact on groundwater resulting from the construction of the projects is directly related to the effects on surface waters, which concern the disturbance of the diet and the deterioration of the quality of surface waters, which has been mentioned above, however, is not expected to occur.

In the event of an accident and spillage of waste water into the ground, appropriate equipment and absorbents will be available on the site.

The above effects on groundwater during the construction phase are described as **neutral**.

Operation phase

No impact from the operation of the project is expected during the operational phase of the proposed projects under normal conditions.

The impact on the operational phase of the projects is therefore described as neutral.

9.14 Effects resulting from the vulnerability of the project to major accident or disaster risks

9.14.1 In general

The purpose of this section is to provide and document data to meet the needs of analysing any impact resulting from the project's vulnerability to risks of major accidents or disasters, as provided for in Article 2 of Joint Ministerial Decision (JMD) 5688/12-03-2018 — Government Gazette, Series II, No 988//21-03-2018 amending theAnnexes to Law 4014/2011 (Government Gazette, Series I, No 209). in accordance with Article 36A of this Law, in compliance with Directive 2014/52/EU andArticle 3(3) of Joint Ministerial Decision 1915 amending Joint Ministerial Decision No 48963/2012 (GG II 2703), Joint Ministerial Decision No 167563/2013 (GG II 964) and Ministerial Decision No 170225/2014 (GG II 135), issued pursuant to Law 4014/2011 (GG I 209), in compliance with Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment of the European Parliament and of the Council of 16^{April} 2014 (Government Gazette, Series II, No 304/2-2-2018). The above Joint Ministerial Decision, as regards risks and major accidents, refers to the relevant national and EU legislation, as Joint Ministerial Decision 172058/2016 (Government Gazette, Series II, No 354/17.2.2016).

The project under consideration is not directly or indirectly linked to obligations, requirements or obligations arising from the Seveso Directives (including Directive 2012/18/EU), Directive 2006/21/EU on the management of waste from extractive industries and Directive 2013/30/EU on safety of offshore oil and gas operations, which should be assessed in accordance with the relevant provisions of the legislation in force.

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As stated in Article 3 of Joint Ministerial Decision No 172058/2016 (Government Gazette, Series II, No 354//17.2.2016) laying down rules, measures and conditions for the control of major-accident hazards in establishments or plants due to the presence of dangerous substances, in compliance with Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC of the European Parliament and of the Council of 4 July 2012. Replacement of No 12044/613/2007 (Government Gazette, Series II, No 376), as corrected (Government Gazette, Series II, No 2259/2007)'

- 'major accident' meansan event, such as a major leakage, fire or explosion resulting from
 uncontrolled developments in the operation of any installation falling within the scope of this
 Decision, which gives rise to serious risks, immediate or delayed, to human health or the
 environment, inside or outside the establishment, and is related to one or more dangerous
 substances; and as
- 'activity establishment', or simply 'installation', means the entire site under the control of the
 operator where dangerous substances are present in one or more establishments, including
 common or related infrastructure or activities; establishments shall be classified in a lower or higher
 tier.

It follows from the above that, in principle, the project under consideration does not constitute an installation within the meaning of the above-mentioned Joint Ministerial Decision and does not fall within its scope.

For the sake of clarity and purity, it is appropriate to set out below the definitions of the key concepts related to the subject matter of this section, as derived from the national and international institutional framework, as well as from the relevant scientific literature.

Destruction (Disaster): Any rapid or slow development of a natural phenomenon or technological event in land, sea and airspace which causes widespread adverse effects on human beings and the man-made or natural environment (Ministerial Decision 1299/2003 (Government Gazette, Series II, No 423/10.4.2003) establishing the General Civil Protection Plan called 'Xenocrates'). Disasters are a function of risk exposure, vulnerability, capacity or lack of measures to reduce potential negative consequences, which may be loss of life, injuries, diseases, effects on physical, psychological and social well-being, material damage, loss of services, social and economic disruption and environmental degradation.

Natural disasters are the result of extreme or non-natural events. The magnitude of the disaster depends on the magnitude and intensity of the physical phenomenon, on the vulnerability or vulnerability of the system that will suffer the occurrence of the phenomenon and on the value of the element exposed to the risk. Such natural phenomena include floods, fires, landslides, volcanoes, climate change, extreme weather events and earthquakes.

The World Health Organisation distinguishes five major categories of natural disasters:

- Geophysical: Earthquakes, volcanic eruptions and mass land movements (landslides, subsidences).
- **Hydrological**: They result from deviations in the normal water cycle and/or from wind flooding of water bodies, such as floods.
- Meteorological: They are caused by short to medium-term atmospheric processes (such processes
 may include a range of a few minutes, up to and including days), such as storms, storms, tropical
 cyclones.
- **Climatological**: They are caused by long-term processes (in the range of intra-seasonal to chronic climatic fluctuations), such as extreme temperatures (high-low), droughts, fires.

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• **Organic**: They are caused by the exposure of living organisms to microbes or dangerous substances, such as epidemics.

Risk, vulnerability and risk are the measure of natural disasters.

Risk (Hazard): a phenomenon, substance, human activity or condition that may cause loss of life, injury or other health effects, damage to property, loss of living and services, social and economic disruption or environmental damage.

The risks that can cause disasters can be of natural origin (geological, meteorological, hydrological, biological) or anthropogenic (environmental degradation, technology). They can be summarised in the following categories:

- Physical hazards: Fires, floods, storms, extreme hurricane temperatures, earthquakes, volcanic eruptions, landslides, fluidisations.
- Biological hazards: Epidemics, pests and infestation of plants, animals and humans.
- Technological risks: Collapse of social-technical infrastructure, agricultural practices, food processing, industrial facilities, infrastructure and public transport.
- Political social risks: Terrorism, sabotage, armed conflict, war.

Risk analysis and assessment lead to risk management.

Hazard analysis is the process by which a hazard is identified, studied and monitored in order to determine its cause, dynamics, characteristics and behaviour. The risk analysis leads to **its assessment** (Hazard assessment), which concerns the recognition of the likelihood of the phenomenon occurring in a given period, its intensity and the characteristics of the area it will affect. Risk assessment is of particular importance in planning at technical level and in the urbanisation of land use. For example, the assessment of an area's seismic risk is seriously taken into account in urban planning (e.g. building conditions, prohibition of constructions on specific soils).

Vulnerability (**Vulnerability**) expresses the level of vulnerability of the natural and/or man-made environment to the impacts of risks. Vulnerability is directly linked to those factors that allow the risk of becoming a disaster and to the capacity of the natural and/or man-made environment to withstand the negative consequences of the disaster.

Risk: The combination of the likelihood of a potential risk to materialise and the extent of the harm-effect that the realisation of the potential risk will entail. The risk or risk shall be expressed by the relationship:

Risk = Likelihood of occurrence of risk X vulnerability

For example, Directive 2007/60/EC on the assessment and management of flood risks **defines 'flood risk**' as the combination of the probability of a flood occurring and the potential negative consequences for human health, the environment, cultural heritage and economic activities associated with that flood.

Damage or damage: A measurable adverse change in a natural resource or measurable degradation of a service connected to a natural resource that may occur directly or indirectly.

Environmental damage or damage: damage to protected species and natural habitats, i.e. any damage that has a significant adverse effect on the achievement or maintenance of the favourable conservation status of those habitats or species.

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damage to water, i.e. any damage adversely affecting, to a significant extent, the ecological, chemical and/or quantitative status and/or ecological potential, as defined in Directive 2000/60/EC, of the waters concerned, with the exception of adverse effects to which Article 4(7) of that Directive applies.

damage to soil, i.e. any soil contamination which gives rise to a serious risk of adverse effects on human health as a result of the introduction, directly or indirectly, into, into or underground of substances, preparations, organisms or micro-organisms.

9.14.2 Identification of potential risks

The vulnerability of the proposed project to Scenarios of Large Accidents and/or Natural Disasters is assessed pursuant to Directive 2014/52/EU and its main objective is to ensure that appropriate preventive measures are taken if any project under study is found to be vulnerable to major accident scenarios and/or natural disasters with significant adverse effects on the environment. Based on the requirements of the legislation, the following questions should be answered:

- To which major accident scenarios and/or natural disasters could the project under study be vulnerable?
- Can these Major Accident Scenarios and/or Natural Disasters lead to a possible significant adverse environmental impact and, if so, what will this be?
- What measures are in place or should be put in place to prevent or mitigate the problem of likely significant negative effects of such events on the environment?

In theory, the project under study can relate only to natural disasters, as defined above, and not to major accident scenarios, since these presuppose the existence of an installation within the meaning of Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances and amending and subsequently repealing Council Directive 96/82/EC, as the work under consideration on exploratory boreholes and forest roads is not related to the production, storage or management of dangerous substances.

Of the above mentioned categories of natural disasters of the World Health Organisation (Geophical hydrological Meteorological Climate and Biological), the project under study could potentially be linked to geophysical and meteorological disasters and more specifically to earthquakes and fires (as a result of severe drought and high temperatures) respectively. It should be noted that risks related to floods are not expected to arise, as the works under consideration will take place in areas with strong gradients outside risk zones (see section 8.14 of this Decision) and no drilling will take place inside a stream bed. It should be noted that in any event of a natural disaster, the vulnerability of the project under consideration is not linked to disasters of a significant scale.

9.14.3 Hazard Analysis — Risk Assessment

In the context of an analysis of the risks that may occur and have a significant negative impact on the manmade or natural environment, reaching the level of the disaster, the first action concerns the ranking of those related to the project under study in principle in terms of their probability of occurrence in five categories from very likely to be unlikely (to occur), as shown in Table 9.14-1.

Risk Error! No text of specified style in document.-5 Classification Table Table — Probability of occurrence

Scale of scale	Category	Description
1	Unlikely	Very low probability of occurrence of risk
2	Unlikely	Low probability of occurrence of risk

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3	A little likely	Medium probability of occurrence of risk
4 Possible		High probability of occurrence of risk
5	Very likely	Very high probability of occurrence of risk

Assessing the vulnerability of the project, i.e. the significance of the impact of a risk is the second step in the risk analysis. It should be noted that the categorisation of the risk assessment takes into account the relevant preventive or mitigation measures, which have either been included in the project design from the outset or are foreseen in a binding manner to be taken as an ancillary measure during construction/operation. When assessing the vulnerability of the project, the risks are again classified into five categories from the level of minimum impact to the level of catastrophic, as shown in Table 9.14-2.

Error! No text of specified style in document.-6 Table Risk Classification Table on the vulnerability of the project to it

Scale of scale	Risk characterisation	Description
1	Minimum	There is no effect or negligible change on the environment Low number of affected people: No accidents and a small number of minor injuries with first aid treatment. No pollution, local impact & EUR 0.5 million. Minimum local disruption of social services (& 6 hours).
2	Limited	Low impact/identified or disturbing Only accident: limited number of affected individuals: very few serious injuries are presented to a hospital with medical treatment. Local evacuation of a small number of people for 6-24 hours. Personal service through local planning. Simple pollution, a short-lived local impact of EUR 0.5-3 million. Normal social function with some suffering.
3	Serious	Moderate effect on the environment Significant number of affected people, affected area with multiple accidents (&5) multiple serious and widespread injuries (20), serious hospitalisation. A large number of remote people for 624 hours or possibly more than 500 evacuations. External resources are needed for personal support. Simple pollution, widespread effect, extended duration.
4	Very serious	Significant effects on the environment From 5-50 accidents over 100 seriously injured more than 2,000 evacuations. Heavy pollution local impact or extended duration. EUR 10-25 million. The functioning of the Community is poor, few services available
5	Catastrophic	A massive impact on a large region, irreversible in the medium term A large number of people affected by a significant number of accidents (> 50), hundreds injured more than 2,000 evacuations. Very heavy pollution, widespread effects of a long duration > EUR 25 m. Major damage to infrastructure causing major disruptions, or loss of important services for an extended period. A Community unable to operate without significant aid.

As mentioned above, the likelihood of a risk occurring in combination with the project's vulnerability to it gives the risk assessment in relation to it. Table 9.14-3 shows how the risk is assessed for a hazard by reference to a project or activity.

The risk assessment matrix shall have a colour coding to provide an easy indication of the risk, as well as a numerical value of the risk resulting from the likelihood of occurrence of the risk and the vulnerability of the project/activity to it. The red zone represents the "high risk" scenarios, for which it is necessary to take additional preventive measures and to draw up and immediately implement general and/or specific response and management plans, orange represents "medium risk scenarios", for which it is proposed to draw up general and/or specific response and management plans, the implementation of which will be judged on a case-by-case basis and the green zone represents "low-risk" scenarios for which it is not necessary to draw up response and management plans. The response and impact management plans should be in line with general or case-specific provisions, regulations, regulations and guidelines of the relevant competent bodies, such as the Civil Protection Services, the Fire Service, the Police, the Harbour Guard, etc.

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Table Risk Error! No text of specified style in document.-7 Assessment

	Very likely	5	5	10	15	20	25
Risk characterisation	Possible	4	4	8	12	16	20
based on the likelihood of its	A little likely	3	3	6	9	12	15
occurrence	Unlikely	2	2	4	6	8	10
	Unlikely	1	1	2	3	4	5
			Minimum	Limited	Serious	Very serious	Catastrophic
			1	2	3	4	5
			Risk characte	risation based on	project activ	ity vulnerability	

Table 9.14-4 contains the risks related to the main types of natural disasters identified above that may relate to the project under study. These are earthquakes, floods and forest fires. The table describes the risks on the basis of the likelihood of their occurrence to such an intensity as to cause a disaster, and the estimated impact on the project under study on the basis of its vulnerability to them.

Table of risk Error! No text of specified style in document.-8 register under consideration and their characterisation as to their likelihood and impact

Risk	Typical risk impact characteristics	Risk characterisation based on the vulnerability of the project under study	Likelihood of occurrence-event of risk	Risk assessment
Strong seismic vibration (above 6 on the Richter scale)	Serious damage within a radius of 100 km from the centre, severe to violent vibration near the centre. Moderate to severe damage to poorly designed buildings, minimal damage to resilient and seismic buildings.	radius of 100 km from the centre, severe to violent vibration near the centre. Moderate to severe damage to poorly designed buildings, minimal damage to resilient and seismic		3 X 2 = 6 Low
Severe flooding phenomenon	Beginning or flash flooding causing major damage to buildings, infrastructure, networks and crops.	Limited Most of the project concerns underground or squeezed parts of G.M. The buildings of the water bodies are considered to be the only ones that may be vulnerable to this risk.	According to Chapter 8.13.1.3, a very small proportion of the study area is in a Potential High Flood Risk Zone or has a recorded historical flooding.	2 X 2 = 4 Low
Large-scale fire outbreak	Destruction of natural vegetation and habitats. Disasters on infrastructure and networks.	Limited A vulnerability to fires can only be found on the premises of the project (M/C). In addition, only the required qualified staff will be located in the project area where a maximum presence of 10 to 12 persons is calculated during the implementation of the project. For	Not Probable As the project under study develops on forest land, the risk of fire in the summer months is likely.	2 X 2 = 4 Low

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Risk	Typical risk impact characteristics	Risk characterisation based on the vulnerability of the project under study	Risk assessment
		the removal of workers from the work area, the appropriate vehicle shall be located at the site of the work.	

9.14.4 Worker safety issues

This section makes a brief reference to the current institutional framework for the safety of workers during the construction and operation phases of projects and activities.

These matters are not the subject of the Environmental Impact Assessment and are governed by a general and specific institutional and regulatory framework that is mandatory and rigorously implemented. However, since they are directly related to the prevention and protection of workers and the environment, it is considered appropriate to include them in the EIA from accidents during both the construction phases and the operation of activities.

The main elements, both legislative and regulatory, of the relevant national institutional framework are:

- **Presidential Decree 305/96**(Government Gazette, Series I, No 212) on minimum safety and health requirements to be applied at temporary or mobile construction sites
 - Relevant circular: D.o.b. 130159/7.5.1997 "Circular for the implementation of Presidential Decree 305/1996 on minimum safety and health requirements to be applied at temporary or mobile construction sites in compliance with Directive 92/57/EEC"
- **PRESIDENTIAL DECREE 17/96**, GOVERNMENT GAZETTE 11/1/96 "Measures to improve the safety and health of workers at work"
 - Codified by: Law 3850/2010 (Government Gazette 84/A/2010) http://www.elinyae.gr/el/item_details.jsp?cat_id=708&item_id=8438 ratifying the Code of Laws on the health and safety of workers
 - O Amended by: Presidential Decree159/1999 (Government Gazette, Series I, No 157/3.8.1999) amending Presidential Decree 17/1996 on measures to improve the safety and health of workers at work in compliance with Directives 89/391/EEC and 91/383/EEC (Government Gazette, Series I, No 141) and Presidential Decree 70/1988 on the protection of workers exposed to asbestos at work (Government Gazette, Series I, No 31), as amended by Presidential Decree 175/1997 (150/A)
 - Relevant circular: D.o.b. 130297/15.7.1996 "Circular for the implementation of Presidential Decree 17/1996 on measures to improve the safety and health of workers at work in compliance with Directives 89/391/EEC and 91/383/EEC"
- Presidential Decree 16/96, Government Gazette 10/4/96 on minimum safety and health requirements for the workplace. Relevant document: D.o.b. OK. 130532/31.7.1996 implementing Presidential Decree 16/1996 on minimum safety and health requirements for the workplace in compliance with Directive 89/654/EEC.
 - Amended by: Ministerial Decision oik 32205/Δ10.96/2013 (Government Gazette, Series II, No 2562/2013) on minimum first aid materials in workplaces
- **Presidential Decree 105/95**(Government Gazette, Series I, No 67) on minimum requirements for safety and health signs at work

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- Relevant document: **D.o.b. 130409/1995** 'Circular implementing Presidential Decree 105/1995 on minimum requirements for safety and/or health signs at work in compliance with Directive 92/58/EEC'
- Amended by: PRESIDENTIAL DECREE 52/2015, GOVERNMENT GAZETTE 81/A/2015: Harmonisation with Directive 2014/27/EU amending Council Directives 92/58/EEC, 92/85/EEC, 94/33/EC, 98/24/EC and Directive 2004/37/EC of the European Parliament and of the Council in order to align them with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures Amendment of Presidential Decree 105/1995, Presidential Decree 176/1997, Presidential Decree 62/1998, Presidential Decree 338/2001 and Presidential Decree 399/1994
- **Presidential Decree**395/94 (Government Gazette, Series I, No 220) on minimum safety and health requirements for use by workers at work.
 - o Amended by: Presidential Decree 155/2004(Government Gazette, Series I, No 121) amending Presidential Decree 395/1994 on minimum safety and health requirements for the use of work equipment by workers at work in compliance with Directive 89/655/EEC (GG I/220), as amended and in force, in compliance with Directive 2001/45/EC, Presidential Decree 304/2000 (Government Gazette, Series I, No 241/2000) amending Presidential Decree 395/1994 on minimum safety and health requirements for the use of work equipment by workers at work in compliance with Directive 89/655/EEC (Government Gazette, Series I, No 220), as amended by Presidential Decree 89/1999 amending Presidential Decree 395/1994 in compliance with Council Directive 95/63/EC (Government Gazette, Series I, No 94) and Presidential Decree 89/1999 (Government Gazette, Series I, No 94) amending Presidential Decree 395/1994 on minimum safety and health requirements for the use of work equipment by workers at work in compliance with Directive 89/655/EEC (Government Gazette, Series I, No 220) in compliance with Council Directive 95/63/EC;
- Presidential Decree396/94 (Government Gazette, Series I, No 220) on minimum health and safety requirements for the use by workers of personal protective equipment at work in compliance with Council Directive 89/656/EEC.
- Presidential Decree397/94 (Government Gazette, Series I, No 221/94) on minimum safety and health requirements for the manual handling of loads involving a risk particularly to the back and back of workers in compliance with Council Directive 90/269/EEC.
 - Relevant document: D.o.b. 130405/1995 implementing Presidential Decree 397/1994 on minimum safety and health requirements for the manual handling of loads involving a risk particularly to the back and back of workers in compliance with Council Directive 90/269/EEC
- Presidential Decree 778/80 (Government Gazette, Series I, No 193/80 on safety measures during the execution of building works)
 - Relevant document: D.o.b. 131120/1980 'Notice of publication of Presidential Decree No 778/26.8.1980 on security measures during the execution of building works'
- **Presidential Decree 1073/81**(Government Gazette, Series I, No 260) on safety measures in the performance of work on building sites and civil engineering projects of all kinds
 - o Relevant document: **D.o.b. 130236/1982**: 'implementation of Presidential Decree 1073/16.9.1981', **131081/1981** 'Notice of publication of Presidential Decree No 1073 on safety measures in the performance of works on building sites and all kinds of projects falling within the remit of civil engineers'
- Presidential Decree95/78on health and safety measures for welded workers (Government Gazette, Series I, No 20)

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The main elements of the Community institutional framework in the field of safety at work are set out below.

- Directive 2009/104/EC of the European Parliament and of the Council of 16 September 2009 concerning the minimum safety and health requirements for the use of work equipment by workers at work (second individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) (codified version) (Text with EEA relevance). Amending Directive 89/655/EEC
- **Directive 2003/105/EC** of the European Parliament and of the Council of 16 December 2003 amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (L345 31.12.2003)
- Directive 2001/45/EC of the European Parliament and of the Council of 27 June 2001 amending
 Council Directive 89/655/EEC concerning the minimum safety and health requirements for the use of
 work equipment by workers at work (second individual Directive within the meaning of Article 16(1)
 of Directive 89/391/EEC) (Text with EEA relevance). Amending Directive 89/655/EEC
- Directive 1996/58/EC of the European Parliament and of the Council of 3 September 1996 amending
 Directive 89/686/EEC on the approximation of the laws of the Member States relating to personal
 protective equipment (L236 18.9.1996)
 Specific reference should be made to the main elements of the national and Community institutional
 framework relating to the management of asbestos due to the existence of relevant materials in the
 area of the project under study for materials and structures containing asbestos that require specific
 management.
- Directive 2009/148/EC of the European Parliament and of the Council of 30 November 2009 on the
 protection of workers from the risks related to exposure to asbestos at work (Text with EEA
 relevance) (L330 16.12.2009). Amends: 1983/477/EEC
- **Directive 2003/18/EC** of the European Parliament and of the Council of 27 March 2003 amending Council Directive 83/477/EEC on the protection of workers from the risks related to exposure to asbestos at work (L97 15.4.2003). Amends: 83/477/EEC.
- CommissionDirective 1999/77/EC of 26 July 1999 adapting to technical progress for the sixth time Annex I to Council Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (asbestos). Amends: 76/769/EEC.
- Ministerial Decision 8243/1113/1991 (Government Gazette, Series II, No 138/8.3.1991) laying down measures and methods to prevent and reduce pollution of the environment by asbestos emissions.

It should be noted that, on the basis of the institutional framework set out above, the following should be drawn up and implemented on a case-by-case basis and in accordance with the provisions laid down:

- 1. Project Safety & Hygiene Plan during the construction phase: The main purpose of the Project Safety and Health Plan is to prevent accidents in order to ensure the life and health of workers at the place where the project is carried out and to prevent damage to the assets of the project owner and the contractor. In other words, it describes and clarifies the potential risks and their prevention measures, taking into account the minimum provisions of the relevant legislation. In addition, it aims to minimise the consequences of any accidents.
- 2. **Emergency response plan** during operation: The Emergency Response Plan (BACS) is being prepared by the operator of an activity to be a systematic programme to prepare for emergencies such as fire, explosion, earthquakes, extreme weather events, acts of terrorism, protecting human health and safety as well as property. BACS also shapes the company's relations with local authorities (police, fire brigade, region, hospitals) in the event of an emergency.

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9.15 Summary of impacts in tables

The table below presents in a supervisory manner the assessment and evaluation of the impact of the construction and operation of the project under consideration by environmental instrument.

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Table Error! No text of specified style in document.-9 Supervisory assessment of the impact of the construction and operation of the project under consideration by environmental instrument

	Impact on the construction phase						t on the	noration	nal phase	
	Шрасі	on the	Construct	ion phase	<u> </u>	Шрасі	l on the t	peration	lai pilase	1
a/a	Nature of the	Size	Duration	Downgrading	Treatment by artificial means	Nature of the	Size	Duration	Downgraded with	Treatment by artificial means
1.	Impact	on clim	atic and l	bioclimatic chara	cteristics					
	_	Α	BP	MEAN	MEANDOT	+	Р	MT	MEAN	MANIFOLD
2.	Impact	on mor	phologica	al and ecologic ch	aracteristics					
	_	Р	ВР	MEAN	MEANDOT	_	Α	MT	MEAN	MEANDOT
3.	Impact	on geol	ogical, te	ctonic and soil ch	naracteristics	,			,	
	_	Р	BP	MEAN	MEANDOT	0				
4.	Impact	on the	natural e	nvironment	T			1		
	<u> </u>	Α	BP	MEAN	MEANDOT	_	Α	MT	IF	INSTEAD
5.	Impact on land use									
	-	Р	BP	MEAN	MANIFOLD	0				
6.	Impact	1		and operations of	1	1	onment	ı	Π	
_	 -	Α	BP	MEAN	MEANDOT	0				
7.		on culti	ural herit	age		Ι.		1		1
8.	0 Casial					0				
0.	+	A econo	mic impa	 		+		MT		1
9.	-	l		astructure		т —		IVII		
J.		P	BP	IF	INSTEAD	0				
10.	Impact	l	atmospho	l	INSTEAD	10	<u> </u>			L
	_	P	ВР	MEAN	MEANDOT	+		MT		
11.	Impact	l	l .	environment		<u> </u>	<u> </u>	1	l	1
	_	P	BP	MEAN	MEANDOT	+		MT		
12.	Effects			omagnetic fields	1	1	1	<u>I</u>	I	1
	0					0				
13.	Impact	on surfa	ace wate	r	1	1	1	ı	1	1
	_	Р	ВР	IF	ANT	0				
14.	Impact	on grou	ındwater		•	•	•	•	•	•
	0					0				
					Languad Tak					

Legend Table

	Legend Table
-:	Negative
0:	Neutral
+:	Positive
S:	Important
P:	Moderate
A:	Patients
BP:	Short-term
MT:	Long-term
IF:	Reversible

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MEAN:	Partially reversible
DO NOT:	Irreversible
INSTEAD:	Manageable by artificial means
MEANT:	Partly manageable by artificial means
MINUT:	Unaddressable by artificial means

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10. ADDRESSING ENVIRONMENTAL IMPACTS

This chapter sets out the preventive and remedial measures proposed in this EIA to address the negative effects of the project on the environment. The structure of the measures follows the thematic structure used in Chapter 9 on Environmental Impact Assessment and Evaluation. The proposed measures aim at the following ways of addressing environmental impacts:

- Prevention avoidance.
- Reduction of intensity and area.
- Rehabilitation.

10.1 Measures to address the impact on climate and bioclimatic features

The projects studied are not related to significant impacts on the climate and bioclimatic characteristics of the study area and therefore no relevant preventive or compensatory measures are proposed.

10.2 Measures to address the impact on morphological and biologic characteristics

Construction phase

In order to address the impact on the morphological and opiological characteristics of the construction of the proposed projects, the following measures are proposed:

- The width of the occupation area of the project is limited to what is strictly necessary for the construction of the project.
- For the whole project and before the construction phase, a delimitation of the catchment areas is made, so that any excavations to be carried out are limited to what is strictly necessary and avoid unnecessary openings, drainage and clearing.
- All waste materials shall be collected and removed from the project site and shall be disposed of in accordance with the provisions in force.
- After completion of the construction works, all materials and equipment transferred to the intervention area for the needs of the project will be removed.
- In addition, at the end of the construction work, the contractor must restore the landscape of the intervention areas by removing obsolete materials and machinery and carrying out morphology restoration work, such as removing a backfilling to cross a stream.
- In order to organise the construction site of the projects under consideration, the location area of the
 site will need to be configured. The operation of a construction site is usually related to the generation
 of urban waste as well as liquid and solid waste. Therefore, appropriate measures will be taken to
 address the effects that may arise on the landscape from site development work and from the
 generation of waste and waste.
- Sites should be sited in areas not covered by vegetation of high ecological value and at sufficient distance from residential areas and protected areas as far as possible.

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• The movement of construction vehicles should take place on the existing road network and on the proposed access zones.

Operation phase

 Regular maintenance will be carried out on the proposed sections of the project (underground transport lines, substations, etc.). Any waste materials will be removed immediately from the project area.

10.3 Measures to address the impact on geological, tectonic and soil characteristics

Construction phase

During the construction phase, efforts will be made to maintain in good condition the access zones and construction sites required for the construction of the works, as well as to rehabilitate and regenerate these areas at the end of the construction works, which will be carried out in accordance with the following:

• Maintain natural slopes of the soil so that there is no change in the run-off of surface water.

In order to address issues relating to the management of excavations and materials in general, it is proposed to optimise the planning of the project, with a view to direct re-use of excavated products in the building blocks and rational management of the necessary aggregates.

All necessary measures will be taken to minimise the impact on the soil characteristics of the intervention area, as set out below.

- The excess material that will arise during the construction phase and cannot be used in the
 construction works shall be deposited in an environmentally licensed deposit chamber or in landfills
 or in areas where other projects are carried out, which have approved environmental conditions and
 where those materials can be used in inactive quarries or through alternative management systems.
 - Account should also be taken of the legislation in force, i.e. Ministerial Decision 36259/1757/E103/2010 onmeasures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (Government Gazette, Series II, No 1312), as amended by Law No 4030/2011 on anew way for the issuing of building permits, building controls and other provisions (Government Gazette, Series I, No 249). according to Article 40 (Article 40on waste from excavation, construction and demolition) and explanatory circular 4834/2013 on the management of excess excavation materials from public works Clarifications on the requirements of Joint Ministerial Decision 36259:
 - 1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
 - Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

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Account will also be taken of Law 4014/2011 on the environmental authorisation of projects and activities, arbitrariness in connection with the creation of an environmental balance and other provisions falling within the remit of the Ministry of the Environment(Government Gazette, Series I, No 209) and, more specifically, Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity':

- Paragraph 2 states that: 'The installations and works resulting from the technical design of projects or activities at a stage following the issue of a DAEC, such as construction sites, depots, car service stations, centres for the servicing and maintenance of works or activities, toll stations, noise protection projects, specification of technical measures and terms of the DAEC of the project, shall be approved by submission and evaluation of a Technical Environmental Assessment (Technical Environmental Assessment) to the authority responsible for the environmental permit, by decision of its Director-General. The following conditions are necessary for the submission and approval of TEMM: a) the general assessment of the impact and the provision of general and/or specific conditions and restrictions for such installations and works in the DAEC and b) the express provision in the DAEC of the project or activity of the possibility to submit and approve TEMM.'
- Paragraph 4 provides that: 'For projects or activities, the use as a storage chamber of an area already extracted and inactive on forest or reforestation land, with the exception of restoring it and integrating it into the natural surroundings of the area, shall be permitted. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.'
- If authorisation of a storage chamber is required for the needs of the projects under consideration, a TEMM will be prepared, in accordance with the provisions of Law 4014/2011.
- The deposit of excavations to be reused as embankment should be done in a way that does not allow corrosion and leaching of materials.
- During earthworks, take the necessary measures to avoid any kind of soil destabilisation or dispersal
 of earth moving and aggregate materials of the project such as landslides or slope erosion, leaching of
 aggregate heaps, etc. In cases where the likelihood of these phenomena appears to be increased, for
 example during a period of high rainfall, earthworks should be stopped until favourable conditions for
 their implementation are restored, with the exception of works which need to be carried out
 immediately for reasons of safety or environmental protection (e.g. stabilisation of excavated slopes,
 removal of materials to prevent their drifting).
- The excavation materials must be transported by means of transport with suitable covers in order to prevent them from being dispersed or diffused in the streets.
- Earthworks should be avoided during days with heavy rainfall.
- To ensure that car services serving construction sites do not pass through the centres of settlements and residential areas.
- Any materials required for the construction of the project must be provided by legally operating
 quarries in the area, which must be provided with the required decision approving the environmental
 conditions.

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- For the whole project and before the construction phase, demarcation of the catchment areas, so that
 any excavations are carried out, are limited to what is strictly necessary and avoid unnecessary
 openings, drainage and clearing.
- It shall be prohibited to dispose of surplus materials and any solid construction waste:
 - o Points on the hydrographic network.
 - Any uncontrolled waste disposal sites of local authorities in the area.
- If leaching of construction machinery is required, in order to protect the soil from spills of mineral oils, fuels, etc., special spaces with a watertight floor and an inclined collection hole should be provided. Otherwise, the washing of manufacturing vehicles and machinery will be carried out in authorised workshops.
- For all waste and waste arising from construction activities during the construction of the projects (solid and liquid) appropriate management is implemented to avoid pollution of the area (soil, subsoil, surface water and groundwater) from uncontrolled disposal or leaks.
- Construction sites shall be supplied with domestic waste bins, with a volume of at least 0.5 m³, in
 which the urban waste of workers on the construction sites is collected. This waste will be periodically
 disposed of at the nearest waste disposal site by the project promoter. It should be noted that
 particular care should be taken to ensure that such solid waste does not include rubbish or material
 which is potentially hazardous, which should be disposed of in accordance with the legislation in force
 on the respective categories of waste.
- The mineral oils used must be managed in accordance with Presidential Decree 82/25.02.2004 (Government Gazette 64A/02.03.2004) laying down measures and conditions for the management of mineral oils used, which replaced Royal Decree No 98012/2001/96. Waste lubricating oils and liquids of each type shall be collected separately per category in suitable tanks with a capacity of 0.50 m³ or in drums and shall be temporarily stored in a covered area.
- Any toxic and hazardous waste must be managed in accordance with Joint Ministerial Decision 13588/725/06 (Government Gazette, Series II, No 383, 28.03.2006) replacing KYA 19396/1546/97 (Government Gazette, Series II, No 604/18-7-1997).
- Take all precautionary measures to avoid leakage of petroleum products from damage, negligence, etc. and carry out appropriate handling to minimise such incidents. However, if, despite the control and proper functioning measures, such materials are leaked, care must be taken to avoid widespread soil impregnation. Absorbent materials (e.g. sawdust, sand) should therefore be available in sufficient quantities to seek adsorption and thus contain the leak fuel and lubricant. After use, these absorbent materials should be carefully collected and disposed of for landfill. Absorbent materials stored in a suitable roofed area must be checked at regular intervals whether they have adsorbed moisture (e.g. from water leakage) at which point they will be less effective if used. In this case they should be replaced as soon as possible.
- Prohibit any form of burning of materials (shapeds, rubbers, oils, etc.) in the project area.
- The project promoter shall be responsible for the good condition and leakproofness of the mechanical equipment. In order to protect the soil from leakages of mineral oils, fuels and other petroleum products from construction machinery, appropriate measures should be taken, such as good and regular maintenance of machinery, oil change and refuelling of vehicles and machinery in a specific suitable place and compliance with all measures to deal with leakages and fire safety. The

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maintenance and refuelling of machinery will be carried out in legally operating service stations and workshops in the area, except in the case of exceptional circumstances (damage, accidental leakage, etc.).

- At the end of the construction work, it is necessary to remove all construction machinery from the
 area, collect the equipment and collect waste materials, waste, lubricants, etc. that will arise during
 the construction work, in accordance with the legislation in force, so that there is no permanent
 impact on the ground of the operating area.
- Slopes formed by loose soil material should be properly concentrated and planted as soon as possible.

As regards the management of the materials that will arise during the construction phase, taking into account also the underground sections of the project located along the existing road network, please note that in any case the legislation in force will be complied with, namely Ministerial Decision 36259/1757/E103/2010 on measures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (DEEK)(Government Gazette, Series II, No 1312, 2010); as amended and in force, also taking into account explanatory circular 4834/2013 on the management of excess excavation materials from public works — Clarifications on the requirements of Joint Ministerial Decision 36259.

It should be noted that the above-mentioned Ministerial Decision was amended by Law No 4030/2011 on anew method for issuing building permits, building controls and other provisions (Government Gazette, Series I, No 249, 2011), according to which (Article 40 'Objectives relating to waste from excavation, construction and demolition (DEEK)')

- 1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
- 2. Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Finally, under Law 4014/2011 (Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity'):

4. Projects or activities may use as a storage chamber already extracted and inactive on forest or reforestation land for the sole purpose of restoring it and integrating it into the natural surroundings of the area. This requires the submission, assessment and approval of an environmental rehabilitation study by the Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.

Operation phase

No special additional measures are required beyond the systematic maintenance of the whole project, so that all types of waste which, in addition to aesthetic degradation, may also have an impact on the functionality of the project are not disposed of uncontrolledly.

During the operational phase of the project, small quantities of solid waste are expected to be generated, which will come from the packaging of materials/maintenance of the facilities and from the cleaning and hygiene materials of the staff. For the collection of this waste, there is provision for the installation of bins in the premises of the water bodies, at selected points of the facility. Litter should be removed from the project

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site at regular intervals. Any other solid waste arising during maintenance (electrical or mechanical parts, batteries, etc.) will be removed immediately under the responsibility of the technical maintainers.

Waste water from water bodies will also be taken into account in accordance with the health provisions in force.

The methods for the management of the main categories of waste material that can be generated during the operation of the project are set out below:

- Collection of waste lubricating oils (L.L.): The holder of the Port Facility Security Fund must conclude a
 contract with an approved alternative management system for the Port Facility Security Fund (ALC). The
 primary collection of waste water treatment plants from the holder's establishment must be carried out
 by a collector with a nationwide licence for collection and transport of waste water treatments and who
 must issue an 'identification form certificate of receipt of the waste water treatmentfacility'. The holder
 of the waste water treatment plant (i.e. the project operator) is required to keep a register of potentially
 dangerous materials.
- 2. Waste electrical and electronic equipment and waste batteries and accumulators: they will be managed by a specialised company contracted by the project promoter.
- 3. Other wastes: Other (non-hazardous) waste is disposed of in consultation with local local authorities and with competent bodies and always in accordance with the general provisions governing waste management and recycling of paper, glass, aluminium, etc.

10.4 Measures to address the impact on the natural environment

Marine Environment

Floating equipment

All evacuations from the work vessel and support/accompanying vessels shall be carried out in accordance with the requirements of the MARPOL Treaty and the applicable regulations. In particular:

- waste water and household waste shall be treated using a marine treatment device capable of generating liquid waste meeting international requirements (Annex IV MARPOL) prior to discharge at sea at a minimum distance of 3 nautical miles from the coast;
- oily liquid waste may be stored on board until it is delivered to appropriate port facilities. If this is not possible, oily liquid waste shall be treated in accordance with MARPOL Annex I (& 15 ppm) before discharge at sea.

All vessels involved in the operations and their equipment shall comply with all applicable international regulations.

Preventive maintenance, leak detection and repair programmes will be implemented to equip vessels that may cause undesirable leakage.

In addition, proper planning will minimise vessel movements and avoid as much as possible the simultaneous presence of many vessels in the area, thus minimising noise levels.

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In the event of a requirement to illuminate outdoor spaces necessary for the activities of the project, they will be limited to the areas of interest, in terms of safety conditions and in accordance with the law, thus avoiding nuisance particularly in relation to night fauna.

Submarine cable construction work

The width of the occupation zone of submarine cables should be limited to what is strictly necessary for the safe construction of the project.

In addition, any amendment to the methods of protection at the stage of final technical design of the project and to the extent that it differs from those described in this EIA will be done through the **preparation of a Technical Environmental Study (TEMEM)** by the project operator. TEMM will be submitted, assessed and approved in accordance with the provisions of the applicable environmental licensing legislation (Law 4014/2011 and Law 4685/2020).

10.5 Measures to address the impact on the anthropogenic environment

Construction and operational phase

In order to address the impact on land use, structure and operations of the man-made environment from the construction and operation of the individual parts of the project under consideration, the following measures are proposed:

- Land occupation will be limited only to those areas that have been identified as necessary for the implementation of the projects under consideration.
- The construction machinery will move in the operating area and access zones and not uncontrolled by shrub or agricultural land.
- The location of construction sites and areas for temporary storage of aggregates must be based on the least possible nuisance to the residential environment and always on the basis of the possibility of full rehabilitation.
- In the operational phase of any construction sites, special preventive measures will be taken to avoid fire in the surrounding areas. Any construction site should have firefighting infrastructure and an immediate mobilisation plan in cooperation with the local fire brigade.
- In addition, an incident response system, such as accidents, water pollution, etc., should be designed, and health and safety rules for personnel from hazardous materials should be precisely defined and complied with.
- Temporary piles of excavated material shall be arranged within the intervention zone and not accidentally on adjacent land, even in the case of abandoned land.
- During the construction of the project, road transport between residential areas and any existing access to sites of legally conducted activities must not be interrupted.
- The parking of wheeled wheels serving the needs of the project in places other than construction sites, in particular residential activities, is prohibited. These vehicles should be parked in suitably configured sites.

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- To ensure that the journeys of vehicles serving construction sites do not pass through the centres of settlements and residential areas. These routes should be defined once all vehicle alternatives have been assessed.
- Care should be taken to ensure that workplaces are labelled and excluded by appropriate means.
- After completion of the construction work, any type of construction site (offices, workshops, warehouses, etc.) must be removed and the site restored, irrespective of the ownership of the site.
- Rehabilitation works will be carried out in the access areas in accordance with a special phytotechnical restoration study to be carried out for this purpose, in order to integrate them more effectively into the surrounding area.

As regards the protection of the public health of the inhabitants of the surrounding agglomerations and of farmers whose parcels are located in the areas of the routing of the underground transport lines under study, it should be noted that the emission of electromagnetic radiation is in any case below the limits of the legislation in force. In addition, given that the four new substations on the islands of Serphos, Milos, Falangrou and Hunt are built using GIS technology, the electromagnetic radiation emitted will be lower and below the limits of the current legislation. Therefore, no further measures are proposed regarding the reduction of electromagnetic radiation emitted.

In order to address the potential impact of the proposed projects on the historical and cultural environment of the study area, all excavation and earthworks will be monitored by archaeologists designated by the competent Antiquities Inspectorates. If antiquities are identified in the course of the work, the work will be interrupted to carry out excavation research in accordance with the provisions of Law 3028/02 (Government Gazette, Series I, No 153) on the protection of antiquities and cultural heritage in general. The results of the investigation will depend on the further progress of the project following the opinion of the competent bodies of the Ministry of Culture. No construction work will be carried out without prior consultation with the jointly competent Antiquities Inspectorates. Prior to the implementation of the project, the results of which will depend on the further progress of the project will be carried out by diving teams of the Marine Antiquities Tax Office at the landing points, following the opinion of the competent tax authority. If antiquities are found at the landing points, the course of the cables and the points of landing shall be shifted in accordance with the instructions of the Marine Antiquities Inspectorate.

Finally, after the definitive closure of the project, the operator must take the necessary measures to restore the environment of the intervention area and remove all elements of the project which may cause damage to the environment or pose a risk to public safety (oils, electrical installations, etc.). To this end, it must, not later than one (1) year before the scheduled date of closure of the project, submit to the department responsible for its environmental authorisation, on the basis of the provisions in force, an Environmental Rehabilitation Study — Plant Technician Study.

10.6 Measures to address the impact on the socio-economic environment

Construction and operational phase

In order to minimise the potential impact on the social and economic environment of the region, appropriate measures should be taken, summarised below.

 During the operation of the individual construction sites of the project, continuous and systematic signalling is required in accordance with the instructions of the competent services (speed reduction signs, by-passes, distress signals, etc.).

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- With regard to the provincial road network in the study area, which will be affected by the traffic of
 construction vehicles and machinery, appropriate traffic regulations should be put in place, with
 information signs and appropriate road signs to avoid accidents.
- The owner or contractor of the construction of the project must, in good time and before the start of
 the main works which will cause traffic obstruction, submit to the supervising service a study of traffic
 regulations, which he will carry out in order to reduce the impact (traffic arrangements, by-passes,
 enlargements, etc.).
- In any event, access to houses or properties will not be cut off, nor will the economic activities carried out in the project transit areas (agricultural and livestock activities, but also activities in the secondary and tertiary sectors) be interrupted.
- The handling of the various materials and the movement of machinery and vehicles related to the
 construction of the works must not cause problems in the traffic conditions (prevention of traffic,
 increased risk, etc.) of existing roads. Appropriate timetables for individual works should be
 established, taking into account the peak times of traffic on existing roads and the routes required
 from the construction works.
- At night there should be light-signalling on site sites as well as traffic setting areas.
- Any damage to agricultural or urban land must be kept to a minimum and all protective measures in
 the agricultural and urban environment must be respected. Construction vehicles should therefore
 operate on the existing road network and on the proposed access zones and not uncontrolled through
 agricultural crops even if they are abandoned land.
- All technical requirements for the safe operation and easy construction and maintenance of the line shall be complied with.
- The staffing needs of the project will be met, as far as possible, by the residents of the study area.
- Adequate fencing and construction sites will be provided for the safety of adults and minors.

10.7 Measures to address the impact on technical infrastructure

In order to address the potential impact on existing technical infrastructure of the construction of the projects under consideration, the following measures are proposed:

- Any intervention in an existing infrastructure project must be carried out in accordance with a relevant study and in cooperation with the competent public interest bodies, in order to ensure the smooth operation of the infrastructure project affected.
- The smooth circulation of vehicles in the project area should be ensured during the construction phase of the project (location of site markings).
- As already mentioned above, before construction of the underground sections of the project starts, a
 Traffic Arrangements study will be prepared to determine the traffic arrangements to be put in place
 to ensure the safe operation of traffic during the construction of the project.

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- With regard to addressing the impact on the maritime traffic of ships and vessels, it is first proposed that the location and timing of installation work be notified to seafarers via the relevant Hydrographic Service of the Navy. In addition, the following measures are foreseen:
 - o Inform the Navy Hydrographic Service of any update of the maritime maps of the area.
 - The installation of submarine cables shall be carried out in an appropriate manner by a special submersible vehicle which achieves the laying of the cables at the desired depth of design with minimum disturbance of the bottom.
 - The main safety risk for submarine cables is fishing activity. Information on the installation of submarine cables of local authorities as well as national and international maritime chart producing services and the ICPC (International Cable Protection Committee) is a very important measure for the protection of cables. However, this measure is not always effective. The most effective measure has been shown to be the burial of cables, which is integrated into the design of the project under consideration. At least for low depth sea transit areas, the depth of the upper part of the ditch, if possible below the bottom, for the natural restoration of the benthic ecosystem.
 - o In order to address any potential impact caused by the laying work on any existing submarine cables (mainly telecommunications), the procedures and designs foreseen by the ICPC for these cases will be applied in cases where submarine cables are crossed with already installed and operating telecommunications cables. In this way, it is not expected that there will be any impact on the operation of these cables.
 - Moreover, as regards any old and out-of-service cables, no information is available on a programme for the removal of old cables that are currently out of service, from Greek Spatial Waters or International waters in the Aegean Sea. In any event, before the cable is installed, it must be checked that the cable is free of obstacles before it is set.

It should be noted that the landing points of the submarine cable on the islands of Milos and Naxos are located far away from protected areas in the South Aegean Water District that have been classified as recreational/sicken water (0.8 km west from the submarine cable landing point in the south Milos and is located close to the 'Côte Provaa' and 0.6 km west of the landing point of the submarine cable in the western Naxos is located close to "Côte Agios Prokopios") and therefore no measures to reduce the impact related to bathing are proposed.

10.8 Measures to address the impact on the environment

Construction phase

During the construction phase of the projects under consideration, the following measures must be observed to limit the impact on the environment of the area:

- Frequent and periodic maintenance of all manufacturing machinery by qualified personnel.
- Systematic maceration of aggregates during the dry period of the year.
- Maceration of the aggregates transported in the works as well as covering heavy-duty transport vehicles with suitable fabric.

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- A ban on permanent parking of wheelchairs serving works outside the construction site.
- The quantities of aggregate stored for the purposes of the projects should be limited to the most necessary and covered as far as possible;
- The machinery working in the area is operated carefully to limit the release of dust;
- Ban on trucks from passing through settlements during hours of common quiet
- The uninsured passageways of machinery and other vehicles on the construction site must be kept at regular intervals.
- The site site shall be stratified with crushed material ("3A") to limit dust emissions.
- Incineration of any form of material (useless material, waste, etc.) is prohibited.
- All the areas where interventions are planned should be delimited before the start of the construction works.

It is also necessary to comply with the legislation in force on exhaust emissions of machinery and construction vehicles. The main relevant legal provisions are the following:

- Ministerial Decision 28432/2447/92 (Government Gazette, Series II, No 536/25.8.92), measures to limit the emission of gaseous and particulate pollutants from diesel engines.
- Ministerial Decision 13736/85 (Government Gazette, Series II, No 304//20.5.85), measures against gaseous emissions from diesel engines for the propulsion of vehicles.

Operation phase

Based on the nature and design of the projects under consideration, no significant emissions of gaseous pollutants are expected during their operation, so no specific measures to protect the atmosphere are required.

10.9 Measures to address the impact on the acoustic environment

Construction phase

In places where construction works in the vicinity of residential areas are planned, special attention shall be paid to measures to reduce construction noise. Special attention is required in the areas where the underground parts of the project pass through residential areas, as presented in **Chapter 9** of this EIA.

The measures to reduce noise generated during the construction phase can be summarised in the noise reduction of machinery etc. of construction vehicles (i.e. reduction of emissions) in the vicinity of sensitive recipients.

Measures can also be taken in the spread of noise, mainly by local noise intervention in the form of mobile 'enclosures' around individual point sources of noise (e.g. airheads). This application is particularly successful in local, small-scale but particularly sound work. This measure must be taken only if noise levels of more than 65dBAs are reached on the boundaries of the intervention area when the works are carried out.

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For noise emitted by construction equipment during the construction phase of the project, the provisions of Joint Ministerial Decision 37393/2028/29.3.2003 on measures and conditions relating to noise emissions into the environment from equipment for use outdoors shallapply.

As regards construction noise, the construction contractor must comply with all the applicable provisions of national and European legislation and must take all appropriate measures to minimise major noise emissions so as to ensure that the noise level is within the acceptable limits during the construction of the works. In particular:

- It is prohibited to remain at the site of the project and to use machinery without the EEC type-approval certificate relating to noise.
- The average noise energy level for the operation of the construction sites of the individual sections of the works is defined as 65 dB(A).
- In specific cases where high noise levels are expected, noise barriers of 2 m-3 m high on the perimeter of the construction site will be used to avoid deterioration of the acoustic environment.
- Where high noise levels are emitted by point sources (e.g. use of air clamps, air compressors or other nuisance tools), mobile sound insulation barriers around the emission points shall be used to reduce noise.
- In the underground parts of the project located within agglomerations, noise activities should not take place during the hours of common quiet.

With regard to vibrations generated during the construction phase of the proposed projects, the level of vibrations shall in no case exceed 0.5 m/s² weighted acceleration or 13 mm/s equivalent top ground particle speed, in the nearest building to the vibration generation point.

Operation phase

In accordance with Chapter 9 of this study, no measures are proposed to address the impact on the acoustic environment of the study area during the operational phase of the project.

10.10 Measures to address the effects related to electromagnetic fields

Construction and operational phase

The design, construction and operation of the transmission line under study and the proposed water bodies will be in accordance with the Greek Regulation (standard ELOT ENV 50166-1 "Exposure of humans to electromagnetic fields — Low frequencies (0-10000 HZ)") and with the directives and limits and the corresponding international regulations (Directive ICNIRP — International Commission for Non-Ionising Radiation Protection of the World Health Organisation, the recommendation of the Scientific Committee of the Council of the European Union).

The Recommendation of the Council of the European Union on the limitation of exposure of the general public to electromagnetic fields was published in July 1999. In this recommendation, the Council adopts the ICNIRP limits after their validation by the Scientific Steering Committee of the European Commission.

The common limits of the ICNIRP Directive and the Recommendation of the Council of the European Union on the continuous exposure of the public to 50 Hz are:

for magnetic induction: B= 100 μT

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• for electric field strength: E= 5KV/m.

The above limits apply in Greece on the basis of Joint Ministerial Decision No 3060 (Φ) 238 (Government Gazette, Series II, No 512/25.04.02): "Measures to prevent the public from operating low-frequency electromagnetic field emission devices".

Compliance with the limits of the Regulations ensures the protection of humans against the electric and magnetic field.

According to what is stated in Chapter 9 of this study, the maximum electromagnetic field values at the fence limits of existing ADMIE substations are not only much lower than the maximum permissible values, but are in many cases close to zero or reach the limits of sensitivity of the measuring instrument.

These prices are much lower than in the homes and are due to household electrical appliances (Report of the University of Patras).

Given that in the operational phase of the project under consideration, the electric and magnetic fields produced along the individual sections of the transmission line and in the substations are below the limit values, according to Greek legislation, no response measures are proposed in relation to the electromagnetic radiation emitted.

10.11 Measures to address impacts on water

Construction phase

To address the impact on water resources of the construction of the individual sections of the project under consideration, the following measures are proposed:

- When carrying out earthmoving operations, measures must be taken to limit the movement or leaching of solid flow in adjacent receiving waters. For this reason, if temporary excavation sites are created during the construction phase, ditches should be built around them to retain solids, which can be drifted during heavy rainfall in the adjacent natural recipients.
- More generally, the proper planning of the works, with a view to avoiding as far as possible heavy
 earthworks during the period of heavy rainfall and avoiding excavation on the rain days, helps to
 reduce emissions of suspended solids into the environment. In fact, major excavations and trenching
 during the summer months also help to protect groundwater as much as possible, as the aquifer levels
 are relatively lower in summer.
- In order to address the impact on water resources of the operation of the individual project sites, the following measures should be taken:
 - The petroleum products of the machinery and vehicles to be used for the construction work shall be managed in accordance with the provisions of the legislation in force.
 - The mineral oils used in machinery and vehicles must be collected and disposed of in accordance with the legislation in force on 'disposal of mineral oils used': Presidential Decree 82/2003 (Government Gazette, Series I, No 64/2.3.2004). Replacement of Joint Ministerial Decision 98012/2001/1996laying down measures and limits for the management of mineral

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oils used (Government Gazette, Series II, No 40), 'Measures, conditions and programme for the alternative management of waste oils from lubricating oils'.

- For site staff (washing, WC, etc.) it is proposed to install chemical toilets in order to avoid the low burden of urban waste water during the construction phase of the project.
- Accident response should be provided for in the construction contractor's programme. The contractor
 must make suitable absorbent materials (e.g. sawdust, sand) available on the construction sites in
 sufficient quantities to seek adsorption and thus contain and limit the dispersion of leak fuel and
 lubricants. These absorbent materials should be carefully collected and disposed of after use.

Operation phase

During the operation of the projects under consideration, no significant impact on the water resources in the area is expected and no corresponding remedial measures are proposed.

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11. ENVIRONMENTAL MANAGEMENT AND MONITORING

11.1 Environmental management plan

Chapter 9 of this study carried out a detailed assessment and evaluation of the environmental impact of the project under consideration, and a number of preventive and remedial measures were proposed in **Chapter 10**. The proposed Environmental Management System (EIS) is presented below, which concerns the project under consideration and has the following main objectives:

- 1. Checking the impact of construction and operation, in accordance with the provisions of this Environmental Impact Assessment.
- 2. Reliable and sufficiently frequent monitoring of the sizes characterising the environmental impact of the project under study.
- 3. Faithful adherence to the construction schedule of the project.
- 4. Application of the environmental conditions of the decision approving the environmental conditions of the project and of all the preventive and remedial measures proposed in this study.
- 5. Prevention and/or control of the consequences of exceptional occurrences.
- 6. Continuous improvement of environmental performance.
- 7. Implementation and compliance with the monitoring programme proposed in this study.
- 8. Effective protection of the environment.

The implementation of the environmental management plan should be entrusted by the project promoter to a group of scientists who:

- they will have the necessary capabilities and equipment to intervene effectively both during the construction and operational phases of the project under consideration, so that the integration of the environmental dimension into these stages is as effective as possible.
- They will have full responsibility for the implementation of environmental management and monitoring measures and guidance.

The Environmental Management Plan (EIMP) will be developed in three main areas, which are presented below.

> Proper implementation of the project according to the proposed design

- The area of occupation of the project under consideration and of those accompanying it will be delimited, before construction works begin, in order to prevent land and seagrass being cleared over a larger area than required.
- As a matter of priority, excess excavation materials should be used in the work of the project and then
 disposed of at the planned tips, depending on their type and the statutory way in which they are
 managed.

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In particular, surplus materials that will arise during the construction phase in the onshore part of the project and that cannot be used in the construction works will be deposited in an environmentally licensed deposit chamber or in landfills or in areas where other projects are carried out, which have approved environmental conditions and where those materials can be used in inactive quarries or through alternative management systems.

For any surplus material that may arise in the construction phase in the maritime part of the project, the guidance of the MARPOL Treaty will be followed.

Account should also be taken of the legislation in force, i.e. Ministerial Decision 36259/1757/E103/2010 onmeasures, conditions and programmes for the alternative management of waste from excavation, construction and demolition (Government Gazette, Series II, No 1312), as amended by Law No 4030/2011 on anew way for the issuing of building permits, building controls and other provisions (Government Gazette, Series I, No 249). according to which (Article 40 'Objectives relating to waste from excavation, construction and demolition (CEDW)') and explanatory circular 4834/2013 on the management of excess excavation materials from public works — Clarifications on the requirements of Joint Ministerial Decision 36259:

- 1. It shall be permitted to install waste treatment plants from excavation, construction and demolition in inactive quarries, irrespective of their ownership status, for the purposes of paragraph 2. These quarries include the provisions of Article 33 of Law 3164/2003 (GG I 176) as suitable places for integrated waste management facilities (IWMF). The operation of CDE treatment facilities in quarries must not extend beyond the time of restoration of the quarry laid down in the contractor's contract.
- 2. Excavation products may be deposited from the construction of public works, including works under a concession, to inactive quarries for their partial or total restoration following a restoration study including the vegetative study and the adoption of a decision approving environmental conditions (DAEC).

Account will also be taken of Law 4014/2011 on the environmental authorisation of projects and activities, arbitrariness in connection with the creation of an environmental balance and other provisions falling within the remit of the Ministry of the Environment (Government Gazette, Series I, No 209) and, more specifically, Article 7 'Procedure for the evaluation of a final study and study of the implementation of a project or activity':

- Paragraph 2 states that: 'The installations and works resulting from the technical design of projects or activities at a stage following the issue of a DAEC, such as construction sites, depots, car service stations, centres for the servicing and maintenance of works or activities, toll stations, noise protection projects, specification of technical measures and terms of the DAEC of the project, shall be approved by submission and evaluation of a Technical Environmental Assessment (Technical Environmental Assessment) to the authority responsible for the environmental permit, by decision of its Director-General. The following conditions are necessary for the submission and approval of TEMM: a) the general assessment of the impact and the provision of general and/or specific conditions and restrictions for such installations and works in the DAEC and b) the express provision in the DAEC of the project or activity of the possibility to submit and approve TEMM.'
- Paragraph 4 provides that: 'For projects or activities, the use as a storage chamber of an area already extracted and inactive on forest or reforestation land, with the exception of restoring it and integrating it into the natural surroundings of the area, shall be permitted. This requires the submission, assessment and approval of an environmental rehabilitation study by the

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Secretary-General of the Decentralised Administration following a recommendation from the competent Forestor.'

> Compliance with preventive environmental protection measures, both during the construction and operational phases of the project under consideration

Environmental protection measures are presented below in the construction and operational phases of the project under consideration.

Construction phase

- If necessary, the transport of materials to any storage chambers or landfills shall take all necessary
 protective measures to prevent the materials from spreading on the hydrographic network of the
 area.
- Excavations to be used as embankments must be deposited in such a way as to prevent corrosion and leaching of materials.
- All suitable earthy and semi-round excavated materials shall be used for infusion where necessary.
- The temporary tipping of unsuitable or surplus excavated products should take place in mild gradients where the surface flow of the water will not be affected.
- Removal of unsuitable excavation material shall take place as soon as possible.
- Earthworks should be avoided during high precipitation days.
- To ensure that car services serving construction sites do not pass through the centres of settlements and residential areas.
- Any materials required for the construction of the project must be provided by legally operating quarries in the area, which have the requisite decision approving environmental conditions.
- The quantities of aggregate stored for the purposes of the project are limited to what is strictly necessary.
- The width of the occupation area of the project is limited to what is strictly necessary for the construction of the project.
- All machinery on construction sites must have maintenance records showing their regular maintenance, which will be available for inspection by the competent environmental services.
- Work should be properly planned to avoid significant material movements in times of adverse weather conditions (e.g. heavy rain or strong winds).
- Frequent washing of the tyres of lorries transporting materials should be carried out in order to minimise the transport of sludge from construction sites outside those areas.
- Maintaining existing vegetation to the greatest extent possible, with a view to minimising soil erosion.
- All waste and waste arising from construction activities during the construction of the project (solid and liquid) should be properly managed to avoid pollution of the area (soil, subsoil, surface water and groundwater) from uncontrolled disposal or leaks.

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- The developer must manage the construction waste during the construction phase in accordance with the applicable legislation on construction, demolition and excavation waste. Soil and other natural materials excavated during construction activities, provided that it is certain that these materials will be used in their natural state on the site from which the excavation took place, may be excluded from the management of ECDW.
- The mineral oils used must be managed in accordance with the provisions of Presidential Decree 82/2004 (Government Gazette, Series I, No 64) laying down*measures and conditions for the* management of mineral oils used, which replaced KYA 98012/2001/96. Waste lubricating oils and liquids of each type will be collected separately by category in suitable tanks or casks and temporarily stored in a covered area.
- Prohibit any form of burning of materials (shapeds, rubbers, oils, etc.) in the project area.
- The project promoter shall be responsible for the good condition and leakproofness of the mechanical equipment. In order to protect water resources from leakages of mineral oils, fuels and other petroleum products from construction machinery, appropriate measures should be taken, such as:
 - o good and regular maintenance of machinery,
 - o the change of oil and the refuelling of vehicles and machinery will take place in a specific suitable place, and
 - o compliance with all measures to deal with leaks and fire safety.
- All preventive measures shall be taken to avoid leakage of petroleum products from damage, negligence, etc. and appropriate handling shall be carried out to minimise such incidents. However, if, despite the measures, such materials are leaked, care must be taken to avoid widespread impregnation of the underground aquifer. Absorbent materials (e.g. sawdust, sand) should therefore be available in sufficient quantities to seek adsorption and thus contain the leak fuel and lubricant. Once used, these absorbent materials should be carefully collected and delivered to a specialised company for management. Absorbent materials stored in a suitable roofed area must be checked at regular intervals whether they have adsorbed moisture (e.g. from water leakage), in which case they will be less effective or insignificant if used. In this case they should be replaced as soon as possible.
- Waste water from construction site staff will be disposed of in chemical toilets, which will be evacuated at regular intervals by a suitable tanker and transported to a legally operational waste water treatment plant.
- In no case shall uncontrolled disposal of waste and waste of any kind be permitted in the project area or in the wider area.
- All appropriate preventive measures should be taken to avoid causing and responding to a fire.
- For all the intervention areas of the project which may be planted, plant technical configurations may be carried out with a view to restoring the environment, after an appropriate vegetative restoration study has been carried out. This study should include:
 - Definition and delimitation of the areas to be planted.
 - Definition of proposed plant species for planting. Priority should be given to native vegetation species.

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- o Proposed species composition and plantation links.
- However, in good time before the works start, the project promoter shall give written notice to the
 competent departments of the Ministry of Culture so that the excavations of the project can be carried
 out under the supervision of a competent official.
- If ancients are detected, the work must be interrupted in the relevant section of the project immediately and the competent Antiquities Inspectorate must be notified. The cost of any excavation research will be borne by the project promoter.
- In the construction phase of the works, along the existing road network, take all measures to rehabilitate the roads or parts of roads affected, as well as safety measures and the servicing of existing traffic.
- The construction works of the sections of the project should be completed in stages, so as to create as few noise sources as possible and be as point-based as possible.
- During the construction period of the project, for the transport to the area of machinery and aggregates, the contractor must plan the transport works in such a way as to minimise nuisance to traffic on the provincial roads. In addition, it must, in good time and before the start of the work which will cause traffic obstruction, submit to the supervising service a study of traffic regulations, which it will carry out in order to reduce the impact (traffic arrangements, by-passes, enlargements, etc.).
- It is prohibited to remain at the site of the project and to use machinery without the EEC type-approval certificate relating to noise. Where available technology does not ensure acceptable noise levels, temporary noise barriers should be installed in its provocation areas.

Operation phase

- Maintenance will be carried out on the proposed substations. Any waste materials will be removed immediately from the project area.
- > Implementation and compliance with environmental protection measures both during the construction and operational phases of the project under consideration

Those presented below are proposed as such environmental protection measures.

Construction phase

- Any type of construction site (offices, workshops, warehouses, etc.) is removed after completion of the construction works and the site is rehabilitated and assigned to its previous uses.
- Design an incident response system, such as accidents, water pollution, etc., and have the appropriate means at the construction sites of the project.
- If ancients are detected, the work must be interrupted in the relevant part of the project and the competent Antiquities Inspectorate will be notified immediately. The cost of any excavation research will be borne by the main contractor.

Operation phase

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 Plantings should be carried out in accordance with the plant engineering study and the instructions of the competent forestry office, as they also contribute to the improvement of the aesthetic environment in the project area.

Please note that the Environmental Management Plan will include an Environmental Monitoring Programme. The monitoring programme proposed by this study is presented in the section below.

11.2 Environmental monitoring

This section proposes a monitoring programme for impacts during both the construction and operational phases of the planned project, which is part of the project's environmental management programme, in order to ensure effective protection of the environment.

11.2.1 Construction phase

During the construction phase of the project under consideration, the indicators presented in the table below will be monitored.

Table Error! No text of specified style in document.-1 Monitoring programme indicators for the construction phase of the project under consideration

Construc	Construction phase			
Code	Monitoring parameter			
K1	Monitoring the management of materials resulting from the works' excavation works.			
K2	Monitoring the clearances carried out for the construction of the project in order to limit it to what is strictly necessary.			
К3	Monitoring compliance with measures relating to the reduction of dust emissions (maceration of materials, bare surfaces and transported excavations and materials, covering heavy vehicles, washin truck wheels before leaving the construction site)			
K4	Monitoring compliance with measures relating to the reduction of gaseous and particulate pollutants.			
K5	Monitoring the noise emissions generated by the construction of projects by applying noise lev measurements at the boundaries of the construction areas. Especially in areas adjacent to the project under construction, the noise emitted should be monitored. Construction machinery must have an El type-approval certificate relating to noise.			
K6	Monitoring the work of the competent Archaeological Services in the area of construction of the projects (testing work if required).			
K7	Monitoring of works to restore the intervention areas after completion of construction (with completion of plant-technical configurations).			

As part of the implementation of the above monitoring programme, annual reports of results and proposals will be drawn up by the project developer and submitted at the end of each semester to the project operator and at the end of each year to the competent environmental authority.

11.2.2 Operation phase

The following table shows the indicators that will be monitored during the operation of the project under study.

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Operation phase			
Code	Monitoring parameter		
L1	Monitoring the quantity of used mineral oils produced during the operation of the project (managed oils) in substations and keeping a record of their disposal with the competent management bodies.		
L2	Monitor electromagnetic radiation levels at water/C and magnetic radiation on underground lines at points which pass near agglomerations.		
L3	Monitoring the development of the project's plantings for at least 2 growing seasons, in areas of the substations that will receive plant technical configurations, roadside vegetation on the existing road network, where it was affected by the construction of the underground sections of the project.		

All the above parameters will be systematically measured at least annually and recorded in records kept by the project promoter. All the results must be presented in each renewal dossier for a decision approving environmental conditions to be submitted by the project operator.

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12. CODIFICATION OF RESULTS AND PROPOSALS FOR THE ADOPTION OF ENVIRONMENTAL CONDITIONS

This chapter sets out the draft decision approving the environmental conditions of the project, which includes the environmental conditions and the monitoring programme proposed to be the necessary condition for the implementation and operation of the project being studied, so as to ensure the highest possible protection of the environment and compliance with the applicable environmental legislation.

The presentation of the draft decision approving the environmental conditions of the project shall follow the provisions of Joint Ministerial Decision oux. 48963/2012 (Government Gazette, Series II, No 2703/05.10.2012) laying down specifications for the content of decisions approving environmental conditions (AEPO) for category A projects and activities under Decision No 1958/13-1-2012 of the Minister for the Environment, Energy and Climate Change (GG II 21), as in force, in accordance with Article 2(7) of Law 4014/2011 (GG I 209)'.

The DAEC imposes conditions, conditions, restrictions and differentiations for carrying out the project, in particular in terms of location, size, type, technology applied and general technical characteristics. Any necessary remedial or preventive measures and actions to monitor environmental instruments and parameters as well as compensatory measures shall also be imposed. The conditions involve, in order of priority, avoiding or minimising the impact or remedying or restoring the environment.

The environmental conditions are:

- (a) compatible with applicable environmental or other legislation and spatial and urban planning.
- adequate for environmental protection;
- directly related to the project in question and its impact;
- fair and proportionate to the size and type of project
- (e) accurate, achievable, binding and auditable.

The project operator shall not be exempted from complying with the provisions of the applicable environmental legislation, irrespective of the existence of an explicit reference to the specific environmental conditions of the project.

The content of the DAEC is presented below.

SUBJECT OF DECISION

Approval of Environmental Conditions for the project: Phase D of the Electricity Interconnection of Cyclades with the Greek Electricity Transmission System of the company Independent Power Transmission Operator (ADMIE) S.A., which is located:

- In the Municipality of Lavretica in the Region of Attica
- In the municipality of Serifou in the Regional Unit of Milos
- In the municipality of Milos in the Regional Unit of Milos
- In the Municipality of Folegandrou in the Regional Unit of Thira
- In the municipality of Thira in the Regional Unit of Thira
- In the Municipality of Naxos and Micro-Cyclades of the Regional Unit of Naxos

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Has decided as follows

The approval of the following environmental conditions and restrictions, the application of which is a prerequisite for the construction and operation of the project: 'Phase D of the Electricity Interconnection of Cyclades with the Greek Electricity Transmission System' of the Independent Power Transmission Operator S.A. The implementation of the environmental conditions shall be borne by both the developer and the operator of the project.

1) Size and type of activity

1.1 General elements of the project

The project includes 150 kV submarine cables of a total length of 353 km and 150 kV underground cables with a total length of 19.45 km, from GIS Lavrio to the new GIS Naxos watercourse, as well as the new substations on the islands of Serfou, Milos, Folegandrou and Thira. It consists of the following sub-sections:

- 1. Underground section 150 kV Attica in Lavrio, a simple circuit with a length of approximately 907 m.
- 2. Submarine section 150 kV Lavrio Serifou G.U., a single circuit and a length of approximately 109.3 km.
- 3. Underground section 150 kV Serifou G.U., dual circuit and length approximately 1.540 m.
- 4. Construction of a new GIS system on the island of Serfou.
- 5. Submarine section 150 kV Serifou-Milou G.M., a single circuit and a length of approximately 46.7 km.
- 6. Underground section 150 kV B.M., a single circuit and a length of approximately 7 500 m.
- 7. Construction of a new GIS system for the island of Milos.
- 8. Underground section 150 kV N.M., a single circuit and a length of approximately 6 650 m.
- 9. Submarine section 150 kV Milos-Folegandrou, a single circuit and a length of approximately 55 km.
- 10. Underground section 150 kV Folegandrou, a double circuit and a length of approximately 2 039 m.
- 11. Construction of a new GIS water body for the island of Folegandrou.
- 12. Submarine section 150 kV Folegandrou Hunt, a single circuit and a length of approximately 59.9 km.
- 13. Underground section 150 kV Hunting, dual circuit and approximately 750 m long.
- 14. Construction of a new GIS water body for the island of Thira.
- 15. Submarine section 150 kV Thira Naxos, a single circuit and a length of approximately 82.1 km.
- 16. Underground section 150 kV Naxos G.U., single circuit and 530 m length.

1.2 Description of the project and its accompanying facilities

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1.2.1. The existing Lavrio hotspot launches a new 150 kV underground transport line with a length of approximately 907 m to the bottling site in a space adjacent to the Lavrio SES. The route to the bottling site will be carried out on a common road or areas to be granted by the Lavrio SES.

There is then a 150 kV submarine of 109.3 km running south from Lavrio and ending at the 'Kycladi' berth on the Tsipaki bay on the south-eastern part of the island of Serf.

The underground section 150 kV Serifou (Municipality of Serifou, Regional Unit of Milos, Region of South Aegean) with a length of approximately 1 540 m from the 'Kycladi' Serifou bottling site to the new GIS Serifou water body. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

It is followed by submarines, 150 kV 46.7 km long, moving south from Serphos and ending up to the 'Ag. Konstantinos' landing position in V. Milos.

Underground section 150 kV North Milos (municipality of Milos, Municipal Unit of Milos, Region of South Aegean), a simple circuit with a length of approximately 7 500 m from the 'Ag. Konstantinos' bottling site in the V. Milos to the new GIS Milos Water Station. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

Underground section 150 kV South Milos G.M. (municipality of Milos, Regional Unit of Milos, Region of South Aegean), a simple circuit with a length of approximately 6 650 m from the new water/body GIS Milos to the bottling position in the 'Provvaa' N. Milos area. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

It is followed by a 150 kV submarine, 55 km long, which moves east from the Milos and ends up to the 'Livadi' Fleangrou berth in the south-east of the island.

Underground section 150 kV Folegandrou (Municipality of Folegandrou, Regional Unit of Thira, Region of South Aegean), double circuit and length approximately 2 039 m, from the 'Livadi' Fleangrou to the new GIS Folegandrou. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

It is followed by a 150 kV submarine, with a length of 59.9 km, which moves south-east from Fleangrou and ends up to the 'monolithol' hunting position on the eastern coast of the island.

Underground section 150 kV Hunta (Municipality of Thira, Regional Unit of Thira, Region of South Aegean), double circuit and length approximately 750 m from the 'monolithic' hunting site to the location of the new GIS Thira water body. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

It is followed by a 150 kV submarine, with a length of 82.1 km, which runs north from Thira and ends up to the 'Stlida' of Naxos berth on the western coast of the island.

Underground section of 150 kV Naxos G.M. (Municipality of Naxos and Small Cyclades, Regional Unit of Naxos, Region of South Aegean), a simple circuit and a length of approximately 530 m from the bottling position near the 'Solila' of Naxos to the M/S of Naxos. The cables will be routed on a site within a foreshore and beach zone, public, municipal or rural or expropriated roads.

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- 1.2.2 The implementation of the proposed project will help to reduce the cost of energy production due to the use of oil in local production plants while reducing emissions of pollutants. It will also contribute positively to the development of the islands, since the specific interconnection of the electricity transmission system with the Greek electricity transmission system will ensure the stability of the transmission system. The services provided in all sectors will therefore be improved, with positive effects on the local and regional economy, but also on improving the living standards of local residents, with significant positive effects on the social environment.
- 1.3 The project is classified in subcategory A1 of group 11 'Transport of Energy, Fuels and Chemicals', No 10 'Air lines for the transmission of electricity...', of Ministerial Decision 37674/2016 (Government Gazette, Series II, No 2471) amending and codifying Ministerial Decision 1958/2012 Classification of public and private projects and activities into categories and subcategories.
- 1.4. The proposed electricity interconnection project between the Cyclades and the Greek interconnected electricity transmission system is reflected in land use maps 4a & 4b, with a scale of 1:50 000, which accompany the EIS file.
- 1.5 the body implementing the project is the Independent Electricity Transmission Operator (ADMIE) S.A., based in Athens.

2. Institutionalised basic characteristics of a project area and sensitive environmental elements

2.1. Spatial planning and land use

- 2.1.1. The General Framework for Spatial Planning and Sustainable Development (GFPSD) provides for a radical improvement of the electricity generation and transmission system and in particular the interconnection of all residential islands with the transmission network of the mainland system, thus keeping autonomous fossil fuel power plants in reserve.
- 2.2.2. The land uses of the transit area of the project under study are presented in the table below.

Table Error! No text of specified style in document.-1 Land Uses found in the location area of the project under study

Project section under study	Land uses in the area where the project is located	Labels for point uses
Underground section	Industrial space, shrubs and agricultural	Most of the GM is located within the Lavrio
150 kV Attica in Lavrio	crops.	Energy Centre (EES), a small part of which
		passes through shrubland and agricultural
		crops.
Underground section	Meadows, sparse woody vegetation	-
150 kV Serifou G.U.	and abandoned agricultural crops	
New S/S Island of	Meadows, sparse ligneous vegetation	The land of the new water is located within
Serifos		meadows with sparse woody vegetation. At the
		south-west boundary of the land of the water
		body is the Sierfou EYL.
Underground section	Agricultural crops with residential land,	The U.S. is located on existing roads which pass
150 kV B.Milou	meadows (grown woody vegetation)	mainly through agricultural crops with
	and shrubland.	residential land. 370 m southeast of the G.M.
		in the N. Milos are located on the surface
		mines of bentonite.
New Island of Milos	Agricultural crops with residential land.	The land of the new water/S is located within
		agricultural crops with residential land. 240 m
		to the west of the water plot is located in the
		PPC's PPC.

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Project section under study	Land uses in the area where the project is located	Labels for point uses
Underground section 150 kV N. Milos	Agricultural crops with residential land and scrubland.	The U.S. is located on existing roads which pass mainly through agricultural crops with residential land. 150 m southeast of the Southern Milos G.M. is located at Milos Airport. In addition, a quarrying region is located around the Achivadolinna campsite in the N. Milos and further southerly, 250 m to the east of the G.M. in the south of Milos.
Underground section 150 kV Folegandrou	Residential land, meadows (grown woody vegetation) and agricultural crops.	The G.M. is located on existing roads which pass through residential areas. The Livadi campsite is located 100 m from the landing point at Fologandro.
New body of the island of Folegandrou	Meadows (grown woody vegetation) and agricultural crops	_
Underground section 150 kV Hunting	Residential land.	_
New Island of the island of Thira	Residential land.	The land of the new Hunting water is located within residential areas. On the south-eastern boundaries of the land, the PPC Thira is located and 250 m south-west of Hunting is located at Thira Airport.
Underground section 150 kV Naxos	Shrublands	The GI is located on existing roads which pass through shrub areas and end up in the existing water/system of Naxos.
Submarine cable parts	Marine environment	_

The total occupation of the project in the construction phase was estimated at **462da**, whereas in the operational phase it was estimated **at 68.6da**. These are mostly areas covered with grassland, agricultural crops and residential construction.

2.2. Environmental sensitivity of the project area

The underwater and underground parts of the project are located within Natura 2000 areas and more specifically:

- In the marine area between Macronos and Lavrio, submarine GM passes within the Natura 2000 SCI area 'GR3000017 Coastal and marine area of Makronus' over a length of approximately 5.8 km.
- In the marine area between Macronso and Lavrio, submarine GM passes within the Natura 2000 SPA area 'GR3000018 Canal Makronisos' over a length of approximately 6.9 km.
- In the sea area of Serifou, submarine GM passes within the Natura 2000 SPA area 'GR4220029 Serif: Coastal Zone and Islands of Serifopoula, Pierri and Bos' over a length of approximately 1.1 km.
- In the marine area of Milos, submarine GM passes within the Natura 2000 SAC area 'GR4220005 Western Milos Coastal Zone' over a length of approximately 1.4 km.
- In the Folegandros marine area, the underwater GM passes through the Natura 2000 SAC-SPA area 'GR4220004 Fleandros East to West Sicinos and Marine Zones' over a length of approximately 2.2 km.
- On the island of Milos, the underground line of the project passes (on the existing road network) within the Natura 2000 SAC area 'GR4220020 — Island of Milos — Profitis Ilias — Wider Area' over a length of approximately 700 m.
- On the island of Milos, the underground line of the project runs (on the existing road network) within the Natura 2000 SPA area 'GR4220030 — Western Milos, Antimilos, Polygos and Islands' over a length of approximately 7 km.

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 On the island of Falangrou (P.E. Thira), the underground line of the project passes (on the existing road network) within the Natura 2000 SAC-SPA area 'GR4220004 — Folegoros East to West Sicinos and Marine Zone' over a length of approximately 1.3 km.

3. Specific emission limit values for pollutant loads and concentrations in accordance with the provisions in force

3.1 The limit values and critical levels of air quality refer to the following decisions:

- 3.1.1. Joint Ministerial Decision No 14122/549/E103/24.3.2011 (Government Gazette, Series II, No 488) laying down measures to improve air quality, in compliance with the provisions of Directive 2008/50/EC.
- 3.1.2. In Joint Ministerial Decision 22306/1075/E103/29.5.2007 (Government Gazette, Series II, No 920), setting target values and assessment limits for the concentrations of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air, in compliance with the provisions of Directive 2004/107/EC.

3.2. For liquid waste:

- 3.2.1 Ministerial Decision No oux. 5673/400/1997 (GG II 192), laying down measures and conditions for urban waste water treatment, as amended.
- 3.2.2 Specific provisions that may have been imposed on the project area.
- 3.3. Presidential Decree 82/2004 (GG I 64) shall apply to the management of waste oils.
- 3.4. The operations planned for the implementation and operation of the project do not include waste management within the meaning of the provisions relating to the production and management of waste.

4. Specific limit values for noise, vibration and electromagnetic radiation, in accordance with the provisions in force

- 4.1. For noise emitted by the construction equipment of the project, the provisions of Joint Ministerial Decision No 37393/2028/29.3.2003, which lays down measures and conditions for noise emissions into the environment from equipment for use outdoors (Government Gazette, Series II, No 1418), as amended by Joint Ministerial Decision 9272/471/2.3.2007 (GG II 286), shall apply.
- 4.2. For noise emitted during the operational phase of the project, the provisions of Presidential Decree 1180/1981 (GG I 293) regulating matters relating to the establishment and operation of industries, craft industries of all kinds of mechanical installations and warehouses and the protection of the environment in general, as amended and in force, shall apply. For electricity transmission units (e.g. corona effect), there are no statutory noise emission limits.
- 4.3. For the electrical and magnetic field of the G.M., the basic limitations and reference levels of the Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz 300 GHz) shall apply, in accordance with ICNIRP/1998 (International Commission for Non-ionising Radiation Protection) guideline GUIDELINES FOR limiting EXPOSURE TO TIME varying ELECTRIC, Magnetic AND Electromagnetic Fields (Health Physics, April 1998, Volume 74 No. 4), as well as the provisions of Joint Ministerial Decision 3060/238/2002 (B 512) It should be clarified that if more stringent conditions are laid down in each case, they shall prevail, irrespective of whether or not this Decision expires.
- 5. Conditions, measures and restrictions to be taken to address (prevent minimise remediate remediate) the potential environmental effects

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5.1. General conditions

- 5.1.1. The promoter and operator of the project, as well as the natural or legal persons entrusted with its implementation or operation (hereinafter referred to as 'third parties'), shall be responsible for compliance with the environmental conditions, measures and restrictions imposed by this Decision.
- 5.1.2. The project promoter and operator shall take all necessary measures to ensure:
 - 5.1.2.1. Compliance with environmental conditions by all those involved in or contributing to the implementation and operation of the project.
 - 5.1.2.2. The possibility of remedying and remedying adverse environmental situations resulting from actions or omissions in breach of environmental conditions.
- 5.1.3. During the procedures for the conclusion of agreements between the project promoter and third parties, as well as the latter, conditions should be laid down for compliance with the environmental requirements of this Decision. A similar requirement applies to operators and third parties that may be involved in the operation of the project.
- 5.1.4. The project promoter and operator should designate a manager or operational unit responsible for monitoring compliance with the environmental conditions laid down in this Decision and the submission of the required environmental monitoring reports.
- 5.1.5 The costs for the construction and operation of the project should be secured, as a matter of priority, those relating to environmental protection and restoration projects, which are necessary to fully respect the terms and limits of this Decision.
- 5.1.6 individual projects and activities relating to construction works or operating activities, other than those described in the EIA and therefore not included in the scope of this Decision, shall be granted environmental permits in accordance with Article 6 of Law 4014/2011. In the case of an installation the general impact assessment of which is included in the EIA and this Decision lays down general and/or specific conditions and restrictions for such installations and works, the operator may submit a Technical Environmental Study (TEMEM) project, which shall be assessed and approved by the environmental authority responsible for the project, on the basis of its classification under Ministerial Decision 1958/2012 (GG II 21), as amended and codified by Ministerial Decision 37674/2016 (GG II 2471).
- **5.2 Definitive planning implementation planning:** The necessary permits must have been obtained before the construction works begin.

5.3. Construction phase of the project

- 5.3.1. In all cases, the excavations and infiltration, for both the underground and the submarine transport line, will be carried out in the presence of representatives of the competent antiquities offices, including the Department of Marine Antiquities. If ancients are identified, the works will be discontinued to be followed by an excavation survey, the cost of which will be covered by the project budget.
- 5.3.2. The materials necessary for the project, such as inert or earth materials, concrete and asphalt, should be ensured by existing plants operating lawfully and complying with the obligations laid down in the environmental provisions. It is prohibited to extract materials from riverbeds or streams for materials that may be required for the construction of the project.

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- 5.3.3. The management of solid waste (including excavated waste), other waste requiring special management (e.g. used lubricants) and hazardous or toxic waste will be carried out in accordance with the requirements of the established relevant legislation for each type of waste.
- 5.3.4. Excavation materials which will not be used for the construction of embankments and recharges of the project may only be disposed of in legal disposal sites for that purpose. In any case, the deposition of excess or inappropriate excavation products in streams and streams and generally at locations affecting the surface flow of water is prohibited.
- 5.3.5. Excavation works during the construction of the project shall be carried out as low as possible.
- 5.3.6. Regular maintenance of the manufacturing equipment shall take place within the area of execution. In cases of emergency maintenance, a record will be kept by the supervising body. For such cases:
 - 5.3.6.1. Waste oils shall be managed in accordance with Presidential Decree 82/2004 (GG I 64), which lays down measures, conditions and a programme for the alternative management of lubricating oil waste.
 - 5.3.6.2. If scrap tyres occur, they will be handed over to an accredited body for alternative management.
- 5.3.7. For soil and water protection:
 - 5.3.7.1. Throughout construction, contamination of surface and groundwater from all kinds of run-off, as well as the discharge of any non-biodegradable substances into the soil, should be prevented.
 - 5.3.7.2. The flows flowing must be free of lightweight material (e.g. suspensions or sludges) and non-biodegradable substances (e.g. lubricants, fuel, etc.).
 - 5.3.7.3. In order to deal with accidents, the project promoter or any Third Party involved in the construction of the project should make available on site and in readiness appropriate materials e.g. specific binding, biodegradation or oil and lubricant collection products, etc.
- 5.3.8. To limit the emission of pollutants and dust to air:
 - 5.3.8.1. All vehicles used during the construction of the project should have a valid certificate of compliance with the relevant air pollutant limits.
 - 5.3.8.2. In any manufacturing activity where dust, particulate matter or odour substances are likely to be emitted, procedures and equipment should be adopted to ensure that these emissions are drastically reduced, and the times of such processes should be minimised.
 - 5.3.8.3. The loading/deposit of loose materials and the routes of construction vehicles within the construction area of the project, during the dry periods of the year, should be carried out under maceration or in an equivalent manner of dust reduction.
 - 5.3.8.4. The emission of dust from wind effects on piles of materials temporarily created in the area of the project, e.g. by covering the heaps or macerating them.
- 5.3.9. With regard to the authorisation granted by this Decision to intervene on the land part of the project in forests and wooded areas (if the project is located in areas classified as forests and wooded areas), the following shall be complied with:

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- 5.3.9.1. Before work on the project starts, the provisions of Ministerial Decision 15277 (GG II 1077) concerning the classification of the area of intervention (pursuant to Article 14 of Law 998/79), as in force in conjunction with Article 5 of Law 4467/2017 (GG I 56), must be complied with if there is a validated or posted forest map and its ownership status.
- 5.3.9.2. If the project passes through afforested land, consider and request the lifting of afforestation, if necessary.
- 5.3.9.3. No deposit of excavation materials and construction materials on streams and streams to ensure the free flow of their water, on forest land outside the area of occupation of the project and on protected areas.
- 5.3.9.4. The excess of the excavated material (if any) is disposed of on an appropriately selected site in the area.
- 5.3.9.5. The slopes that may be built must be properly configured so as to avoid the risks of landslides and to facilitate the restoration of vegetation.
- 5.3.9.6. The excavations should be limited to the surfaces strictly necessary and completed as soon as possible.
- 5.3.9.7. Any damage to forest vegetation during the construction of the project (if the project is located in areas classified as forests and wooded areas) should be kept to a minimum.
- 5.3.9.8. Harvesting and possible removal of trees are limited to what is strictly necessary for the construction and safe operation of the project and that harvested wood products are disposed of by the local forestry office, in accordance with the provisions of forestry legislation.
- 5.3.9.9. To avoid heavy earthworks during the period of heavy rainfall.
- 5.3.9.10. Do not work during night hours.
- 5.3.9.11. All types of construction site must be removed at the end of the works.
- 5.3.9.12. The project operator should take care of the protection of the environment, in particular the prevention of fires during the construction and operation of the project and take measures to protect the project site to avoid accidents.
- 5.3.9.13. Interventions on forest-based land (if the project is located on areas classified as forests and wooded areas) are limited to what is strictly necessary and only in the area where the project is occupied and carried out in accordance with the terms, conditions and procedure laid down in forest legislation.
- 5.3.9.15. At the end of the project's implementation work, on forests and wooded land (if the project is located in areas classified as forests and wooded areas), the competent forest authorities must submit a special pre-study for approval, as provided for in Ministerial Decision 15277/2012 (GG II 10777) on the restoration of forest vegetation and the improvement of the landscape aesthetics from the construction of the project. The plant species to be used are native and not alien to the natural plant society of the area. Planting must begin immediately on each part of the project in which the earthworks have been completed and the final surfaces have been formed. The plantings are maintained for the first three years under the responsibility of the project promoter.

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- 5.3.9.16. Failure to comply with the above conditions shall give rise to criminal proceedings against those responsible in accordance with the provisions of the Article. 71 of Law 998/1979 and, in the event of a repeated infringement, the revocation of this Decision.
- 5.3.9.17. The State shall bear no responsibility for any claims, extinction of rights of third parties over the land for which the authorisation of intervention for the implementation of the project will be granted by this Decision.
- 5.3.9.18. This Decision does not affect the State's rights in rem over the land.
- 5.3.9.19. The monitoring and implementation of the terms of this Decision relating to the application of the provisions of forestry legislation shall be entrusted to the relevant forest authorities.
- 5.3.10 Before starting the laying work of the submarine sections of the Secretariat-General, inform the Hydrographic Service so that a notice can be issued to seafarers. At the end of the installation, send the Department a detailed list, in digital format, indicating: (a) the coordinates of the cable landing points, (b) the coordinates of the cables routing peaks at the bottom and (c) the theoretical accuracy of the coordinates.

5.4. Operational phase of the project

5.4.1. To comply with the environmental conditions proposed in the EIA dossier accompanying this Decision and do not contradict the above.

5.5 Monitoring

- 5.5.1 Compliance with the environmental conditions laid down in this Decision is a necessary condition for the installation and operation of the projects in question and shall be the responsibility of the body implementing and operating them. The institution responsible shall be obliged to:
 - keep data (invoices, contracts, various supporting documents, records of data, etc.) to demonstrate compliance with the environmental conditions of this Decision. These elements should be located on the project site.
 - allow entry to any audit body competent under the applicable legislation.
 - provide all the data and information required.
 - facilitate the audit and comply with the recommendations and recommendations of the competent audit bodies on compliance with the provisions of the applicable environmental legislation.
- 5.5.2 This Decision, the relevant approved MPE and the plans accompanying it must be available within the project site and must be presented by the responsible body to each competent audit body, in accordance with the legislation in force.
- 5.5.3 Compliance with the terms and conditions set out in this Decision does not exempt the project operator from environmental liability, without prejudice to Article 11 (paragraph Presidential Decree 148/2009 (Government Gazette, Series I, No 190, 29.9.2009) on environmental liability for the prevention and remedying of damage to the environment, etc.
- 5.5.4 Failure to comply with the terms of this Decision or to carry out projects and activities which have a negative impact on the environment or to cause any pollution or other deterioration of the environment shall result in the penalties provided for in Articles 28, 29 and 30 of Law 1650/86 as amended by Law 3010/02, Law 4014/2011 and Law 4042/2012 and in force.

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- 5.5.5 The project operator shall be obliged to adopt and apply the measures to prevent environmental damage provided for by the legislation in force, and in the event of environmental damage or an imminent threat of such damage, it shall immediately inform the competent authority. It is also obliged to cooperate with the competent authority in the definition and implementation of remedial measures and to cover the related costs, whatever their amount, when liability for the damage in question arises.
- 5.5.6 Any issues arising during the implementation of this Decision which are not covered by the terms of this Decision shall be resolved on the basis of the legislation in force (national and Community) and where this is not possible on the basis of the relevant approved MPE or the file accompanying it.
- 5.5.7. Taking into account the above, the project operator must submit an annual environmental monitoring report at the end of March each year.

6 Period of validity of the decision approving environmental conditions — Conditions for its renewal and amendment

All the conditions set out in this Decision shall be valid for fifteen years from its adoption, provided that there is no change in the data on the basis of which they were adopted.

- 6.2 Before this period expires, the project operator must start the procedure for the renewal of environmental conditions, in accordance with Article 5 of Law 4014/2011, as in force. According to the same Article, if the renewal dossier is submitted on time (at least two months before expiry), for the period up to the completion of the renewal procedure, the environmental conditions remain valid.
- 6.3 In order to modernise, improve, extend or amend the project, in accordance with environmental conditions, Article 6 of Law 4014/2011 must be complied with.
- 6.4 If the regular and non-routine environmental inspections reveal serious problems of environmental degradation or if effects on the environment that were not provided for in the EIA and this Decision are observed, additional environmental conditions shall be imposed or the terms of that decision shall be amended, as provided for in Article 2(9) of Law 4014/2011, in conjunction with Article 6 of the same Law.

7 Other provisions

- 7.1 The present decision:
 - 7.1.1 It does not cover aspects of safety against accidents or safety and hygiene of personnel, which are still regulated by the standard provisions relating to them.
 - 7.1.2 It does not exempt the project operator from the obligation to issue any other permits, authorisations or regulatory acts provided for by the legislation in force for the project.
 - 7.1.3 It has been issued without examining the title deeds of the site of implementation of the project, as well as the conditions and restrictions on the construction of land.
 - 7.1.4 It shall not entail the legalisation of any arbitrary existing structures to which the provisions of the legislation in force apply.
 - 7.1.5 Of the above elements (7.1.1-7.1.4) were examined in the EIA, they have been provided under the responsibility of the project promoter.
- 7.2 This Decision shall apply provided that it is not contrary to town planning and other specific provisions which prevail over it.

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Environmental impact study of project "Phase D Electricity Interconnection of the Cyclades with the Greek Electricity Transmission System"

7.3 This decision approving environmental conditions also constitutes authorisation for intervention within the meaning of Chapter 6 of Law 998/79, as in force in accordance with Article 12 of Law 4014/11 and Ministerial Decision 15277/12.

8 Obligations relating to compliance with environmental conditions

- 8.1 This Decision, the validated EIA dossiers, as well as the subsequent dossiers for renewal, amendment and technical environmental studies, together with relevant decisions, must be available at the project site during its implementation phase and at the headquarters of the operator thereafter. This information should be presented by the obligated body to each audit body competent in accordance with the legislation.
- 8.2 The project promoter during the construction phase and the operator thereafter should:
 - 8.2.1 to keep information at the project site or at its headquarters to demonstrate compliance with the environmental conditions of the project (e.g. invoices, contracts, supporting documents, records of data, etc.).
 - 8.2.2 To allow access to the project to any competent audit body and facilitate its audit.
 - 8.2.3 Provide all data and information required.
 - 8.2.4 To facilitate the audit and comply with the recommendations/recommendations of the competent audit bodies in compliance with the provisions of environmental legislation.
- 8.3 If issues arise in the application of this Decision which are not covered by the terms of this Decision, they shall be resolved on the basis of the legislation in force and where this is not possible on the basis of the approved EIA of the project or subsequent dossiers relating to its environmental authorisation.
- 8.4 In the event of pollution or other deterioration of the environment or infringement of the terms of this decision, the persons responsible for the project shall be subject to the penalties provided for in Articles 28, 29 and 30 of Law 1650/1986, as amended by Law 3010/2002, Law 4014/2011 and Law 4042/2012 and in force.

9 Disclosure

This Decision shall be published in accordance with the law by posting it on the special website at the Aepo.ypeka.gr website, as provided for in Article 19a of Law 4014/2011 and Joint Ministerial Decision No 21398/2.5.2012 (GG II 1470).

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13. ADDITIONAL ELEMENTS

13.1 Specialised studies

Mapping of marine habitat types for this study

In order to map the seabed data in detail along the planned route, the project operator commissioned 'Oceanograph research on the installation of a 150KV submarine cable to interconnect the Cyclades with the Continental System (Phase D)' to the research company 'Geotech'. As part of the survey, the bathymetry and the characteristics of the bottom along the cable route were recorded. The survey made use of:

- Observations from twins moving on a graduated line along the planned routing of the submarine pipeline, from the 30 m isobath to the coast, in the areas of the landing points. The sections of the routing of the cable investigated in this way are the first 1.200 m at the landing point at the Apple and 590 m in the Folegandro. During the surveys, videos, penetration tests were recorded.
 - Records from a Side Scan Sonar to investigate the substrate type, its morphological characteristics and the identification of possible obstacles and signs of anthropogenic activities.
 - Multi Beam Sonar recordings for the collection of high resolution bathymetry data along the proposed route and single beam sonar (Sigle beam sonar) recordings in very shallow areas (deep &5m).
 - Sub Bottom Profiler recordings to identify structures below the bottom surface that may prevent the installation or burial of the cable.
 - Magnetometer recordings to detect metal objects such as submerged shipwrecks, other cables, etc. requiring special attention in the final design of the routing of the submarine electric conductor.

By combining the results of the above, it is possible to identify the different types of substrate and to relate them to corresponding habitat classes and habitat types along the cable path.

Bird species

Fieldwork to record bird fauna was carried out in February-March, 2020. The survey focused on the bird fauna in the area around the project being studied.

On the basis of bibliographic references, field observations, species and status of biotopes, a list of bird species has been established. For all these bird species, the status of presence and protection is presented.

Recording and assessment of the terrestrial habitat of monk seals

The methodology for recording the terrestrial habitat of monk seals was based on that which, after long experience in the field, has been developed by the MOm/Company for the Study and Protection of the Mediterranean Seal, which in turn is based on international standards for the study of seals. The main points of the methodology are as follows:

• The movement to the study area and the approach to the registration areas was carried out using the inflated research vessel 'Navtilos', BIOTOIPIA O.E.

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- First of all, the coastline is surrounded by each recording area and the coast is examined in detail to determine whether there are entries of sea cave/land refuge of the species.
- If the presence of a sea cave is found, a thorough internal control shall be carried out, as follows: at a distance of approximately 50 metres from each place of refuge found, the researchers shall switch off the inflator machine so that it is not perceived by the animals likely to be in the cavity. The final approach to shelters is carried out by swimming, while within the shelter the minimum possible artificial light source necessary for effective control of its interior is used.
- During the check of a shelter, if no animal is found to be present, a detailed investigation of its interior shall be carried out to record its morphological characteristics and to detect any evidence of previous presence of an animal in the shelter (e.g. traces, odour, faeces, hair, blood, tissues, etc.). All data recorded and possible samples are collected for future analysis.
- If an animal is found to be present, researchers without closer proximity shall record all its visible external characteristics (e.g. size, stage of development, colouring, external marks and abrasions, condition of the animal, sex, etc.). For age categorisation and sex determination of animals, researchers shall use well-documented criteria established on the basis of specific scientific results (Badosa et al. 1998, Dendrinos et al. 1999, Badosa et al. 2006). Depending on the circumstances of each case and whenever possible (e.g. the animal/animals are sleeping), the investigators shall take photographs and/or videos in order to identify the different individuals of the species in a comparative manner.
- The assessment of the suitability of a refuge and of a sampling area as a whole as a potential habitat for the Mediterranean seal is based mainly on the methodology and parameters described by Dendrinos et al. 2007b and the many years of experience of the biotope research team of the O.E. in the field of research. It should also be noted that the above methodology is in line with the National Specifications for the Implementation of Monitoring Actions for Population and Habitats of Mediterranean seals, as proposed by the MOm and approved by the Ministry of the Environment.

Photographic documentation of both areas of interest and terrestrial habitats of monk seals as well as possible observations of individuals of monk seals or other species of interest (cetaceous, sea turtles) shall be carried out during field work.

13.2 Drafting problems and ways to solve them

No problems were identified at the stage of the study.

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15. MAPS AND PROJECTS

In the context of this study, a number of environmental maps have been created to support the text of the study. In addition, the project promoter, as part of the project design, fed into this study technical plans of the proposed projects.

The list of environmental maps accompanying this study is as follows. Maps and technical drawings are listed in Annex I to Chapter 16.

List of environmental maps and technical plans

a/a	Title of environmental map/technical plan	Scale of scale				
Enviro	Environmental maps					
1.	Guidance map	1: 250.000				
2.	Map of the Area of Study and Protected Areas (sheets 2.1, 2.2, 2.3, 2.4, 2.5 and 2.6)	1: 25.000				
3.	Land Uses and Coverage Map of study area (sheets 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)	1: 10.000				
Techn	Technical plans for a proposed project					
4.	WP 150/MT Serifou — Projected Development (FX.31449)	1:500				
5.	WP 150/MT Thira — Projected Development (FX.31450)	1:500				
6.	WP 150/Mt Folegandrou — Projected Development (Event 31451)	1:500				
7.	WP 150/MV of apple — Projected development (E.G.31457)	1:500				
8.	Ministerial Decision 400/150/CYLavrio — Projected Development (Ref. 31414)	1:500				
9.	WP 150 MT of Naxos — Projected Development (Ref. 31461)	1:500				
10.	Layout of three fixed double-circuit connectors within a configured Lakkos, plan (E.g. $1539\Delta \Phi 1/2$)	1:25				
11.	Arrangement of three fixed Double Circling Lakkos Associations, Sections (e.g. 1539Δ Φ2/2)	1:25				
12.	Underground transmission line cables 150 Kn. — Cross sections (E.g. TMMM 3001	1:100				
13.	Indicative Lakkos of Associations Y/C-HB (Ref. DMM — 3002)	1:100				
14.	Y/S GIS Serftou Proposed and Alternative position (E.g. SKA68)	1:500				
15.	Y/Σ GIS Hunting Proposed Position (Ref. SKA66)	1:500				
16.	Y/S GIS Hunting Alternative position (e.g. SKA66-A)	1:500				
17.	Y/Σ GIS Folegandros Proposed position (E.g. SKA65)	1:500				
18.	Y/Σ GIS Folegander Alternative position (e.g. SKA65-A)	1:500				
19.	Y/S GIS Milos Proposed blasting position (e.g. SKA67)	1:500				

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16.ANNEXES

The Annexes accompanying this EIS are the following:

i. Annex I: Environmental Maps — Technical Projects

ii. Annex II: Special Ecological Assessment Study

iii. Annex III: Documents

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