

Document title: CULTURAL HERITAGE MANAGEMENT PLAN

Document number: 1062-TGN-MNG-PLN-PJM-22-00013

Project: THE DEVELOPMENT OF THE ROMANIAN GAS TRANSMISSION

SYSTEM ALONG BULGARIA-ROMANIA-HUNGARY-AUSTRIA ROUTE, PODISOR – GMS HORIA AND 3 NEW COMPRESSOR

STATIONS (JUPA, BIBESTI AND PODISOR) (PHASE 1)

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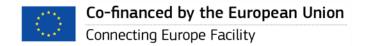






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Abbreviations

Abbreviations	Descriptions	
BRUA	Bulgarian-Romanian-Hungarian-Austrian	
CESMP	Construction Environmental and Social Management Plan	
EBRD	European Bank of Reconstruction and Development	
ESAP	Environmental and Social Action Plan	
ESIA	Environmental and Social Impact Assessment	
ESMP	Environmental and Social Management Plan	
ES-MS	Environmental and Social Management System	
EU	European Union	
F-CESMP	Project Framework Construction Environmental and Social Management Plan	
HSE	Health, Safety and Environmental	
HSE-MS	Health, Safety and Environmental Management System	
HSSE	Health, Safety, Social and Environmental	
KPI	Key Performance Indicator	
PMU	Project Management Unit	
PR	Performance Requirement	





1 Introduction

1.1 Overview

The Construction Environmental and Social Management Plans (CESMP) defines the actions and measures necessary for the overall management of environment and social impacts for both the Project beneficiary (TRANSGAZ S.A., represented by the Bulgarian-Romanian-Hungarian-Austrian Project Management Unit (BRUA PMU)) and contractors in line with the applicable law and other obligations. The CESMPs are comprised of a suite of management plans.

This is document is the Cultural Heritage Management Plan, document no. 1062-TGN-MNG-PLN-PJM-22-00013.

Project construction activities have the potential to result in negative impacts on both tangible and non-tangible cultural heritage, which can be held as highly valuable within local communities and often also at a regional level. Some cultural heritage sites may also be tourist attractions that help support local economies. The Project seeks to proactively manage, avoid or limit any negative impacts on cultural heritage and to this effect has included specific obligations regarding cultural heritage in the tender documents issued to potential Contractors.

1.2 Purpose of This Cultural Heritage CESMP

This CESMP:

- Outlines the key policies, legislation and standards relating to waste management;
- Defines roles and responsibilities;
- Outlines actions and measures necessary for the effective management of risks and impacts to cultural heritage;
- Covers the management of both tangible and non-tangible cultural heritage;
- Details specific control measures to be implemented by Transgaz and its contractors (and subcontractors), to achieve this;
- Incorporates the requirements of the EIA findings, Supplemental Environmental Assessment, Supplemental Social Impact Assessment, International standards, Romanian legislation, Lenders requirements and Project-specific construction permits;
- Considers Transgaz's general approach to cultural heritage management procedures and methodologies; and
- Includes the Chance Finds Procedure, which details the necessary steps to be taken if any culturally significant artifact is found during the construction process (in appendix 4).

In doing so, this CESMP defines the actions and measures necessary for the overall management of cultural heritage during the project construction phase for both the Project beneficiary (TRANSGAZ S.A., represented by BRUA Project Management Unit (PMU)) and contractors in line with the applicable law and other obligations.

1.3 Scope of the Cultural Heritage CESMP

This CESMP covers all activities throughout the Project construction phase and is applicable to all Transgaz staff, Contractors and Sub-contractors. Whilst this CESMP will act as a 'framework' to determine what the Contractors will be expected to produce, Contractors are required to ensure that all the requirements of the



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Cultural Heritage Management Plan are adopted within their own management plans. Further information on Roles and Responsibilities is provided in Section 5 of this CESMP

1.4 Document Management

Project documentation will be managed and controlled by the Document Control and Archiving Compartment within BRUA Project Management Unit. The methods for document management and improvement during the construction phase will be described in the Document Guide to be developed by BRUA PMU.



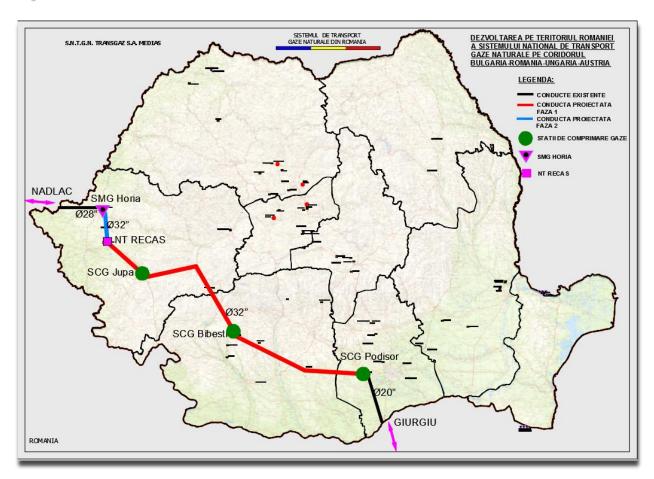


2 The BRUA Project

2.1 Project Overview

SNTGN Transgaz SA Medias ("Transgaz", "the Company" or "the Beneficiary"), the licensed operator of the Romanian National Gas Transmission System, is developing a 529km natural gas pipeline between Podisor in southern Romania and Horia in the west of the country (the "Project") (Figure 2.1). The pipeline, which for much of the route will be buried and will upgrade or run alongside existing pipelines, represents the Romanian section of the Bulgaria-Romania-Hungary-Austria Natural Gas Transmission Corridor. In addition to the pipeline itself, the Project will also require construction of three new Gas Compressor Stations at Podisor, Bibesti and Jupa, as well as a range of supporting infrastructure including block valve stations, construction camps, pipe storage areas, watercourses and infrastructure crossings and access roads.

Figure 2.1 BRUA Route



Whilst the majority of the route is on land currently used for farming, it does pass through a number of specifically sensitive areas, including seven Natura 2000 Sites, and the nationally important Dinosaurs Geo-





Park. It also passes close to a number of sites of archaeological value including the ancient city of Tibiscum near Jupa. In some of these areas, as well as near major roads and railways and for the eight major rivers. this will involve the use of horizontal directional drilling. In other areas in the mountains special "hammering techniques" may also be applied.

Environmental and Social Commitments

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The Project is subject to various environmental and social requirements that are managed by the Company through the implementation of its Health, Safety and Environmental Management System (HSE-MS)1. This HSE-MS includes a specific Project Framework Construction Environmental and Social Management Plan (F-CESMP) as well as associated topic/activity specific CESMPs. Operational phase Environmental and Social Management Plans (ESMPs) will be developed at a later stage prior to BRUA operation. The overall approach to integration of the above documents is described in Section 4.2 of the F-CESMP document.

Project Approach to Cultural Heritage Management

Activities, such as trenching that may result in psychical impacts on culturally significant structures or artifacts, including currently unknown artifacts, or construction causing disruption to cultural practices due to obstruction of access to cultural sites.

Table 2.1 lists f the currently identified major cultural heritage sites within 1km of the pipeline, detailing their location and distance from the BRUA pipeline route. The sensitivities of these archeological sites and any other archeological sites identified via work with cultural heritage municipal authorities at county level will be constantly considered by the contractors to manage any impacts they may have on these sites, including access to the sites.

Table 2.1 Identified Cultural Heritage Sites

County	Places	Protected areas (other than natural areas)	Distance from BRUA (Km)
Caraş-Severin	Jupa	Tibiscum – Dacian Castra	0
Hunedoara	Sarmizegetusa	Dacian colony - Ulpia Traiana Augusta Sarmizegetusa - the capital of the Roman province of Dacia	0.4
Gorj	Schela	St. Demetrius Church	0.7

Following the submission of the Regulatory Environmental Impact Assessment, further archaeological desk studies have been conducted across the 11 counties through which BRUA passes. The results of these studies have highlighted some further areas of potential archaeological value where intrusive diagnostics (trenching) may need to be conducted prior to construction. The proposed pipeline will, however, generally follow existing pipeline infrastructure so the probability of a major archaeological find is considered to be low.

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Integrated Management Manual Quality-Environment-Occupational Health and Safety, code MSMI-CMSSO Ed. 03/Rev.



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Plans for the intrusive diagnostics will be incorporated into the Environmental & Social Action Plan (ESAP) for the Project, and the results of any findings needing to be taken into account prior to construction.

According to Romanian 422/2001 Law, republished, protection is required for an historical monuments or archaeological sites within 500 meters of a new build in areas outside of villages. The recommended archaeological investigation and protective measures are outlined in Table 2.2.

Table 2.2 Archaeological Research

County	Recommendations	
Giurgiu	Intrusive diagnostics recommended at 4 sites, and 6 non-investigated zones. Preventative archaeological research recommended at 3 identified sites.	
Teleorman	Preventative archaeological research recommended at 4 archeological sites. Intrusive site evaluation recommended at 9 archeological sites	
Dambovita	Final authority permit, after preventive archaeological research	
Arges	Preventative archaeological research recommended at 3 archeological sites	
Olt	No archaeological sites identified	
Valcea	Intrusive diagnostics recommended at the extremities of the 31 archaeological sites. Preventative archaeological research recommended at 5 archeological sites	
	4 known archeological sites, affected in the protection zone	
Gorj	Intrusive diagnostics recommended for part of the pipeline route	
Hunedoara	Preventive Archaeological Research in archaeological sites identified by intrusive diagnostic	
Caras, Severin	Preventive Archaeological Research in the identified achaeological sites	
Timis	Intrusive diagnostics recommended for part of the pipeline route. 14 archaeological sites	
Arad Intrusive diagnostics recommended for part of the pipeline route. 7 archaeological sites		

To ensure that impacts upon cultural heritage sites are mitigated effectively, archaeological specialists will be employed as a part of the Transgaz Team and by Contractors. The roles and responsibilities of the Contractor onsite archaeologists will be to oversee, as construction progresses, the correct implementation of cultural heritage management measures, write reports on cultural heritage incidents, conduct training of cultural heritage awareness within the workforce and further the implementation of the chance finds



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procedure (appendix 4). The archaeologists will, as a result, help to ensure the protection of both tangible and intangible cultural heritage.





3 Key Policies, Legislation and Standards

3.1 Overview

The Project is subject to a range of policies, legal & regulatory requirements and other applicable standards and technical requirements of relevance to this CESMP. Where two or more of the identified standards are inconsistent or contradictory, the Project will adopt the more stringent.

3.2 Company Policies

Transgaz' *Health, Safety and Environmental policy* (as outlined in the Integrated Management Manual Quality-Environment-Occupational Health and Safety, code MSMI-CMSSO Ed. 03/Rev.) and *Corporate Social Responsibility policy* apply to all activities carried out by, or on behalf of, the Company as part of this Project. Details of these policies are provided in the F-CESMP Document (Section 7.3).

The internal process by which Transgaz manages cultural heritage issues is the Transgaz Procedure relating to the protection of cultural heritage and the capitalization on scientific research in accordance with the current legislation in the field.

Protocols included in the Transgaz Procedure are:

- Consultation with the community and local authorities with responsibilities in the protection of cultural heritage in the feasibility study stage of the project;
- Theoretical non-intrusive evaluation of the cultural heritage found on the route designed for BRUA;
- Achieving the preventive archaeological research necessary for the archaeological discharge of the archaeological sites and areas of historical monuments protection zone with incidence in the BRUA project;
- Management of cultural heritage and measures to mitigate adverse impacts on cultural heritage in areas transited by the BRUA project;
- Training of all personnel involved in BRUA; and
- Monitoring and management of archaeological discoveries incidents, including the discovery of cultural artefacts and archaeological complexes during construction works.

3.3 National Legislation and Permits

All contractors are also required to comply with all relevant national regulatory requirements. Whilst contractors are required to verify the latest regulatory requirements themselves an indicative list of Romanian national legislation is provided in Appendix 3 to this CESMP.

Contactors must also ensure that relevant requirements of the various construction-related permits for the Project issued by national (and local) regulators are addressed. Key permits are summarized in Section 3.2 of the F-CESMP. Any requirements arising from the revision/amendment of those permits will also be applied.



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3.4 International Standards and commitments

A range of international standards and commitments are applicable to this CESMP as described in the F-CESMP Document (Section 3.3). These include the EBRD Environmental and Social Performance Requirements (PRs), with PR8 being especially relevant to this document. All Contractors are required to comply with all such regulatory requirements as they apply to their activities. Transgaz will commit to meeting the requirements of EBRD's PR8 whilst implementing all of their policies.

Key requirements of PR8:

- To identify and evaluate the risks and potential impacts to the cultural heritage within the Project area during the design, construction, operation, and decommissioning of the Project and to establish preventive measures and plans to address them in a manner commensurate with the identified risks and impacts. These measures will favor the prevention or avoidance of risks and impacts over minimization and reduction.
- Where the Project or stage of the project poses material risks to or potential adverse impacts on cultural heritage, to disclose applicable project-related information to enable the affected communities and relevant government agencies to understand these risks and potential impacts, as well as the proposed prevention, mitigation measures, as appropriate.
- The development and implementation of a chance finds procedure, establishing the necessary steps and management system to be in acted in the event of an archaeological find.

An indicative list of EU Directives/Regulations that have been taken into account and the Romanian national legislation that transposes or completes them is provided in Appendix 3 to this CESMP.



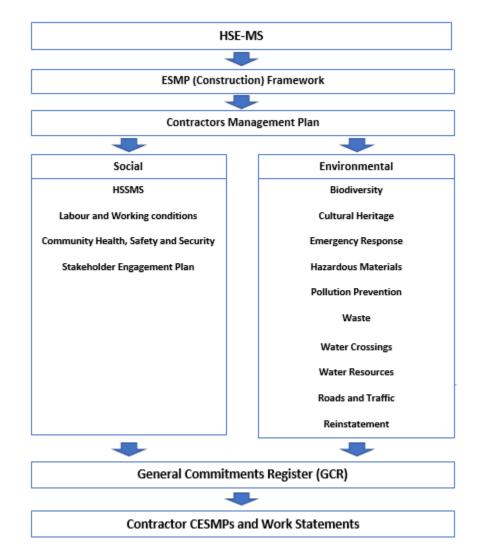


4 Linkages to Other Elements of Transgaz HSE-MS

4.1 Overview

This CESMPs forms part of the Project HSE-MS as described in the F-CESMP (Section 4.2). Where relevant the CESMP should be read in conjunction with other HSES-MS elements including the ESMP source documentation, control documentation and the key HSE-MS documentation. These are described further in Section 4.1 of the F-CESMP and illustrated in Figure 4.1 below:

Figure 4.1 HSE-MS Linkages





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4.2 Linkages to Other CESMPs

A listing of the CESMPs and their document numbers is presented in Section 4.2 of the F-CESMP Document. The other CESMPs considered to be of particular relevance to the Cultural Heritage CESMP are listed within Table 4.2:

Management Plan	Document Reference
Road and Traffic Management Plan	1062-TGN-MNG-PLN-PJM-22-00012
Pollution Prevention Management Plan	1062-TGN-MNG-PLN-PJM-22-00003
Reinstatement Management Plan	1062-TGN-MNG-PLN-PJM-22-00014
Stakeholder Engagement Management Plan	1062-TGN-MNG-PLN-PJM-22-00016
Contractor Management Plan	1062-TGN-MNG-PLN-PJM-22-00002
Labour and Working Conditions Management Plan	1062-TGN-MNG-PLN-PJM-22-00010



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5 Key Roles and Responsibilities

5.1 Overview

An integrated approach to cultural heritage management involves a range of stakeholders, including the Company, the Contractors (and subcontractors), local authorities, regulatory agencies, museums and the general public. Effective cultural heritage management therefore requires robust processes regarding information dissemination, training, designation of responsibility, management actions, monitoring, control, and remedial actions.

Generic roles and responsibilities for the Company and Contractors are detailed in Tables 5.1 and 5.2. An initial split of activities between key stakeholders is shown in Table 5.1 below with further information on specific responsibilities for CESMP actions outlined in Appendix 1 and Appendix 2. Transgaz will design a management system with all of its Contractors after they are selected to address cultural heritage impacts and the chance finds procedure, in which will explicitly identify the role and responsibilities of both Transgaz and Contractor staff.

Table 5.1 Initial Split of Activities

Activities	Beneficiary	Contractors	The Contracting Parties of archaeological services
Planning	Χ	Х	
Dissemination of information	X	X	X
Management of cultural heritage impacts	Х	X	X
Chance finds implementation	Х	Х	X
Professional training	Х	Х	
Surveillance and control	Х	Х	Х
Corrective actions	Х	Х	Х
Management of cooperation	Х	Х	

5.2 Company Roles & Responsibilities

Transgaz HSE management roles and responsibilities during the Project construction are detailed in the BRUA – PMU Regulation of organization and functioning

Further information is also provided in other documents listed in the F-CESMP document.

With regards to this CESMP, Transgaz S.A. is responsible for key management activities including:



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- Development of bidding conditions regarding cultural heritage management;
- Professional training of a Transgaz cultural heritage representative on site;
- Monitoring Contractor performance, supervision and control of Contractors;
- Ensuring the chance finds procedure management system is followed;
- Management cooperation in case of an incident (including registration and communication of events). Specifically, within the organization the following roles and responsibilities will apply:

Table 5.2 Transgaz Roles and Responsibilities

Roles	Responsibilities
General Director SNTGN TRANSGAZ SA BRUA Manager CTG, STC	 Approval of this Cultural Heritage Management Plan and of the resources for implementation. Ensures the compliance of the Project with the requirements set out in this Plan. Has the general responsibility for the implementation of this Cultural Heritage Management Plan, including by the main contractors Develops, monitors and revises this plan according to changes in the legislation or other requirements emerging
SNTGN Transgaz Archaeological Service	 Conducting assessment processes of the cultural heritage; Supervise, reporting and notification of unauthorized activities that can lead to destruction of the cultural heritage or to violations of legal procedures; Providing information / training of the personnel engaged in actions involving infringing works on cultural heritage while understanding the responsibilities arising from the project; Reports, work permits, correspondence; and Coordinate implementation teams of the archaeological services and relationship with entities with responsibilities in the national cultural heritage.
All SNTGN Transgaz employees	To familiarize themselves with the laws and procedures for the protection of the national cultural heritage through training or other courses.





5.3 Contractor Roles & Responsibilities

Overarching Contractor HSSE requirements are defined in the relevant articles of their contracts and associated mandatory annexes. Each contractor must also implement all relevant requirements of the CESMPs, including this Cultural Heritage CESMP. Contactors are also responsible for ensuring that any subcontracted work also meets these requirements.

Contractors will therefore be required to present to the Beneficiary, represented in the project by BRUA PMU in accordance with the requirements, their proposed approaches to:

- Management and monitoring of impacts to cultural heritage sites/historical monuments;
- Implementation of the chance finds procedure in the event of a find; and
- Any other conditions outlined in this CESMP or its Appendices.

In addition, contractors will present the Beneficiary with details of:

- A nominated representative on cultural heritage management;
- Records of any impacts associated with cultural heritage management

Further specific responsibilities of the Contractors/sub-contractors are outlined in Table 5.3, below.

Table 5.3 Contractor Roles and Responsibilities

Roles	Responsibilities
Manager responsible for cultural heritage matters	Compliance with the legislation and the management procedures (Protection and Research) for the national cultural heritage;
matters	To comply with management tasks of the national cultural heritage established in the framework contract;
	 Providing information / training of the personnel engaged in actions involving infringing works on cultural heritage while understanding the responsibilities arising from the project;
	To conduct courses of protecting national cultural heritage, which will be organized by the SNTGN Transgaz Archaeological Service; and
	Managing documents referred to in this CESMP.
The Contracting Parties of the	Compliance with cultural management procedures;
archaeological services/entrepreneurs	 To meet the requirements of the cultural heritage management established in the tender documents and in the framework contracts;
	Intrusive archaeological diagnostic services;
	 Developing a preventive archaeological research project for each archaeological site determined and defined by intrusive archaeological diagnosis;
	Preventive archaeological research services;
	Surveillance of construction works;
	To know and apply the legislation; and



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To know and apply the procedures for chance discoveries.





6 Management, Mitigation, Monitoring, Training and Verification

6.1 Management Actions

A range of management actions (and other mitigation measures) are required to be implemented in respect of cultural heritage management. The specific management actions and measures required of Transgaz staff and its contractors (and sub-contractors) are described in Appendix 1 to this CESMP.

6.2 General Monitoring Activities

Monitoring provisions for this Cultural Heritage CESMP have been developed through the following process as detailed within Table 6.1:

Table 6.1 Approaches to Monitoring

Objective	Approach
1: Risk Based	Monitoring programs to address material issues base on the use of the 'source-pathway-receptor' approach in the ESIA. These are commensurate with: • the scale and nature of the activity, • the assessed potential level of impact (and uncertainty thereof), and • the sensitivity of the local environment within the activity area of influence
2: Compliance Based	Addition monitoring programs to meet specific regulatory needs.

Following this approach, the proposed monitoring plans should meet both Transgaz's requirement to understand and manage the Project's potential impacts for each construction activity/ location and any specific requirements of the Romanian authorities. The specific monitoring requirements for this Cultural Heritage CESMP are presented in Appendix 2.

In the event of an archaeological discovery for which the National Archaeological Commission will not grant the necessary archaeological discharge certificates, . Trangaz will resort to deviations of the pipeline route via horizontal directional drilling below the depth of the archaeological deposits.

All results of archaeological research presented as reports to the Local Commissions of Monuments will be reviewed and approved or approved with some conditions or recommendations. These committees are made up of professionals from different backgrounds, such as: cultural, architects, landscape architects and anthropologists, which determine how an investment with impact on the environment can be implemented with minimal negative effects.

The majority of monitoring in regard to cultural heritage protection however will be in the remit of the SNTGN Transgaz Archaeological Service, therefore an overview of the expected implementation of monitoring procedures is demonstrated below.





Project supervisors and archaeologist's service providers will report monthly to the SNTGN Transgaz Archaeological Service on the implementation of cultural heritage management requirements during construction and operation phase of the project, including:

- Minutes relating to incidental discoveries;
- Archaeological supervision is carried out only in the specific area of the yard of the excavation works construction;
- Protecting sites and construction sites of archaeological research by diverting routes of access to construction sites and their facilities;
- Giving lectures on the awareness of cultural heritage protection to staff in management entrepreneurship; and
- Track cases of destruction of cultural heritage and measures taken.

SNTGN Transgaz Archaeological Service will carry out inspections on all in progress archaeological activities and in all events determined by the chance archaeological discoveries (outlined in appendix 4).

Monthly reports will be carried out by the SNTGN Transgaz Archaeological Service that will be presented to the General Director and Manager BRUA. The reporting will include:

- A summary of activities in the reported calendar month;
- Any deviations or non-conformities recorded in this Cultural Heritage Management Plan;
- Proposed activities during the next reporting period;
- Any other issues of interest; and
- Handling complaints related to cultural heritage and responses thereto.

SNTGN Transgaz Archaeological Service will lead routine inspections of construction activities in collaboration with BRUA management and organizational staff to assess the situation of cultural heritage at the work sites.

6.3 Management System Verification Monitoring

Management System verification monitoring requirements, as detailed in the F-CESMP Document, are divided into three levels as shown in Table 6.2 below.



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Table 6.2 Project Auditing System

Tier	Objective	Responsible	Description
Tier 1:	Transgaz management system audits.	Transgaz	These audits are aimed at assessing HSE-MS Integrated Management Manual Quality-Environment-Occupational Health and Safety, code MSMI-CMSSO Ed. 03/Rev. elements and assessing their continued suitability throughout the project life cycle.
Tier 2:	Transgaz CESMP audits.	Transgaz	These audits are undertaken by the Transgaz BRUA team to confirm compliance by the Company and its contractors with the CESMPs.
Tier 3:	Contractor self-audits.	Contractor	These audits are to be undertaken by contractors to confirm compliance by themselves and their sub-contractors with the CESMPs and their own HSE management systems. The managing contractors shall ensure that audit reports are provided to Transgaz

In addition to the above, there are also expected to be regulatory audits and lender compliance monitoring visits. The nature and structure of these will be confirmed with regulators and lenders.

Internal audit

Archaeologists of Transgaz in operational areas will carry out daily inspections. Any incident identified during these inspections will be reported to the SNTGN Transgaz Archaeological Service.

All incidents and non-conformities identified will be reported to the Transgaz management.

External audit

According to this Plan, it will be subject to periodic evaluation as part of the audit of the BRUA project.

Keeping records

Records during the audit, inspections and incidents will be managed in accordance with the Transgaz procedures.

The BRUA PMU regulation for organize and functioning will contain provisions to cover all attributes and activities mention on this CESMP.

Key Performance Indicators

Both the General Monitoring and the Management System Verification Processes require robust Key Performance Indicators (KPI) to be developed. These are quantitative or qualitative measurements used to



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gauge performance over time and can be used to assess the effectiveness of control measures. The KPIs considered relevant to this Cultural Heritage CESMP are shown in Table 6.3.

Table 6.3 KPIs for the Project Cultural Heritage asset management

ID	KPI	Target	Monitoring Measure	Associated mitigation controls
KPI- CH01	Number of reported non- compliances with the requirements of this CESMP	zero per year.	See verification column of Appendix 1	All measures identified in Appendix 1
KPI- CH02	Number of cultural heritage related complaints from local communities	Zero per year	See Appendix 2	N/A
KPI-CH03	Number of non- compliances closed due to corrective actions being taken within the defined timeframe (set on a case by case basis)	100% of all non- conformities remedied within the defined timeframe.	N/A	All actions identified in Appendix 1
KPI-CH04	Reports of near misses should be reviewed for root cause and a corrective action identified and shared across all spreads within 48 hours to prevent future occurrence	N/A, however the more reports that are shared the better the operation will be.	N/A	N/A

The specific auditing requirements for the verification of each of the management measures described within this Cultural Heritage CESMP are identified in Appendices 1 and 2. This includes identification of the relevant audit tier level (1 to 3) to be undertaken.

The contractors will proceed to the management of cultural heritage based on:

- Legal stipulations and other applicable requirements: BRUA law, EU legislation and local authority requirements;
- **Internal/external audits findings, etc.**; The results of the county level intrusive diagnostics and the implications of its findings;
- Will tender / pre-contracts / agreements from licensed companies;
- Bids are analyzed to verify the existence of archaeological county level permits; and
- Requests and requirements outlined by the Ministry of Culture and National Identity.

The BRUA PMU archeologists are responsible to monitor the compliance with all provisions of the Plan,



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under execution managers coordination.

6.5 **Training**

Training needs for all TRANSGAZ and Contractor staff shall be identified at the outset, before construction works commence, and a training plan developed.





7 Appendices

7.1 Appendix 1: Mitigation Measures & Management Actions

Ref	Topic	Location	Requirement	Responsibility	Verification Process	GCR Ref.
CH001	Access	All Areas	Public access to cultural heritage sites (crosses, churches, cemeteries etc.) will be maintained at all times during the works.	Contractor	Visual inspection	166
CH002	Additional studies	All Areas	The additional archaeological field studies highlighted in the environmental permit will be completed before works commence. This will include further evaluation of potential sites of cultural heritage value along the route to ensure a more rigorous assessment of potential construction impacts. This will involve consultation with local consultants, archaeologists and the relevant authorities (including Ministry of Culture Representative Agencies at County level). Any further assets and appropriate mitigation will be incorporated into an updated version of this Cultural Heritage CESMP.	Transgaz	Field study reports	168, 276
CH003	Chance finds	All Areas	In the event of the accidental discovery of new artifacts and archaeological sites; works will be stopped and will only be resumed after the site has been archaeological discharged by authorized archaeologists.	Contractor	Audit of the Chance Find Procedure paperwork	164,165
CH004	Chance finds	All Areas	Transgaz will develop a 'chance finds procedure' to define the actions that will be taken should unexpected sites or finds be uncovered during the construction works. This will include liaison with authorized local archaeological representatives.	Contractor	Approval of the Chance Find Procedure	276
CH005	Mapping	All Areas	All previously recorded sites of historical or cultural value will be mapped/reported at the outset of the works and workers will be advised of their sensitivity in advance of works commencing.	Contractor	Audit of maps	218
CH006	Noninvasive methods	All Areas	Should the route have the potential to affect any identified cultural heritage sites, alternative non-invasive routes will be evaluated in alignment with EBRD's performance requirements.	Contractor	Management of Change records	277



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CH007	On-site specialists	All Areas	Qualified archaeological specialists will be retained onsite during construction, and will pay particular attention to activities in the vicinity of any previously recorded historically or culturally important sites	Contractor	Qualifications on archaeologists	218
CH008	Repairs	All Areas	Any damage to any known cultural heritage sites will be repaired or restored.	Contractor	Visual inspection	167
CH009	Stakeholders	All Areas	Transgaz will actively engage with local stakeholders to assess the potential for any material impacts on local cultural heritage (both physical and events). Any such impacts shall be appropriately mitigated and the approaches incorporated into the project ES-MS/CESMPs.	Transgaz	Records of stakeholder meetings/engag ement activity	278, 280
CH010	Training	All Areas	The project workforce will be trained on the recognition of sites with historical or cultural value and the actions to be taken in the event of any sites or finds being encountered.	Contractor, Transgaz	Audit of training records	218



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7.2 Appendix 2: Monitoring Requirements

ID	Activity	Description	Parameters	Location	Standards	Frequency	Tier (1/2/3)
CHM 001	Chance finds Procedure	A minimum of 2 archaeologists at each work front to oversee and assess as to whether any cultural heritage sites are being negatively impacted and to implement the chance finds procedure in the case of any archaeological artifact's discovery	Archaeologic al Findings	Construction Work Front	N/A	Ongoing throughout construction phase	
CHM 002	Reports	Production of a watching brief report by on site archaeologist, including recording physical impacts of tangible cultural heritage and the mitigation used	Archaeologic al Findings	Construction Work Front	N/A	Monthly	
CHM 003	Reports	Production of a report indicating as to whether there has been fencing or demarcation of cultural heritage site	Fencing/De marcation	Construction Work Front	N/A	Monthly	
CHM 004	Reports	Production of a report on assessing issues/compliance in regards access of cultural heritage sites	Route Access	Construction Work Front	N/A	Monthly	



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CHM 005	Reports	Production of report recording number and nature of complaints regarding cultural heritage and resolution	Mitigation Specific	Construction Work Front	N/A	Monthly
CHM 006	Training	Courses of information and recognition of the cultural heritage for all employees and contractor employees, especially in regards to the implementation of the chance finds procedure	Worker training attendance	Construction Work Front	N/A	At the start of the construction works
CHM 007	Compliance Review	A sixth monthly review of the cultural heritage training program, assessing whether the training has been successful in limiting impacts, check on staff participation in the training program	Worker training attendance	Construction Work Front	N/A	Every 6 months during construction phase
CHM 008	Compliance Review	A sixth monthly review of cultural heritage incidents, their impacts, mitigation used and success of mitigation	Mitigation Specific	Construction Work Front	N/A	Every 6 months during construction phase

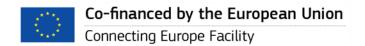


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CHM	Visual	The registered site	No presence	Construction	N/A	Ongoing throughout
009	inspection	archaeologist(s) will conduct routine inspections of site activities in consultation with the Site Construction Manager to assess the potential for chance finds at work sites and any other cultural heritage	of archaeologic al findings/acce ss to cultural site limitations/w	Work Front	N/A	construction phase
		issues that may arise	orks disturbing cultural events			





7.3 Appendix 3: Legislation

Government Ordinance no. 43 / **30.02.2000 republished in 2006,** regulates the legal status of archaeological discoveries and research and protection of archaeological heritage, part of the national cultural heritage.

Order of the Minister of Culture no. 2071/2000 establishes rules of organization of archaeological excavations in Romania. It has been regularly modified and adapted to new situations in which is put the archaeological heritage in Romania because of national interest or joint projects and small-scale building projects. In force and effect on the present Management Plan are now:

Order of the Minister of Culture and Cults no. 2518/2007 regarding the procedure for conducting archaeological research and archaeological discharge.

Order of the Minister of Culture and National Heritage no. 2562/2010 approving the procedure for granting licenses for archaeological research.

Order of the Minister of Culture and National Heritage no. 2178/2011 on the modification of OMCPN no. 2562/2010.

Law no. 422/2001, republished 2007 on protection of historical monuments art. 3, 18, 23 (3), 24, Title III, Chapter 1, Chapter 3, everything VI sanctions.

Order of the Minister of Culture and National Heritage no. 2392/2004, which establishes archaeological standards and procedures.

Code of professional ethics of the archaeologists in Romania, which indicates the behavior of archaeologists.

Law no. 185/2016 on certain measures necessary for the implementation of projects of national importance in gas, especially art. 22 lit. h) -p), which specifies the system of granting work permits and authorizations for incidents of historical monuments, archaeological finds and their protection zones.

Valetta Convention approved in Romania by *Law no. 150/1997* on the protection of archaeological heritage.

Granada Convention approved by Law no. 157/1997 on the protection of Europe's architectural heritage.

Law 451/2002 ratifying the European Landscape Convention adopted in Florence on October 20, 2000.





7.4 Appendix 4: Chance Finds Procedure

1. Overview

Romanian legislation related to incidental discoveries is summarized below.

- By incidental archaeological discovery is understood highlighting of archaeological heritage assets
 due to natural factors or human actions, other that the archaeological attested research (G.D.
 43/2000, republished, art. 2, let. g))
- The archaeological heritage uncovered by chance is delimited around the site of the incidental archaeological discovery depending on the surface of the land actually affected by this discovery, without prejudice to the right to use, exploit and / or start or continue the construction works for the rest area of land subject to the building permit issued (*Law no. 185/2016, art. 22, let. o*).
- Suspension of construction works on the archaeological heritage uncovered by chance does not lead to suspension of the building permit (*Law no. 185/2016, art. 22, let. n*).

Chance highlighting of an archaeological finding or of an area of archaeological potential is expected only during construction. It can be found by:

- Constructor through the staff assigned to the execution, previously trained by the SNTGN Transgaz
 Archaeological Service;
- Archaeologist conducting archaeological supervision of the construction works designated by the decentralized services of the Ministry of Culture and National Identity, according to the contract concluded with SNTGN Transgaz;
- Archaeologist in the SNTGN Transgaz Archaeological Service.
- Since in the perimeter of the construction site will be prohibited the access of unauthorized persons, another discoverer is excluded.

2. SNTGN Transgaz Procedure



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Step 1: The discovery of an archaeological artifact or complex, all construction activities in place of the discovery and its vicinity within a radius of 50 m (according G.O. 43/2000 republished Art. 2 (13) b) will cease immediately.

Step 2: Shall be notified the staff of the constructors, the project supervisor, the BRUA project manager and SNTGN Transgaz Archaeological Service, UAT's leader within whose jurisdiction the discovery was made and the legal representative of the Ministry of Culture and National Identity.

Step 3: Land delimitation of discovery, taking pictures, drawings and topographic coordinates setting.

Step 4: Securing the area in order to prevent any destruction or disappearance of the archaeological complexes / artefacts.

Step 5: Commencement of legal procedures for preventive archaeological research or, where appropriate, evacuation of the artefacts discovered at the museum departmental that has the protocol to take over all the archaeological discoveries in UAT's competence.

i. Responsibilities of the Archaeologists

The archaeologist site or supervisor will act only in the interest of preserving cultural heritage and its safeguarding, without unjustified delays or blockages of the BRUA project execution process.

For this, he will propose strategies to avoid crossing the chance archaeological complexes either by diversion route, either by directed horizontal drilling.

If avoidance of the archaeological complexes is not possible, the evaluation of the discovery will allow predictions regarding the duration of archaeological research, possibility of release of the archaeological land, cost and duration.



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Option 1: Partial/complete avoidance by reworked project/relocation

In case of discovery of any archaeological complex or artefact, after the evaluation and decision archaeologist supervisor, assessed and endorsed by the SNTGN Transgaz Archaeological Service, if by nature of discovery is impossible to release archaeological burden or tailboard, according to Law 185/2016, art. 22, letter I), the initiator of the project assumes the risk of changing the project by making deviations.

Option 2. Application of protection / conservation of the site

This applies in case of negative opinion of the archaeological discharge, which could add to SNTGN Transgaz task to draft a conservation / protection / restoration.

Option 3. Preventive Archaeological Research followed by archaeological discharge

Based on the assessment and on draft preventive archaeological research will be conducted an archaeological excavation that will lead to the evacuation of the archaeological complexes captured and will result in a preventive archaeological research report under which will be issued by the devolved departments of the Ministry of Culture and National Identity an archaeological discharge certificate. This will allow the continuation of the construction works.

The below figure gives a visual representation of how the Chance Finds Procedure should be implemented





Figure 7.1 Chance Finds Procedure

Step 1: Archaeological Discovery



Step 2: Notification of: Project Supervisor, BRUA project manager, Transgaz Archaeological Service and the Ministry of Culture



Step 3: Land delimitation, identification of topographic coordinates, site photography and drawings



Step 4: Securing the site to ensure no damage to artefact



Step 5: Commencement of legal procedures for preventive archaeological research



Option 2: Application of protection / conservation of the site



Option 3: Preventive Archaeological Research followed by archaeological discharge

avoidance by reworked project/relocation

Option 1: Partial/complete

ii. Implementation of SNTGN Transgaz Procedure

Reviewing and revising the Management Plan

The Management Plan will be reviewed at least 6 months during construction and commissioning.

Review of the Management Plan will be the responsibility of SNTGN Transgaz Archaeological Service, which is the custodian of this plan.

Any review of this Management Plan will be forwarded to BRUA Management Unit to ensure for all employees Transgaz, access to the latest version of the plan.