Non-Technical Summary (English) in Relation to an Environmental Impact Assessment (EIA)

As per ERA requirements for PA/04448/22

Report

Non-Technical Summary (English)

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AIS Environment Ltd,
AIS House, 18, St. John Street,
Fgura, FGR 1447

+356 21803374
www.aisenvironment.com
info@ais.com.mt

VAT No: MT 1457-1625
Reg No: C18445

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1 DESCRIPTION OF THE PROPOSED DEVELOPMENT

This Non-Technical Summary outlines the findings of the Environmental Impact Assessment (EIA) that has been undertaken for development permit PA/04448/22. The project, herein referred to as the "Scheme" involves the construction of the second cable link inter-connector project, henceforth referred to as the IC2 project (Figure 1).

FIGURE 1: PROPOSED INTERCONNECTOR ROUTE IN THE MALTESE EXCLUSIVE ECONOMIC ZONE (EEZ)

1.1 PHYSICAL CHARACTERISTICS

The proposed 2nd Interconnector (IC2) is considered a project of high priority in the country's policy initiatives to improve and diversify the supply of electricity. The project is essential to help the nation meet its' environmental and energy targets coupled with its obligations to combat climate change. In effect, the IC2 is specifically listed in the latest version of the Maltese Government's Low Carbon Development Strategy (LCDS) and is a crucial project to achieve the Nation's long-term Carbon Neutral vision.

The proposed new electricity interconnector is designed to meet the future electrical demand whilst simultaneously offsetting the atmospheric emissions that are currently generated from the existing natural gas and diesel oil power stations at Delimara. The existing Combined Cycle Gas Turbine (CCGT) plants may still be used for grid balancing or as backup in case of constraints on the use of the interconnectors.

The Scheme comprises of land works in Sicily and Malta, along with a marine offshore component within Maltese and Sicilian waters. This EIA covers the works

being undertaken in Malta only, i.e. the onshore works at the various Maghtab complexes, trenchless drilling to open water, and the offshore cable laying works in Maltese waters.

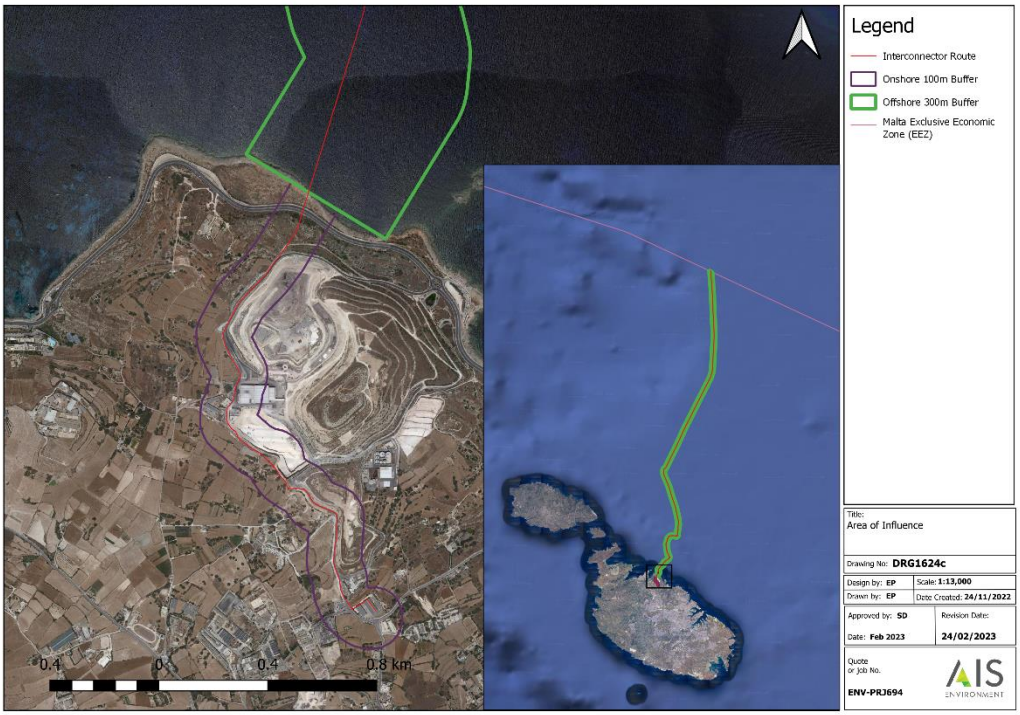

FIGURE 2: PROPOSED CABLE ROUTE FROM NAXXAR TO MALTA EEZ

The proposed onshore cable route (Figure 2) will start from the northwest end of the existing Maghtab Terminal Station and follows a public road towards the western service road of the Wasteserv engineered landfills. The route will then continue along the western side of the facility's ring road and proceed northeast, perpendicular to Triq Tul il-Kosta, exiting the boundary of the Ghallis landfill and remaining perpendicular to Triq Tul il-Kosta for approximately 150 meters (within public land).

The connection between the cable laid in the marine environment and the onshore electrical distribution network will be possible by adopting a trenchless drilling approach, specifically horizontal direction drilling (HDD), through which the cable shall cross Triq Tul il-Kosta and the shoreline for approximately 310 meters.

More importantly, the route has been purposely designed to steer away from a nearby terrestrial Natura 2000 site also known as l-Ghadira is-Safra u l-Iskoll tal-Ghallis (MT0000008) which is designated as a Special Area of Conservation (SAC).

The project shall connect the TERNA 220kV substation sited in Contrada Cimillà at Ragusa, Sicily to the Maghtab terminal station. The cable link shall be rated at 245kV, 50Hz and shall be designed to operate in parallel with the existing link in order to maximise the power transfer between the two networks.

No permanent constructions above ground shall take place in Malta. Exiting from the proposed trenchless approach, the nearshore cable shall be protected in both

countries using cast iron shells and further protected by burial, either by trenching in sandy or clayey type seafloors, or by a combination of rock placement and mattresses in areas where the seafloor is rocky. The offshore cable shall be protected mainly by trenching where the seabed is sandy or clayey, or using a combination of rock placement and concrete mattresses in areas where the seafloor is rocky. These techniques shall also be adopted to avoid free spans and for offshore infrastructure crossings.

During the construction phase, multiple stages are involved. The phases that are envisaged can be summed up as follows:

- Onshore works to excavate trench and joint bays, install the land cable, and reinstate land route.
- Installation of a temporary HDD (Horizontal Directional Drilling) machinery platform, transition joint bay and HDD drilling.
- Laying and jointing of the submarine cable.
- Protection of the submarine cable.

1.2 WASTE MANAGEMENT

The total quantity of excavated waste is expected to be approximately equal to 4,500m^3. This figure represents the total amount of material that will be excavated to create the various trenches and structures to accommodate the new cable.

Minimal waste quantities shall be generated during the operation stage. Waste generated during the operational phase will be mostly limited to maintenance waste. The type and quantities of waste will depend on the maintenance work required and is therefore impossible to specify and quantify at this point.

2 ASSESSMENT OF ALTERNATIVES

2.1 DO-NOTHING SCENARIO

Implementing the zero option implies that the impacts associated with the construction and operation of the IC2 will not be realized, thus maintaining the status quo in environmental terms. Nevertheless, the IC2 project is vital in helping Malta reduce its dependency on fossil fuels and lower carbon emissions.

Secondly, the IC2 project will help Malta achieve stability in its electricity supply. If a new source of supply is not provided in the coming years, Malta is expected to face challenges in meeting its electricity demand during peak periods. The interconnector will provide Malta with a reliable and stable supply of energy, reducing the risk of blackouts and ensuring the uninterrupted supply of electricity to households and businesses.

Lastly, the interconnector project will also help Malta reach the European Climate Change targets. The European Union has set ambitious targets to reduce greenhouse gas emissions and increase the share of renewable energy in its member states. The new interconnector will provide another connection to a large source of power, the

European grid, that will enable the connection of large-scale renewable sources by balancing their inherent intermittencies.

2.2 DOWNSCALING

Downsizing any of the project components has been considered by the applicant but is not considered feasible, as it could negatively impact the overall performance of the system. However, it is possible that future enhancements may be suggested for the proposal, which could further improve its performance or efficiency.

2.3 LOCATION

The Applicant considered various sites across the Maltese islands to accommodate the project. The assessment was narrowed down to Delimara Power Station and the Maghtab Terminal Station in Naxxar as these two sites offer the main electricity distribution and power generation hubs on the island.

The terminal station at Maghtab already has most of the necessary civil works required for the installation of the second interconnector, including the HV switchgear room, cable ducts at basement level, a transformer bay, and shunt reactor bay, as well as cable tunnels to connect the station to the local electricity grid. Therefore, terminating the project at Maghtab Terminal Station offers an optimal solution, as it would require only minor modifications within the existing building to improve cable laying. This solution is the natural consequence of the generation planning process implemented in the energy sector in recent years.

2.4 LAYOUTS AND CONFIGURATIONS

The applicant considered various trenchless methods to avoid open trenching in ecologically sensitive areas. Since there are no route alternatives that completely avoid interferences with Posidonia oceanica, the attention was focused on the minimization of the impact, trying to find a compromise between trenchless feasibility and environmental impact.

To create underwater trenches, water jetting systems and ploughs were considered to provide cable protection. The ROV jetting tool is typically employed to bury the cable by using a combination of pressure water jets to fluidize the seabed.

For cable laying, two main approaches were considered. The first approach is the 'simultaneous lay and bury' method, where the cable is laid in a trench as it is formed, often using the same machinery. The second approach is the 'post-lay' method, where the cable is initially laid on the seabed by the cable laying vessel (CLV) and then trenched (i.e., protected) afterwards. The post-lay method is widely used as it allows for a reduction in the installation time needed for the cable-laying vessel, leaving less expensive support vessels to perform the cable protection phase.

At least 5 layout options were also considered for the onshore approach at Maghtab. The preferred option was chosen following a detailed assessment which considered various technical, geological, and environmental criteria.

3 LAND COVER AND LAND/SEA USES

The chapter provides an overview of the Area of Interest (AOI) for the IC2 project. The AOI includes a Civic Amenity Site and the ECOHIVE waste management complex managed by Wasteserv Malta. This entails the Mechanical and Biological Treatment Plant, a planned waste-to-energy plant, various engineered landfills, a material recovery facility, a future organic processing plant, as well as a thermal treatment facility. There are also agricultural parcels that are primarily used for the production of wheat, with wild flowering species along the edges of fields, and planted trees.

The garigue in the Northern region is interspersed with tree plantations and local indigenous shrubs. The coast-road which lies to the north is flanked by a thin strip of planted trees, followed by coastal garigue, which merges into bare rocky shores. The route passes through two Marine Protected Areas and a Fishing/Trawling Area for approximately 400m of the cable trajectory, but it does not coincide with the Malta-Sicily ferry route, which is an area of high vessel route density.

Terrestrial Impacts

The proposed construction works in the onshore area will temporarily change the land use to the disturbed ground and access roads along the cable route. The route will pass through about 1,290m of access roads and 480m of disturbed ground planned to be integrated with the rest of the internal ECOHIVE complex road network. In addition to the trenching area, extra space may be required for temporary storage of materials, vehicles, equipment, and site hoarding. The study indicates that the trenching will cause a moderate adverse impact on terrestrial land uses, but most of the affected area is within the ECOHIVE complex. The site currently generates a substantial amount of dust tracking from waste operations, and the proposed trenching works will generate additional dust, which may deposit on surrounding agricultural land and roads. This may decrease crop yield if deposited in large amounts. However, appropriate mitigation measures will be put in place to contain the spread of dust to the working area.

In the disturbed land/garigue area at the North area of the onshore AOI where HDD drilling will be used, an extension of the existing access routes is proposed, causing the smothering of existing vegetation. The impact is considered minor and temporary, as the footprint will be kept to the minimum possible, and the site will be restored to its original condition once works are completed.

During the operational phase, repair works will cause a temporary change of land use and a minor impact if any faults are located along the cable route. Overall, the construction and operational phases will have temporary and minor impacts on the land use, which will be mitigated through appropriate measures.

Marine Impacts

The AOI overlaps with one designated sea use area, referred to as Trawling Area 'D', where 400m of the cable route runs close to the edge of the area. Trenching works for the cable may cause minor impacts on fish yields, but since it only affects a small

portion of the area, the impact is considered minor. The AOI is also close to two other trawling areas and a bunkering area, but no impacts are expected in those zones. Vessel routes may be affected depending on the location of works, but fishers will be warned in advance to plan their routes accordingly. The nearshore works may temporarily restrict the area to recreational sea users, but the site is not commonly used for recreational activities.

During the operational phase, any localised repair works may cause minor to moderate temporary impacts, depending on the location, extent, and duration of the works.

4 GEOLOGY, GEOMORPHOLOGY, HYDROGEOLOGY AND SOILS

A desktop study enabled the identification, description and mapping of the geology, geomorphology, hydrogeology and soils of the onshore and offshore study areas. The expert made use of data collected by FUGRO during a preliminary marine route survey which was supported by the sampling of boreholes to investigate the subsurface geotechnical properties of the seabed within the footprint of the Scheme site.

The proposed project has the potential to cause various negative geological impacts. One of the concerns is the establishment of a transition joint pit which must remain accessible during operation. The proposed trenchless methodologies at the coastline could introduce drilling fluids that may be absorbed by porous materials such as porous and fractured rocks. Ground investigation at landfall has shown that the rock contains layers of highly fractured rock. Rock cuttings produced during drilling may also alter the seabed morphology until they are dispersed by wave or current action.

To drill the trenchless hole efficiently, drilling fluids such as a bentonite-water mixture are used. Bentonite is a clay mineral that is liable to disperse on the sea bed along fissures that connect the HDD hole being drilled to the seabed. Dispersal may occur over a wide area, exacerbated by wave action that may enhance dispersal over a wider area. Plugging of fissures may be required using solid material dispersed in the drilling fluid and injected into the hole during the drilling operations. The drilling operations may not be straightforward and may be hampered by damage to the drilling equipment or by heavy storms.

Laying of the cable may cause landslides or boulder destabilization along the margin of the deep shore platform identified in the nearshore segment and in the offshore up to the 95m isobath. The earthquake study undertaken did not exclude the occurrence of major earth tremors which may cause sediment liquefaction accompanied by sinking of the cable with serious consequences. The earthquakes that occur from time to time on the Malta Sicily Platform are low intensity ones associated with tension (normal) faults and therefore sediment liquefaction and/or landslides are unlikely. They have never been recorded.

Illegal activities such as bottom trawling may cause seabed sediment disturbance which shall be more serious along the cable route where the seabed sediment has been disturbed by trenching. Anchoring of marine crafts may unknowingly lift the cable off the seabed, causing a major impact that would lead to significant seabed disturbance and sediment dispersal possible along a long tract of the cable.

Trenching in terrestrial areas is often accompanied by noise and dust. This is particularly the case when trenching is done along disturbed ground which covers the major part of the perimeter road of the landfill. Excavated material may be carried away by run off if undertaken during the rainy season with negative impacts on the coastal waters. Trenching along the initial segment of the route out of the landfill shall be on pristine limestone pavement with negative impacts on geology and geomorphology.

5 WATER BODIES

The impacts on the relevant terrestrial and coastal water bodies were evaluated through a literature review, onsite surveys and laboratory analysis of seawater samples. The seawater sample provides a baseline of water quality readings to monitor the impact of construction works along the cable route.

During trenching works on the seabed for laying the interconnector cable, impacts may occur on the soft sediments, causing soft sediment dispersal. This can be particularly damaging to the sedentary flora and fauna. Additionally, trenching works on the seabed may trigger gas bubbles accompanied by sediment dispersal, while cable laying on steeply inclined seabed may trigger submarine landslides with accompanying soft sediment dispersal.

The proposed marine construction works can also lead to the release of fine silt/sediment into the sea. This will increase the turbidity (cloudiness) of the sea at the Scheme site. The use of a silt curtain during works reduces the significance of the impact to negligible as all silt would be contained to a restricted area.

The establishment of a working pit for the trenchless sea approach and a transition joint pit that must remain accessible during operation may potentially have an impact. Drilling of the horizontal hole (HDD) at landfall may require chemical additives to be added to the drilling fluid (water), which could lead to local contamination of the seawater. The drilling fluids contain bentonite, which is a clay mineral that can cause temporary turbidity of the seawater if leaked to the seabed through connecting fissures.

Accidental oil/fuel spills and leaks may also occur. Any oil/fuel discharges may leak directly into the sea or flow by natural means if left untreated. This constitutes an adverse impact of moderate significance. Regular servicing of the machinery and correct storage of such liquids reduces the impact severity to minor adverse.

6 ECOLOGY

Terrestrial Ecology

The proposed construction of a temporary laydown area for heavy machinery during Horizontal Directional Drilling (HDD) in an ecologically sensitive area will have severe impacts on the terrestrial environment. The area proposed for trenching and HDD laydown will adversely affect various ecosystems, including tree plantations, garigue, and the internal road network in the ECOHIVE complex. Soil compaction, the destruction of habitats, and the release of pollutants during construction will disrupt the balance of the terrestrial ecosystem, causing a long-lasting impact. The temporary laydown area construction will result in the loss of vegetation and soil stability, decreasing soil permeability and negatively affecting water quality in the xeric habitat. Noise and light pollution can deter wildlife and influence their behavioural patterns. Windblown dust and particulate matter generated during construction can have a temporary negative impact on local vegetation and affect the quality of the surrounding substrate. The proposed area is not expected to affect any Natura 2000 sites, but it will destroy ecological communities present in the Area of Ecological Importance Level 3. Overall, the temporary laydown area construction will have major adverse impacts on the environment.

Avifauna

The construction of the IC2 project within the marine SPAs MT0000112 and MT0000107 is expected to have minor impacts on the seabird community as long as mitigation measures are implemented, particularly regarding light pollution. Marine habitat utilised by pelagic seabirds for foraging and resting will be reduced temporarily during the construction phase. Construction work (including the 0.5 km buffer area) in areas which overlap with the Natura 2000 site (MT0000112) should ideally be carried out outside the fledging period of the most vulnerable receptor species, *P. yelkouan*, which spans over the period June to July. However, as this appears to be unfeasible, it is recommended that the footprint of the construction sites is kept as small as possible and no works will be carried out during the night. These measures should prevent significant impacts on the seabird populations in the Natura 2000 sites. However, there are concerns about potential residual impacts of temporary light pollution on the *P. yelkouan* colony on St. Paul's Island if mitigation measures are not fully implemented. Therefore, careful monitoring and compensatory measures may be necessary.

Marine Ecology

The project activities that are likely to have significant impacts on marine ecology during the construction phase include the HDD punchout hole, releasing drilling fluids and suspended sediments into the marine environment, cable laying and trenching, installation of cable supporting structures and cable crossing features, benthic impacts from servicing vessels, abandonment and recovery of abandoned cable components, and anthropogenic generation of submarine noise. The activities causing significant impact will permanently damage benthic habitats along the site

footprint. Furthermore, cable supporting structures will take up additional seabed, including protected benthic habitats such as *P. oceanica* and maërl. Atmospheric deposition of fine particulate matter can significantly impact benthic habitats, such as *P. oceanica* and sand. The release of chemicals from construction sites and work vessels can also affect the marine environment. Drilling fluids used in horizontal directional drilling (HDD) can cause smothering of the seabed and reduce the oxygen available to benthic organisms. An increase in suspended sediments due to disturbance of the seabed from activities such as the punchout hole, trenching, and cable laying can have short- and long-term impacts on marine life.

Onshore Noise

The assessment examined the potential impact of the proposed Onshore Scheme on construction noise emissions using international standards and guidelines such as BS 5228:2009+A1:2014 and AQTAG2009. The assessment concluded that in the worst-case scenario, the impact of construction noise on ecological receptors would be minor and negligible, respectively, and the level of effect would be insignificant. The assessment also considered the baseline sound levels representative of the assessment locations and concluded that construction noise emissions are not expected to have an adverse impact at the identified receptor locations. The significance of these effects was determined by comparing them with the targeted limits from AQTAG2009 for ecological receptors and by assessing the ambient noise level increase resulting from construction noise. Overall, the assessment suggests that the Onshore Scheme is unlikely to have a significant impact due to construction noise emissions.

Offshore Noise

The study assesses the impact of various operational activities on marine mammals, fish, and sea turtles using different metric criteria. Various impact and cumulative exposure impact criteria were used to assess PTS (permanent hearing threshold shift) and TTS (temporary hearing threshold shift) impact for marine mammals and sea turtles, as well as the behavioural response of marine mammals, fish, and sea turtles. The estimated maximum zones of impact for all operational activities are estimated. Non-impulsive activities are modelled based on the assumption that marine animals are constantly exposed to the source at a fixed location over the entire operational period. The worst-case consideration is taken for marine mammals and sea turtles as they may not stay in the same location for the entire period. The combined cable-lay vessel sources are predicted to have the highest noise impact on low-frequency cetaceans. For fish species, no mortality or potential mortal injury is expected, and the overall adverse impact relates to behavioural disturbance only. For sea turtles, low physiological impact (only PTS) is predicted at close distances from the noise source. It is recommended that the applicant reviews the detailed specifications of relevant equipment and considers the characterization of source noise emissions and noise model validations via field measurements.

7 ARCHAEOLOGY & CULTURAL HERITAGE

Horizontal Directional Drilling at the onshore section involves launching a drill from one end of the designated path and retrieving it at the other end, with the entire process taking place underground except for the launch and retrieval areas. The cable will then be inserted into the tunnel and either pushed or pulled through, resulting in minimal disruption to the ground surface. The only potential issue is subsidence, and the possibility of buried materials within the sediment column should also be considered. Consequently, the surface layer will not be affected by cable laying operations.

For the remaining onshore construction, land HV cable will be placed in a trench excavated below the existing asphalt surface that is about 1.60m deep and 0.90m wide. The impact assessment has taken into account various known features within the 100m buffer zone, such as listed archaeological sites, intact rubble walls, rubble walls in poor condition, and agricultural buildings/huts. The results indicate that the proposed works will have no direct impact on the listed archaeological sites and the rural landscape. However, there will be a slight indirect impact on the rubble walls in poor condition within the North-West 100m buffer zone. It is recommended that an archaeological monitor would be present during the trenching phase, and that a distance of at least 50 meters be kept from cultural heritage sites during the onshore works.

As for the offshore cable-laying, any works in close proximity to the identified underwater features (such as wrecks) will be avoided via a buffer zone specified by the Superintendence of Cultural Heritage. Therefore, the works on the cable laying will bypass these features by a significant distance, minimizing any potential impact or disturbance.

8 INFRASTRUCTURE AND UTILITIES

The IC2 project poses a risk of unintentional harm to existing cables during its construction, particularly in the Southern terrestrial region of the AOI where there is a high density of cables. Enemalta and Wasteserv own cables in the area, and the contractor must consult with them to confirm plans and avoid accidental damage. The proposed IC2 will be connected to the national electricity grid system at the same terminal station as the first interconnector, and while their cables are in close proximity, they do not cross within the AOI. Measures must be taken to mitigate any adverse impact resulting from this proximity.

The onshore trench route passes near streetlights, street signage, crash barriers, pavements, fencing, and stormwater culverts, all of which the contractor must discuss with Wasteserv Malta to ensure they know their location and depth to avoid any accidental damage. In the North Region, HDD will be used to cross the section of the cable route that passes through the Coast Road, avoiding existing underground electric cables that connect the streetlights. The IC2 cable will also cross two potable water pipes and an underground telecommunications cable owned by GO, and the HDD will be directed to pass below the road foundations. The Coast Road contains street furniture, which the contractor must confirm the exact location, depth, and size of with Infrastructure Malta.

The offshore route of the project will cross nine broadband cables from local and international operators. The contractor must communicate with the operators to reduce the risk of accidental damage and implement mitigation strategies. During the construction phase, the project may cause accidental damage to existing infrastructure that is not directly intersecting the proposed route. The contractor must report any damage to relevant entities and operators to coordinate a prompt repair operation.

The IC2 project will provide the national electricity grid with an additional source of imported electricity, improving the security and reliability of the national electricity supply. Effective communication between the contractor and competent authorities during the construction phase will ensure that adverse impacts are minimized.

9 PUBLIC ACCESS

The IC2 cable shall be trenched along a terrestrial route of 1,708.05m, with the majority of it being done on internal restricted roads located within the ECOHIVE Complex. The road network within the complex is used by large vehicles owned by the Wasteserv Malta Ltd and other private waste carriers. The trenching will cause a temporary narrowing of the existing road access, but measures will be taken to ensure that daily operations of the complex continue. The adverse impact is considered of minor significance if all mitigation measures are in place.

The public road between the ECOHIVE Complex and the Enemalta Terminal station is frequently used by the general public, primarily as an access road for the services provided by the Civic Amenity Site. However, the works have been restricted to the northernmost part of the road in an area wide enough to still accommodate two vehicles during the construction phase. The increase in heavy vehicles accessing the site during construction works may increase congestion on the surrounding roads which will affect other road users in the nearby vicinity. The report has classified the adverse impact as being of minor significance since the adjacent road network is not heavily frequented by members of the general public.

The offshore route will be excavated using HDD, passing underneath the natural area between the ECOHIVE access road and the Coast Road. The cable will be laid underneath the Coast Road using HDD drilling and continue underneath the rocky coastline into the seabed using the same method. The HDD activity and offshore cable route construction will not result in any changes to public access arrangements since the HDD drilling station is located within uneven terrain not frequented by the general public.

The construction works at sea will require the use of at least one vessel. At certain times throughout the construction phase, certain areas of the marine area may be inaccessible to other vessels. This will force other sea users such as fishers and recreational boat users to make deviations from their preferred routes. The impact is considered adverse and of minor significance due to the temporary nature of the impact.

Since the terrestrial ancillary facilities required to operate the proposed cable will be located within the confines of the Maghtab Terminal Station, the Scheme will not have any adverse impacts on terrestrial access arrangements. Similarly, given that the cable shall be laid on the seabed and does not encroach into any designated areas except for a short distance at the edge of a Trawling area, it is not expected to lead to any alterations or access restrictions within the marine environment during its operation.

10 OTHER IMPACTS

10.1 CLIMATE CHANGE AND CLIMATE CHANGE ADAPTATION

The construction of an underwater electricity cable can have direct and indirect impacts on climate change. During the construction phase, energy-intensive interventions like extracting and producing materials, manufacturing machinery, and transporting materials lead to an increase in greenhouse gas emissions, which can contribute to climate change effects such as sea ice decline, sea level rise, extreme weather conditions, ecosystem changes, and reduced crop production. The loss of marine carbon sinks along the cable corridor can also indirectly contribute to the acceleration of climate change effects.

However, the second permanent electrical connection between Malta and the main European electricity grid network can yield beneficial impacts on climate change by meeting the electricity demands of Malta and reducing the need for local electricity generation, leading to a decrease in GHG emissions. But, if the electricity generation from the main European electricity grid network is largely based on non-renewable energy sources, the indirect impact of the cable on climate change could be significant. In contrast, if renewable energy sources such as wind, solar, and hydropower are used for electricity generation, the impact of the cable on climate change could be significantly reduced, and the cable can play a crucial role in promoting the use of renewable energy sources in Malta.

To ensure sustainable development, appropriate measures must be taken to mitigate the negative impacts of the construction of an underwater electricity cable on climate change, such as preserving marine carbon sinks and promoting energy conservation measures to reduce the demand for electricity. The adaptability of the proposed second interconnector cable to future effects of climate change depends on Malta's ability to transition to renewable energy sources, which requires a broader strategy that includes increasing local renewable energy production.

10.2 ENVIRONMENTAL RISK

The environmental risk study assesses any relevant risks, including major accident scenarios like contamination, emissions, explosions, blasts, flooding and major spillages, which could occur during the phasing of the proposed Scheme.

The preliminary risk assessment identified 12 potential environmental threats or sources of contamination identified within this EIA study:

One-Time Environmental Risks

1. Contamination of geological layers through the spillage of chemicals, oils and fuels
2. Contamination of the Malta Mean Sea Level Aquifer through spillage of oil or fuels
3. Contamination of the surrounding marine environment through the spillage of chemicals, oils and fuels
4. Generation of dust from works which may affect surrounding sensitive receptors

5. Rock/soil instability which could impact nearby ecological/agricultural features of land uses
6. Spillage of excavated material during transportation
7. Dust emissions from transportation of waste rock material
8. Loss of protected endemic vegetation species through trampling, trenching and temporary HDD laydown area
9. Loss of protected benthic habitats through trenching and rock placement to protect the cable

Exceptional Environmental Risks

1. Instability of the infrastructure, including the cable itself, due to earthquakes
2. Damage to surrounding environment from explosion/fire at Terminal Station
3. Physical damage to the cable by heavy anchoring, trawling and/or sabotage

The environmental risk assessment evaluates the majority of risks to be moderate. High-risk activities are one-time environmental risks associated with exceptional weather events and/or natural phenomena. The assessment concludes that the overall environmental risk associated with the project is of a moderate level. The implementation of appropriate mitigation measures can reduce the severity of the risks.

10.3 HUMAN POPULATION

The study identified a number of impacts on human populations. Predicted impacts during the construction phase include:

- Generation of dust: Reduction in air quality for nearby residents.
- Generation of noise and vibrations: Increase in noise and vibration levels in the surrounding area affecting local residents and nearby commercial premises.
- Public accessibility: Influencing operations within ECOHIVE complex as well as fishermen and other maritime traffic.

Predicted impacts during the operational phase include:

- Air quality & climate change: The cable may supply imported RES to replace the combustion of fossil fuels and would thus reduce the overall GHGs emitted on a national scale.
- National electrical distribution network: Electrical supply from IC2 will improve the security of supply.

10.4 PROJECT DECOMMISSIONING

Decommissioning a cable refers to the process of ending its use and operation, which typically involves disconnecting it from its power source and either removing it or leaving it in place. In the case of the cable in question, it is unlikely to be removed due to several reasons.

Firstly, the cable is oil-free, which makes it environmentally friendly as it does not contain any hazardous materials that could harm the environment. This reduces the

immediate risk to the environment if the cable remains in place. Secondly, removing the cable would be expensive and have significant environmental impact, requiring specialized equipment and personnel and potentially disturbing the surrounding soil and seabed. Lastly, leaving the cable in place does not pose any significant risk to human health or the environment, and its impact on the local ecosystem is minimal.

Therefore, given the high cost and potential negative environmental impact of removal, it is practical and environmentally responsible to leave the cable in place after its decommissioning.