Ministry of Internal Affairs
Department of Emergency Situations
General Inspectorate for Emergency Situations

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)
CONSTANȚA PORT FIREFIGHTING DETACHMENT

MAY 2024

Table of Contents

ABBREVIATIONS

DRM	***Disaster risk management***
EA	Environmental Assessment
EGO	Emergency Governmental Ordinance
EIA	Environmental Impact Assessment
EP	Environmental Permit
EPAC	Environmental Protection Agency Constanța
ESIA	Environmental Social Impact Assessment
ESMF	Environmental Social Management Framework
ESMP	Environmental Social Management Plan
GD	Governmental Decision
GIES	General Inspectorate for Emergency Situations
CPFD	Constanța Port Fire-Fighting Detachment
MoE	Ministry of Environment
MoC	Ministry of Culture
MoIA/DES/GIES	Ministry of Internal Affairs/Department of Emergency Situations/General Inspectorate Emergency Situations
NEAP	National Environmental Action Plan
OJ	Official Journal of Romania
OP	Operational Policy
CESI	Constanța Emergency Situation Inspectorate ,,Dobrogea"
PIU	Project Implementation Unit
WB	World Bank

EXECUTIVE SUMMARY

Background Information

This Environmental and Social Management Plan (ESMP) outlines the environmental and social impacts and mitigation measures related to the retrofitting of existing structures and the functional upgrading of a building serving the **Constanța-Port Fire-Fighting Detachment (CPFD)** and the **Constanța Emergency Situation Inspectorate ,,Dobrogea" (CESI),** one of the sub-project investments that is being financed by the World Bank funded ***Romania Strengthening Disaster Risk Management Project*** (P166302). This sub project investment will involve the retrofitting of existing structures, the functional upgrading of building and an attic extension, that will accommodate improved working conditions for the Constanța Fire-Fighting Detachment (CPFD) and Constanța Emergency Situation Inspectorate ,,Dobrogea" (CESI) staff, energy efficient features and inclusive facilities for disabled persons and women.

This ESMP is based on the Environmental and Social Management Framework (ESMF) that has been prepared for the ***Romania Strengthening Disaster Risk Management Project***. This ESMF outlines procedures and mechanisms that will be triggered by the Project to comply with World Bank Safeguard Policies, including OP/BP4.01 Environmental Assessment, OP/BP 4.11 Physical Cultural Resources, OP/BP 4.12 Involuntary Resettlement and OP/BP on Access to Information and the legislation and normative and legal acts of Romania that govern preparation and implementation of environmental and social protection actions. The ESMF ensures that project activities are environmentally and socially sustainable throughout the project implementation cycle and provide the MoIA-DES-GIES engineering and technical staff and consultants with an appropriate institutional, normative and technical framework for this purpose.

Project objective and activities – Romania Strengthening Disaster Risk Management Project

This project is the first one of a series of investment operations to support long-term physical resilience to disaster and climate risks in Romania and starts with the one of the most urgent needs for a well-functioning DRM system: disaster-resilient emergency response facilities that meet modern standards.

The objective of the proposed project is to enhance the resilience of critical disaster and emergency response infrastructure and to strengthen the government's capacities in disaster risk reduction and climate change adaptation. The project's activities include the following: *Component 1 on Improving seismic resilience of disaster and emergency response infrastructure*, through investments in building infrastructure, structural strengthening and modernization; Component *2 on Enhancing technical capacity for risk reduction investment planning*; *Component 3 on Project Management* will support all costs related with implementing and managing the Project; *and Component 4, the Contingent Emergency Response Component* - an ex-ante mechanism available to the Government to gain rapid access to financing to respond to an eligible crisis or emergency.

Objectives of the Environmental and Social Management Plan

In accordance with the World Bank's environmental and social safeguards, the project will undertake dedicated procedures and operations to ensure the avoidance or mitigation of any negative impacts that are created at the level of the local environment and communities, as a result of of retrofitting and functional upgrading works, as well as the operation of the future facilities. The current Environmental and Social Management Plan (ESMP) reflects the baseline site conditions, the expected outcomes and risks in terms of environment and community, as well as mitigation measures to reduce potential risks.

Objective of the Environmental Assessment (EA)
The objective of the EA is to analyze the potential environmental and social issues related to the proposed Project and to ensure that these aspects are addressed, mitigated and monitored during the project implementation in compliance with WB requirements and Romanian environmental & social legislation.

Sub-project site location and characteristics
The Constanța-Port Fire Fighting Detachment operates in the buildings located in Constanța Municipality, Port precincts Constanța, Gate 5, Constanța County. The land that houses the buildings is identified by cadastral no 223046 according to the land register no. 223046 of Constanța, consisting of 23598 square meters of land. The main section of the operational building that was used by the fire brigade and SMURD personnel was built in 1975-1976.
The Constanța-Port Fire Fighting Detachment (CPFD) is one of the eleven intervention sub-units that are organized within the Constanța County Emergency Inspectorate "Dobrogea" and covers interventions in the Port of Constanta and surroundings, in Constanța County, over an area of 42 square km including 6 districts and southern cliff of Constanta municipality, 1 commune, 2 villages and Port Constanța. The Constanța-Port Fire-Fighting Detachment is serving approximately 90.000 people.

Sub-project Environmental Category. The project was assigned Category B for the purpose of its EA. For such type of project, it is necessary to conduct an EA and prepare an ESMP which should be based on WB and national EA rules and procedures. The sub-project ESMP should be used for the project implementation and its main provisions need to be included in the project documents.

Sub-Project environmental impacts and risks
The overall findings of the ESMP are that short-term negative impacts on air, soil, water, and acoustic environment can be expected, especially during civil works. The environmental issues likely to be associated with the project activities include: noise generation; impact on soil and on water by the construction run-offs; disturbance of traffic during of retrofitting and functional upgrading works; construction dust and wastes; and workers' safety. However, these adverse impacts will be temporary and site specific and could be easily mitigated through implementing adequate avoidance and/or mitigation measures.

Sub-Project social impacts and risks

The main findings of the social screening process and the feasibility study indicate that social risks are low and that the of retrofitting and functional upgrading process will not involve land acquisition or any economic displacement to private properties in the vicinity of the investment objective.

The project is expected to have a mainly positive social impact at the level of the community by: providing a healthy and safe environment for the existing and future members of staff currently working at CPFD, reducing the risks of collapse and human accidents in case of an earthquake, contributing to the climate change adaptation process, providing gender equality and universal access in the newly built facilities, promoting the equal treatment of all current and future members of staff and the general public accessing the future buildings

The two main areas of concern in relation to negative social impacts are related to the relocation process and the working conditions in the temporary site, as well as disturbances created by construction works to neighboring economic operators. These are related to: discomfort of the neighbors due to noise and dust pollution, potential interruptions in utilities for neighboring properties and institutions, at the time of connecting the new buildings to gas, water, sewerage, electricity; health and safety risks related to,

construction works and relocation of the unit's staff, temporary increase of traffic congestion and road accident risks during transport of construction works waste and building materials.

In relation to the planned construction works, impacts related to the health and safety of workers on site, especially considering the increasing share of foreign workers across construction projects, will be addressed once the works are commenced.

Appropriate planning, outreach, consultations with affected parties, grievance redress mechanisms and monitoring procedures are expected to avoid or keep these impacts at a minimum low.

Environmental and Social Management Plan. The sub-project ESMP includes, along the WB safeguards policies applied to the current project, a description of the policies, legal, and administrative framework in place in Romania regarding EA, environmental management, social protection policies, and other technical norms. It contains also: (a) a series of activities targeted at mitigating identified adverse impacts; (b) monitoring plan for ESMP implementation; (c) implementing arrangements as well as a short analysis of project beneficiaries.

Environmental mitigation measures. The ESMP stipulates all adverse environmental impacts associated with the project will be prevented, eliminated, or minimized to an acceptable level. This can be achieved through continuous refinement and effective implementation of the environmental mitigation measures, including careful selection of project interventions that would avoid or minimize potential adverse impacts on the environment of surrounding urban areas; retrofitting extending and functional upgrading works for the building in a way that would prevent as much as possible cutting of trees, destroying of landscape in one involved green square, pollution of air and soil; ensuring labor safety and health impacts during welding operations etc.

Social mitigation measures. The ESMP includes mitigation measures that are meant to avoid or reduce the negative impacts that the project might have on CPFD staff, the activity of the CPFD relocation in other buildings on the site, neighboring properties, and community members in Constanța-Port. In relation to retrofitting, extending and functional upgrading works, the social safeguards team will ensure that planning activities are sensitive to human health and safety aspects. For the purpose of engaging with potentially affected persons, the sub-project will consult with relevant stakeholders, organize public consultations and promote a grievance mechanism dedicated to the affected parties.

Environmental and social monitoring. Environmental and social monitoring during project implementation provides information about the project environmental and social impacts and the effectiveness of mitigation measures. Such information enables the client and the Bank to evaluate the success of mitigation as part of sub-project supervision and allows corrective action to be taken when needed. The monitoring section of the ESMP provides: (a) details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements; and, (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

Environmental and social supervision and reporting. The ESMP implementation will be supervised by both, environmental and social safeguard specialists and PIU staff periodically (as per monitoring schedule), as well as by the WB (during its supervision missions) and by the local environmental guard inspectors.

Furthermore, the safeguards specialists will present semiannually short information about the ESMP implementation as part of the Progress Reports to be presented to the WB by the client.

Integration of the ESMP into project documents. The ESMP provisions will form part of the design documents for the Constanța-Port sub-project and will be included in construction contracts for proposed activities, both into specifications and bills of quantities. Furthermore, the Contractors will be required to include the associated ESMP mitigation and monitoring costs in their financial bids and required to comply with the ESMP provisions while implementing the sub-project activities.

Implementing arrangements.
The PIU's environmental and social experts are directly responsible with the implementation of the ESMP during all phases of the project. Many of the responsibilities under the mitigation measures fall under the responsibility of contractors, meaning that the E&S experts will need to supervise and monitor their implementation. Two Health and Safety experts from GIRG will support the monitoring of H&S aspects on site.
At the level of each sub-project, however, local expertise is needed to support the preparation of the ESMP (e.g. baseline data, press contacts, public consultation organization, etc.) but also during implementation. The following staff members at the level of Constanța Emergency Situations Inspectorate "Dobrogea" are expected to fulfill supporting activities for the PIU E&S experts: public relation officer, grievance secretary, environmental expert and health and safety expert.

Stakeholders Engagement and Information Disclosure
The main stakeholders of the Constanța-Port sub-project are the local community served by unit, current workforce of the CPFD, staff employed in the retrofitting, extending and functional upgrading works, owners and users of the neighboring properties, and institutions in the area.
The project is expected to have limited negative impact on current CPFD staff, related to the relocation conditions during the works, as well as at the level of the neighboring properties. However, noise and dust from construction, and other disturbances that may be experienced by the near-by community in the area, as a result of these works, means that the project should take all the means to engage with these affected parties, in order to understand their concerns, their discomfort and suggestions, and mitigate as much as possible the adverse impacts towards them. The guiding principle of the consultation and engagement process is geared around inclusion practices, through actions that promote equality and nondiscrimination and remove barriers against those who are often excluded from the development process, such as women, children, the poor and disadvantaged, persons with disabilities, minorities, ensuring that the voice of all can be expressed in relation to the benefits and impacts of the investment.

The engagement actions foreseen under this ESMP include public disclosure procedures, public consultations, media coverage and direct interaction with affected parties. The communication and engagement activities will be carried by the PIU social expert, with support from the Constanța ESI communication staff with guidance from the Communication officer within PIU.

Grievance Redress Mechanism
The grievance mechanism is intended to provide all potentially affected parties with a means to express their concerns or make suggestions to the project. The project dedicated grievance mechanism (dedicated email, grievance box at site, process for solving grievances) will be promoted during disclosure and consultation process. In addition to the existing channels at the level of GIES, a grievance and suggestions

box will be installed at the construction site, as well as a grievance board with instructions on how to submit feedback (including complaints, suggestions, queries and compliments), the designated timeframe for when GRM users can expect a response to their feedback. In this respect, although not usually registered, anonymous complaints will be taken into consideration and included in the weekly review by the PIU's social expert.
The project includes a dedicated channel for receiving grievances related to Gender Based Violence that might result from Project activities.

ESMP disclosure and public consultation. This Plan has been subject to a consultation and debate process with all stakeholders. The public consultation meeting took place on 23 May 2024 in hybrid system, at the CPFD headquarters in Constanța and online.

This version has been approved by the World Bank, has been prepared following the completion of the consultation process and includes stakeholders` comments and recommendations, as well as a description of the activities related to community engagement and the publication, dissemination and public consultation of the ESMP.

1. INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This Environmental and Social Management Plan (ESMP) outlines the environmental and social impacts and mitigation measures related to the retrofitting, extending and functional upgrading of the building for the ***Constanța Port Fire-fighting Detachment and Intervention Divers Training Center***, one of the sub-project investments that is being financed by the World Bank funded ***Romania Strengthening Disaster Risk Management Project*** (P166302). This sub project investment will involve the retrofitting, extending and functional upgrading of the current building in order to accommodate improved working conditions for the two units' staff, energy efficient features and inclusive facilities for disabled persons and women.
This ESMP is based on the Environmental and Social Management Framework (ESMF) that has been prepared for the ***Romania Strengthening Disaster Risk Management Project***. This ESMF outlines procedures and mechanisms that will be triggered by the Project to comply with World Bank Safeguard Policies, including OP/BP4.01 Environmental Assessment, OP/BP 4.11 Physical Cultural Resources, OP/BP 4.12 Involuntary Resettlement and OP/BP on Access to Information and with the legislation and normative and legal acts of Romania that govern preparation and implementation of environmental and social protection actions. It will ensure that project activities are environmentally and socially sustainable throughout the project implementation cycle and will provide MoIA-DES-GIES engineering and technical staff and consultants with an appropriate institutional, normative and technical framework for this purpose.

1.2 BACKGROUND

Geophysical and climate-related disasters pose a considerable threat for Romania's poverty alleviation efforts and its sustainable economic growth, with disaster losses growing as climate change and urbanization occur. Romania is prone to a range of natural disasters, particularly earthquakes, floods, droughts, and extreme weather, which have resulted in significant physical, social, and financial impacts over recent decades. Since 1990, 77 severe disaster events were recorded in Romania, including 44 floods, 15 extreme temperature events, 7 storms, 2 earthquakes, 1 drought, and 1 landslide, resulting in over US$3.5 billion of direct damage. Disaster impacts are now increasing for several reasons, including (a) increased exposure of people and economic assets, (b) insufficient funding for risk reduction, and (c) climate change effects.

Romania's vulnerability to natural disasters will be further exacerbated by climate change. Romania's climate is predicted to change considerably over the next 50–100 years. Expected increases in air temperature vary between climate models but increases in the annual average temperature are expected to be in the range of 0.5°C and 1.5°C by 2029, and 2.0°C and 5.0°C by 2099.
In addition to being one of the most flood-prone countries in Europe, Romania is one of the most at-risk countries from earthquakes in the EU, with hundreds of lives lost and tens of thousands of buildings damaged in earthquakes in the last 200 years. In each of the last five centuries, there have been on average, two earthquakes of magnitude 7+, with five earthquakes since 1802 of magnitude above 7.5 Moreover, seismic experts consider a high magnitude earthquake possible. The vulnerability of the Romanian economy to earthquakes is exacerbated by the fact that more than 75 percent of the population (65 percent of the urban population) is in areas with high earthquake hazard, as is 45 percent of all critical transport, energy,

water, and communication services. Furthermore, 60–75 percent of Romania's fixed assets, which contribute to 70–80 percent of the country's gross domestic product (GDP), in seismic zones.

Romania is committed to improving disaster risk management (DRM), with improvements to the country's emergency response system being a national priority. In 2014 an update of the legal framework (Government Emergency Ordinance 1/2014) led to the creation of the Department of Emergency Situations (DES) within the Ministry of Internal Affairs (MoIA), which is in charge of national coordination of emergency prevention and management actions, the provision and coordination of human, material, financial and other resources needed to restore normality, including specialist first aid and emergency medical care in Emergency Care Units and Centers. The DES coordinates the GIES, the General Inspectorate of Aviation (with respect to medical missions) and performs the operational coordination of territorial ambulance services in counties and in Bucharest, Emergency Rooms within the Emergency Hospitals, and of public mountain rescue services.

1.3 PROJECT CONCEPT – ROMANIA DISASTER RISK MANAGEMENT PROJECT

This project is the first one of a series of investment operations to support long-term physical resilience to disaster and climate risks in Romania and starts with the one of the most urgent needs for a well-functioning DRM system: disaster-resilient emergency response facilities that meet modern standards.
The DES and GIES have already been using EU resources very efficiently to improve Romania's emergency response capacity with modern rescue and response equipment and vehicles. The proposed first project will support improving resilience in emergency response infrastructure, primarily in fire, rescue and emergency coordination buildings.
Given Romania`s exposure to geophysical and climate change-induced disasters, a Contingent Emergency Response Component (CERC) is introduced under the AF. The CERC is an ex-ante mechanism available to the Government for rapid access to financing to respond to an eligible crisis or emergency.
Possible response, repair and rehabilitation investments under CERC would consider mitigation and adaptation measures. This component would draw from the uncommitted loan resources from other Project components to cover emergency expenditures.

1.3.1 Project Development Objective

The project's objective is to enhance the resilience of critical disaster and emergency response infrastructure and to strengthen the government's capacities in disaster risk reduction and climate change adaptation.
This will be achieved by improving the safety and resilience of critical disaster and emergency response buildings at GIES level, developing robust data and information for national prioritization of disaster risk reduction and climate change adaptation, and improving the recipient's capacity to respond promptly and effectively in emergencies.

1.3.2 Project components

The Project consists of the following three components:
Component 1: Improving seismic resilience of disaster and emergency response infrastructure. The main objective of Component 1 is to improve the seismic safety and disaster resilience of critical disaster and emergency response buildings through investments in building infrastructure, structural strengthening and modernization. This is especially important given that the buildings were constructed prior to 1990, before the current seismic building codes were established. Such improvements will ensure that these critical

buildings are fully operational before, during and post-disaster for all types of disasters – earthquakes, floods, storms, extreme weather and so forth – by considering the resilience of critical systems such as energy, water and communications. Buildings will also receive energy efficiency improvements, aligned with EU and Romanian regulations which contribute to operational savings and Romania NDC Commitments. Finally, all building renovations achieve universal access and ensure equal access for men and women by the additional of gender appropriate facilities (e.g., bathrooms for women).

Component 2: Enhancing technical capacity for risk reduction investment planning. The objective of this component is to improve the understanding of disaster and climate risks in Romania, with a focus on developing a national risk reduction program and investment strategy to guide future investments in subsequent phases of the Project. This will focus on financing activities that: i) improve hazard, exposure and vulnerability datasets critical to prioritize risk reduction actions, as well as additional risk modeling for all types of natural hazards so as to build on Ro-Risk; ii) forward-looking resilient investment planning for disasters and climate change; iii) development of a package of evidence-based priority investments to support strengthening of existing critical buildings across the country; and iv) development of designs, communications activities, and other activities to enhance the capacity of the Government to implement and manage large-scale retrofitting programs. This activity would also support, within the framework of a long-term investment plan, the commissioning of retrofit designs for investment activities that may potentially be considered in future phases.

Component 3: Project Management. This component will support all costs related with implementing and managing the Project such as the hiring of external specialists and consultants for the GIES project units for technical issues, procurement, financial management, monitoring, and evaluation, etc. The project management component will also support incremental operational expenses of the project management and coordination units.

Component 4: Contingent Emergency Response Component. A Contingent Emergency Response Component (CERC) is an ex-ante mechanism available to the Government to gain rapid access to financing to respond to an eligible crisis or emergency. This component will allow for rapid reallocation of uncommitted project funds towards urgent needs in the event of a natural or man-made disaster, crisis, or public health emergency. Such events may include serious storms, floods, earthquakes, droughts, and disease outbreaks.

1.3.3 Targeted Project Buildings

35 buildings from 23 counties in Romania are being considered for investments in infrastructure and structural strengthening. The map below indicates the locations of the 35 proposed buildings.

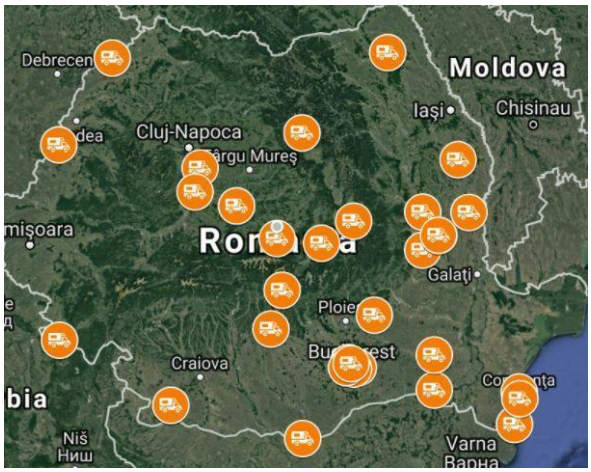

Figure 1 **Location of proposed sites**

These buildings include emergency response headquarters, fire and rescue stations and command centers. The inoperability of these buildings during an earthquake, storm or flood disaster would create a significant gap in the government's response capacity. They represent a small percentage of the total number of public buildings in Romania that are at risk from collapse or serious damage. However, this Project aims to develop the systems, frameworks and data for an eventual larger scale risk reduction program. It will also showcase the benefit of this approach for short-term gain, such as amenity and energy efficiency improvements, and long-term risk reduction and climate adaptation and will provide a very visible sign of the government commitment to, and progress in, risk reduction. This is particularly important given the limited progress in Romania in risk reduction in recent decades.

The structural retrofitting, functional upgrading or demolition and reconstruction, and energy efficiency investments will include the financing of (i) preparation, review and analysis of the Technical Surveys, Energy Efficiency Audits, Feasibility Studies and Technical Designs to obtain permits for (ii) civil works for retrofitting/upgrading or demolition/reconstruction of priority facilities, and (iii) supervision of construction works.

Since this project aims to strengthen, modernize, and make energy-efficient those emergency coordination centers for firefighting and Mobile Emergency Service (SMURD, Emergency Rescue Services) with the highest exposure to earthquakes and highest level of criticality, its direct beneficiaries will be the 1,700 users of the approximately 35 identified buildings (rescue personnel, emergency and disaster management staff, volunteers, and administrative staff). By ensuring that emergency, fire, and rescue services are fully operational and can respond to community needs within their area of responsibility, the project is expected to reach more than 5 million beneficiaries in the community.

The buildings that were included in the project have been selected by using a prioritization framework that included: (1) Seismic hazard, (2) Year of construction of the building (3) Structural system, (4) Importance in the disaster management system (relative score for the proposed buildings). The values of parameters 1, 2, 3 were decided by the UTCB (Technical University of Bucharest) team based on the data sheets of each building. The value of parameter 4 was decided by DES/GIES staff. Buildings exposed to flood or landslide risk were not included in the project.

1.4 RATIONALE FOR PREPARATION OF ESMP

An Environmental and Social Management Plan (ESMP) outlines the mitigation, monitoring and institutional strengthening measures to be taken during project/sub-project implementation and operation phases to avoid or eliminate negative environmental/social impacts. For projects/sub-projects of intermediate environmental risk (Category B) an ESMP may be an effective way of summarizing the activities needed to achieve effective mitigation of negative environmental/social impacts.

1.4.1 Purpose of the ESMP

The Environmental and Social Management Plan (ESMP) is designed to guide the implementation and operation of a project to eliminate or offset adverse environmental and social impacts or to reduce them to acceptable levels; and the actions needed to implement these measures.

Environmental Assessment (EA) for Category "B" projects may also result in a project-specific/site-specific ESMP preparation. However, the impacts of the Constanța-Port sub-project are considered to be mainly site specific.

The ESMP provides a set of procedures through which GIES-PIU will develop and implement environmental, social, health and safety management systems, programs, processes and procedures that will establish a foundation for sound mitigation of adverse impacts, enhancement of positive impacts, institutional responsibilities, indicative costs for mitigation and monitoring of the ESMP implementation.

1.4.2 Objectives of the ESMP

The objective of the ESMP is to ensure that the environmental and social impacts likely to arise from the sub-project activities are addressed and appropriate mitigation measures integrated into sub-project implementation and operation in order to protect human and environmental health. The objective is consistent with the Project's approved ESMF.

The specific objectives of this document include the following:

a. Describe the existing status of the surrounding environment and socio-economic setting of the subproject in Constanța-Port;

b. Identify the environmental and social issues/risks associated with the existing conditions;

c. Develop a plan for mitigating environmental and social risks associated with retrofitting, extending and functional upgrading works and operation of the sub-project in consultation with the relevant public and government agencies;

d. Identify feasible and cost-effective measures that may reduce potentially significant adverse environmental and social impacts to acceptable levels;

e. Identify monitoring objectives and specify the type of monitoring, with linkages to the impacts assessed and the mitigation measures mentioned above

f. Provide a specific description of institutional arrangements: the agencies responsible for carrying out the mitigation and monitoring measures (e.g. for operation, supervision,
enforcement, monitoring of implementation, remedial action, financing reporting, and staff training) and the contractual arrangements for assuring the performance of each implementing entity;

1.4.3 Scope of Work

The ESMP document approach is in accordance with World Bank operational policy OP4.01 – Environmental Assessment which focuses on specific steps and procedures, policy and guidelines in preparing environmental management plan. Also, a number of national and international environmental guidelines are applicable to this sub-project.

The scope of work in the preparation of this ESMP includes:

- Compliance with the World Bank's safeguards policy
- Review the concept of Environmental and Social Management Framework (ESMF)
- Review the existing national environmental and social legal framework;
- Identify those construction and/or rehabilitation activities that may have detrimental impact on the environment and the society in each of sub-project locations;
- Determine the mitigation measures that will need to be taken into consideration, and the procedures for their implementation;
- Define the institutional arrangements for implementing activities to mitigate adverse environmental and social impacts, suppressing or reducing them to acceptable levels;
- Develop a site specific Environmental and Social Management Plan (ESMP) with indicative responsibilities and costs for implementation.

This ESMP outlines environmental impacts and mitigation measures related to the retrofitting, extending and functional upgrading of the building for the Constanța-Port Fire-Fighting Detachment. It is based on the data compiled under the feasibility study and the environmental and social screening process that has identified potential risks related to the retrofitting, extending and functional upgrading process and is expected to be updated based on detailed design documentation and public consultation of this document.

2. LEGAL AND ADMINISTRATIVE FRAMEWORK

NATIONAL LEGAL ENVIRONMENTAL AND SOCIAL REGULATORY FRAMEWORK

This section briefly describes the main existing environmental regulations and standards relevant to the project, and refers to local and national levels institutions that are responsible for issuing permits and licenses and enforcing compliance of environmental and social standards. A more comprehensive list of the legal and institutional framework is provided in Annex 1.

Environmental protection framework

Some of the most important legal acts that regulate environmental protection are found in the table below:

Law	Purpose
Law no. 22/2001 on ratification of the Convention on Environmental Impact Assessment in a Transboundary Context, with subsequent amendments, published in the OJ paragraph (1) no.105 / 01.03.2001 Government Decision no. 918/2002 establishing the framework procedure for environmental impact assessment - repealed by Law no.292 / 2018	Besides the fact that an EIA is carried out to determine the requisite measures to prevent adverse environmental impacts due to the implementation of certain planned objects and types of activities, it also covers to some extent the social aspects. See also the provisions of art.17 of Law no. 292/2018
Law no. 481 of 8 November 2004 regarding the civil protection	Envisions an integrated set of specific activities, measures and organizational, technical, operative, humanitarian and public information tasks, planned, organized and realized in order to prevent and reduce risks of disasters; protection of population; goods and environment against the negative effects of emergency situations.
Decision no. 878/2005 regarding public access to environmental information	The request and the provision of environmental information is made in accordance with the provisions of the Convention on access to information, public participation in decision making and access to justice in environmental matters, signed at Aarhus on June 25, 1998, ratified by Law no. 86/2000, published in the OJ of Romania, Part I, no. 224 of May 22, 2000. Ensures the right of access to environmental information held by or for public authorities and establishes the conditions, basic terms and modalities for exercising this right Transposes the provisions of the Directive of the European Parliament and of the Council no. 2003/4 / EC of 28 January 2003 on public access to environmental information and repealing Council Directive no. 90/313 / EEC, published in the Official Journal of the European Union (OJEU) no. L 41 of February 14, 2003

EGO no. 68/2007 regarding environmental liability with reference to the prevention and repair of environmental damage, published in the OJ of Romania, Part I, no. 446 of June 29, 2007, approved by Law no. 19/2008, with the subsequent modifications and completions (Law 249/2013 for the modification of the EGO 68/2007 regarding the environmental liability with reference to the prevention and remedying of the damage to the environment)	Transposes the provisions of art. 2 paragraph (1) lit. a) of the Directive 2004/35 / EC of the European Parliament and of the Council of 21 April 2004 on environmental liability in relation to the prevention and repair of environmental damage, published in the Official Journal of the European Union (OJEU) no. L.143 of April 30, 2004. It establishes a liability framework for the environment based on the polluter pays principle, in order to prevent the damage caused to the environment.
Law 101/2011 for the prevention and sanctioning of certain facts regarding the degradation of the environment republished 2014, OJ paragraph (1) no.223 of 28.03.2014	Transposes Directive 2008/99 / EC of the European Parliament and of the Council of 19 November 2008 on environmental protection through criminal law, published in the Official Journal of the European Union no. L 328 of December 6, 2008 Annex no. 1 to the law stipulates the List of normative acts that include provisions whose non-compliance represents an infringement of the legal provisions in the field according to art.2 letter a) of the law and which transposes the legal documents provided in Annex A to Directive 2008/99 / EC
Law no. 50/1991 regarding the authorization of the execution of the construction works, republished, with subsequent modifications and completions (2019).	Regulates the construction field in terms of demolition - see art.43 letter a and the modifications approved by Decree by the President of Romania on October 26. 2019
Law no. 10/1995 regarding quality in construction	Regulates the field of construction/demolition
Law no. 292/2018 on the assessment of the impact of certain public and private projects on the environment, published on OJ 1043 of 10.12.2018.	Regulates the environmental impact assessment of public and private projects that can have significant effects on the environment. It is materialized in the environmental agreement that is the basis of the building permit, for the projects provided in Annex no.1 and those provided in Annex no.2 pt.1 letter a), c), e), f) and item 2 - 13
Normative NP 055-88	The demolition of the construction will be done in compliance with the provisions of the "Provisional framework normative on the partial or total demolition of constructions",
Guide on the execution GE 022-1997	Guide on the execution of the demolition works of the concrete constructions and reinforced concrete
GD 856/2002 on the record of waste management and for the approval of	Loading, transport, take-over and treatment - final disposal of waste resulting from construction and demolition work

the list of waste, including hazardous waste	
Government Decision 766/1997 regarding the approval of some quality regulation in construction	Regulates the field of construction/demolition
Law no. 372/2005 regarding the energy performance of buildings	The goal of this law is to promote measures to increase the energy performance of buildings, taking into account the external climatic and location conditions, indoor comfort requirements, optimal level, in terms of costs and energy performance requirements.
GEO no. 92 of 19 August 2021 on the waste regime	Regulates efficient waste management, promoting waste prevention and reduction; regulates the loading, transport, collection and final treatment and disposal of waste resulting from construction and demolition works
GD no. 1.061 / 2008 on the transport of hazardous and non-hazardous waste on the territory of Romania	Establishes the procedure for regulating and controlling the transport of hazardous and non-hazardous waste in Romania

Social impact framework

Unlike the Policies of the World Bank which require a social assessment for investment projects the Romanian legislation does not require it, nor is it a requirement for issuance of any permit. However, the national legal framework provides the basis for addressing the overall socio-economic impact of investments (GD no. 907/2016 regarding the technical and economic documentation for public investments), effects of civil works on neighboring properties (Law no.50/1991 regarding the permitting for execution of construction works and Law no. 287/2009 – The New Civil Code), or the application of quality norms and standards in constructions (Law no. 10/1995 regarding the quality assurance for constructions). **Annex 2** covers the main legal acts in relation to assessing and addressing social impacts associated with the Project, such as provisions for public consultations, assessment of impacts on neighboring properties, community and occupational health and safety, compensations for any losses incurred in the process, etc.

3. WORLD BANK SAFEGUARDS POLICIES

Ten safeguard policies and the additional policy on *Access to Information* represent the framework of safeguard mechanisms applied by the WB for the sake of interests of beneficiaries, clients, stakeholders and that of the Bank. Applying these policies allows avoiding adverse impacts on the environment and people's lives, minimizing and mitigating potential unfavorable environmental and social project impacts. On **Annex 4** the safeguard policies of the World Bank are described at large.

The major document regulating the WB environmental safeguard policy is **OP 4.01 *Environmental Assessment,*** which is one of ten safeguard policies that the projects submitted for the Bank financing are to comply with. Since the project's interventions will include rehabilitation and limited new construction of GIES buildings all over the country and it will not finance any activities with significant or irreversible environmental impacts, the World Bank's operational policy (OP) 4.01 Environmental Assessment (EA) is applicable with classification as Environmental Category "B" – partial assessment[1].

This project also triggers OP/BP 4.11, Physical Cultural Resources to include procedures and responsibilities for managing works in culturally and historically significant areas, as well as any accidentally discovered cultural artifacts to ensure that Cultural Heritage assets will not be adversely affected by World Bank-financed projects.

OP 4.12 on Involuntary resettlement is not triggered as there are no foreseen cases of physical or economic displacement at this subproject. However, if such situation arises (e.g. due to the collapse of a wall during demolition), the WB team will be informed and a decision to trigger the safeguard will be taken in accordance with the situation.

Finally, the World Bank's Access to Information Policy is applicable to this project, including this ESMP. The World Bank recognizes that transparency and accountability are of fundamental importance to increase public awareness and maintain public dialogue about the Bank's development role and mission. It is also critical for enhancing good governance, accountability, and development effectiveness[2].
In case of discrepancy between the requirements of OP 10+1 and those of the national legislation norms, the more stringent ones prevail; in case of conflict between the OP 10+1 and the national environmental requirements, the WB policies will prevail (even if some parts of the project are financed by the Government of Romania or third parties). The legal basis for such approach is the Agreement ratified by the Romanian Parliament, which carries the force of an international treaty and prevails over the national legislative acts. In this case a social impact assessment will be conducted to fulfil the requirements of the WB Safeguard Policies, although not required by the Romanian Law. The major requirements of the environmental policies are stated in the Annex 2.

[1] A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas – including wetlands, forests, grasslands, and other natural habitats are site-specific; few if any of them are irreversible; and in most cases, mitigation measures can be designed more readily. The scope of EA includes the project's potential negative and positive environmental impacts and recommendation of any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

[2] See World Bank Access to Information Policy. 2010. World Bank. http://documents.worldbank.org/curated/en/391361468161959342/The-World-Bank-policy-on-access-to-information

4. CONSTANȚA-PORT SUB-PROJECT DESCRIPTION

4.1 SUB-PROJECT SITE LOCATION AND CHARACTERISTICS

Site Location and Description

The building that is the subject of the Constanța-Port investment sub-project is located in Constanța Municipality, Port Constanța precincts, Gate 5, and houses the headquarters of the Constanța-Port Fire Fighting Detachment and of the Training Center for Intervention Divers. The surface of the land on which the building is located measures 23.598 sqm.

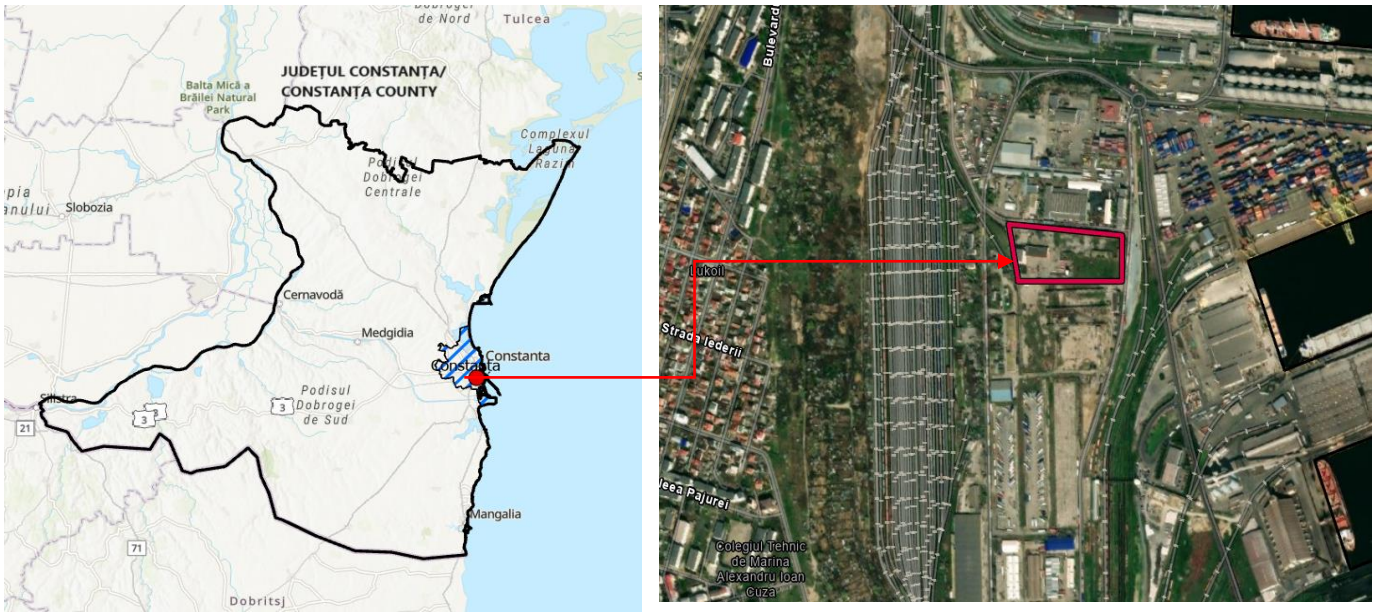

Figure 2 The positioning of CPFD in Constanța-Port Municipality

The site includes eight constructions, as presented in Figure 3:

- Building C1 Administrative building- which is the subject of investment works under the sub-project.
- Building C2 Garage
- C3, C4, C5, C6 Warehouses - currently decommissioned;
- C7 toilets - currently decommissioned;
- C8 former gas station and underground fuel oil storage - currently decommissioned;

The only building that is subject to construction works is the C1 administrative pavilion, which is located in the eastern part of the site, set back about 10 m from the property limit.

The current garage C2 will continue to be used during construction. In order to ensure the continuity of CPFD activity, a temporary modular building will be erected on the south side of the current subunit land plot, in the proximity of the garage. This will include the necessary facilities and amenities for the sub-unit staff and volunteers as well as for the personnel and beneficiaries of the Training Center for Intervention Divers - changing rooms, training room, rest areas, gendered sanitary spaces, etc. and will provide conditions similar to the current ones.

There are no buildings on the marginal land plots that are situated on the property limits.

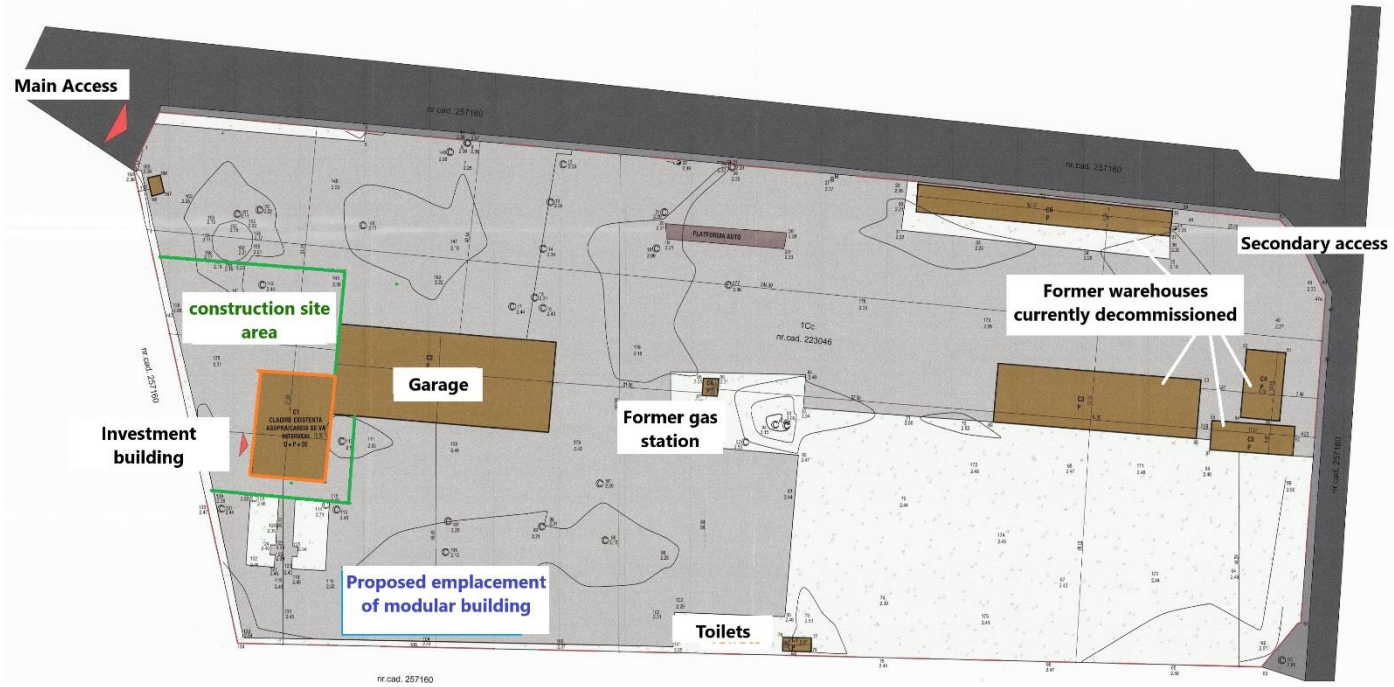

Figure 3 The existing buildings and the proposed positioning of the relocation building and construction area on the land plot of the unit.

The activity of the CPFD

The Constanța-Port Fire Fighting Detachment (CPFD) is one of the eleven intervention sub-units that are organized within the Constanța Emergency Situation Inspectorate "Dobrogea".

At present the unit covers interventions in in the Port of Constanta and surroundings over an area of 42 square km including 6 districts and southern cliff of Constanta municipality, 1 commune, 2 villages and the Constanța Port. In order to reduce the intervention time in the designated area, CPFD include an intervention guard in Chirnogeni.

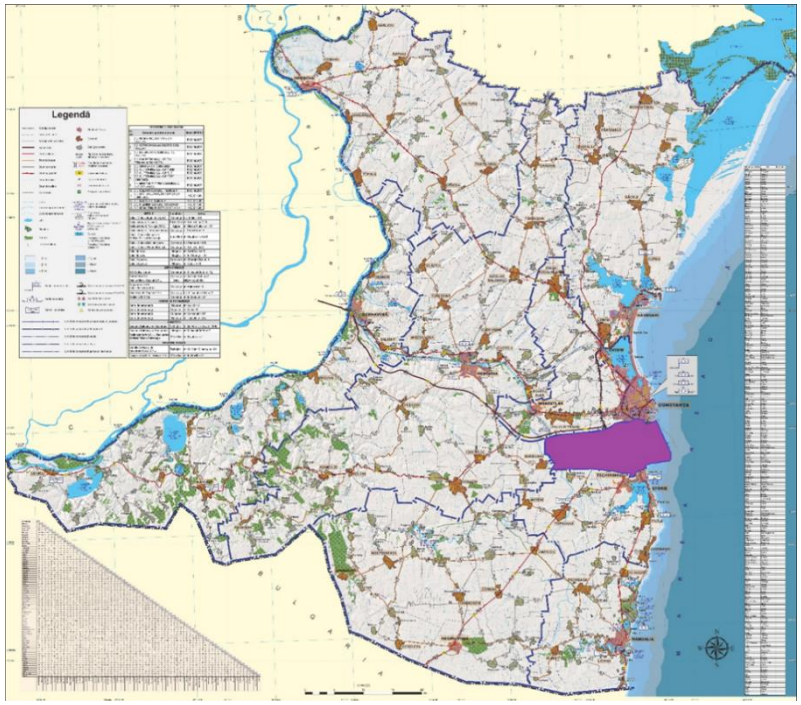

Figure 4 Constanța County map. The intervention area of CPFD is marked with purple

The main activities carried out by the fire subunit consist of protecting the population affected by disasters by providing emergency services consisting of warning, informing, alerting, searching, evacuating, sheltering, rescuing, providing first aid, emergency medical assistance, clearing unexploded ordnance, protecting material goods and cultural heritage values, as well as other measures to protect the population in case of emergency.
In recent years, the CPFD has been involved in an average of 2951 interventions per year, including SMURD interventions, fire interventions, floods, assistance to affected persons, as well as prevention actions, risk assessment visits and simulation exercises. The table below details these interventions per year and the type of actions carried out by Constanța-Port Fire Fighting Detachment.

Table 2. Evolution of interventions at CPFD

Year	SMURD	Emergency situations	TOTAL
2018	2136	198	2334
2019	2247	277	2524
2020	2087	196	2283
2021	2836	877	3713
2022	2643	1256	3899

Currently, a part of the building serves as headquarters of the **Training Center for Intervention Divers**. This unit employes 7 people - six diving trainers, and a female nurse and is the specialized unit in the structure of Constanța Emergency Situations Inspectorate, that provides training sessions for the intervention divers within the county emergency inspectorates countrywide and also specific diving intervention in Constanța, Călărași, Ialomița and Tulcea counties.
Due to the poor conditions offered by the current building the divers participating at the trainings are currently accommodated in the „Meridian" hotel administered by the MoIA, situated in Mamaia resort, near Constanța municipality .

Description of neighboring area

The land is located in Constanța Port in an area with buildings and facilities serving port specific economic activities: logistics - transport, storage, customs brokerage, etc. The land plot is bordered by lands with logistics and industrial facilities used by different economic operators.

Figure 5 Neighboring area of Constanța-Port Fire-Fighting Detachment

The pedestrian and vehicular access is mainly from the North-Western corner of the land plot but there is also a secondary access un the North-Eastern corner, as presented in Fig 3.
The existing building is not listed as a historical monument and is not located in the protection area of a historical monument.

Description of staff working in the two institutions

Currently, the Constanța-Port Fire-Fighting Detachment employs 150 people, out of which 50 are carrying activities at Chirnogeni intervention guard. At the time of writing this document the personnel located in Constanța Port headquarter of the detachment were including eight women, one administrative non-commissioned officer that works in an 8 hours daily schedule and seven intervention staff that are carrying activities on 24 hours shifts; for the women in the subunit gendered rest and sanitary spaces are available in the current building.

At the Constanta Port Fire-Fighting Detachment 5 volunteer contracts are registered but only one man participates regularly at the subunit activities in 24 hours shifts, usually once a month.

The Training Center for Intervention Divers personnel consists of 6 trainers and one female nurse. Also the institution provides accommodation during the two weeks training sessions for groups of maximum 20 persons. Currently there are no female divers joining the emergency situation units.

After retrofitting and functional upgrading of the administrative pavilion, the same sub-units will operate: Constanta - Port Fire Detachment and the Training Center for Intervention Divers.

Relocation of staff during construction works
In order to ensure the continuity of SFD activity, a temporary modular building will be erected on the south side of the current subunit site, in the area near the garage. This will include the necessary facilities and amenities for the sub-unit staff and volunteers and also for the Training Center personnel and beneficiaries - training room, changing rooms, rest areas, gendered sanitary spaces, etc. and will provide similar conditions to the current ones. The divers participating at the trainings offered by the Training Center will continue to be accommodated at the „Meridian” hotel in Mamaia resort, near Constanța village.
The current garage will continue to be used during construction.
The area allocated to the construction activities will be clearly delimited and securely fenced from the rest of the land plot that hosts buildings and facilities used by the subunit, such as the garage and the training facilities of the detachment.
Given that the vehicles and pedestrian access on the land plot will be common for the Contractor, Fire-fighting Detachment and Training Center, a proper planning for the traffic of the construction vehicles will be in place so the activities of the different entities do not interfere at any moment.
Also, the area of the subunit's land allotted to the construction site will be strictly delimited and fenced, so that activities related to construction works do not interfere in any way with those of the Fire-fighters entities.

4.2 CURRENT STATE OF EXISTING BUILDINGS

The building that accommodates the headquarter of CPFD is located at Port Constanța precincts, Gate 5, and the surface of the site measures 23598 sqm.
The building C1 with the destination of administrative pavilion has a built area of 330 m^2 and is composed of Basement, ground floor, and three floors. The administrative pavilion of the Constanta - Port Fire Fighting Detachment was built between 1975 and 1976.

Figure 6 Existing CPFD's C1 administrative building

Considering that both the Fire Station and the Training Centre for Intervention Divers operate in the building, it does not meet the needs of the two units in relation to the regulations in force regarding the

spaces for collective activities or for the service of other specific functions - offices, training activities for own staff and for third parties (e.g. volunteers, economic agents, personnel appointed by local/county public administrations or other public institutions). Also, the building does not provide universal access and does not have sufficient and adequate facilities for female staff.

Following an expert assessment by an authorized technical expert, the building was classified in seismic risk class II which includes buildings with a risk of suffering structural damage under the effect of the design earthquake. The retrofitting and functional upgrading of the building are proposed to ensure the safety of users.

4.3 PROPOSED RETROFITTING, AND FUNCTIONAL UPGRADING WORKS

The objective to be achieved following the investment is to ensure optimal conditions for the daily work of Constanta ESI staff and intervention personnel from the Constanta Port firefighting Detachment. At the same time, conditions will be created for the preparation of the population in the area in order to ensure an effective responsibility for different types of risks according to the needs generated by emergency situations.

Fig.9 Proposed design of the new building

The objective to be achieved as a result of the investment is to ensure the optimum conditions for the daily activities for the intervention personnel of the Constanta Port firefighting detachment.
The optimal spaces will be ensured for carrying out the requested activities, works materialized by new distribution of the existing spaces on the existing construction, upgrading the main and the secondary accesses.
In addition, the building will correspond to the latest energy efficiency requirements and will be equipped to provide high standards for Constanța ESI staff and for the firefighters and SMURD staff operating in the facility.

The retrofitting design takes into account the seismic risk in the area and the materials and construction methods are in line with national and European standards in relation to health and safety, energy efficiency and sustainability. Solar thermal panels mounted on the roof of the building will support the gas heating system of the building, considerably reducing the CO2 footprint of the building. Other equipment that will be incorporated in the building will be selected based on their reduced energy consumption.

In addition, the building will be equipped to provide high standards for the firefighters and SMURD staff operating in the facility. The building will accommodate the Constanta Port Firefighting Detachment, an Integrated Dispatch for Ambulance, Special Communication services, with an important role in the management of emergency situation at the local level. and the headquarter of the Intervention Diver Training Center with adequate spaces for the trainers and diving intervention personnel participating at the trainings,
Also, the building will be equipped with access ramps and toilets for people with disabilities, gym, separate bathrooms, changing rooms and dormitories for women, providing universal access in the upgraded facilities, gender equity and equal treatment of all current and future members of staff.
The seizure of utilities prior to the dismantling process, and the reconnection for the construction site and for the retrofitted buildings will be made with assistance from utility companies in Constanta County and Maritim Ports Administration. No disruptions are expected to affect neighboring properties.
There are no associated risks deriving from retrofitting works that could impact the neighboring buildings.
The proposed works, technical details, facilities and utilities of the building are detailed at large in Annex 7.

4.5 TEMPORARY FACILITIES REQUIRED DURING CONSTRUCTION PHASE

The works of retrofitting and functional upgrading activities will require temporary facilities to be erected and installed on the site. Installation of these temporary facilities will enable various site functions to be achieved, including storage of construction materials, office administration and amenities and provision of site security.
The construction site will be installed and include the installation of the containers to serve as offices, changing rooms for site workers and as deposit for equipment. Portable toilets will be installed on the site and their content will be constantly emptied by the supplier. A truck washing platform has been designated to clean the wheels of trucks going out of the construction site during retrofitting/construction works. The technical design documentation includes all the standards and requirements of the Contractor to comply with health and safety on site, including trainings, provision of protective gear, identification of risks and mitigation measures, clear division of tasks on site, etc.

A grievance mechanism board and letter box will be installed at the entrance of the site and workers will be informed about the possibility to contact the project team or to submit an anonymous grievance in relation to working conditions and health and safety provisions on site.

Temporary facilities required during construction works might include items such as a batch plant, bulk materials laydown yard, vehicle wash bays, decontamination facilities for vehicles, fencing and security access control points, contamination control points, portable toilets, waste water utilities, bulk material stockpile areas, demountable offices and lighting.

5. ENVIRONMENTAL AND SOCIAL IMPACTS AND RISK ASSESSMENT OF SUB-PROJECT ACTIVITIES

5.1 PROJECT ENVIRONMENTAL IMPACTS AND RISKS

The analysis of environmental impacts involves that is expected to have a net positive environmental impact by reducing the risk of damage and collapse of the selected buildings as a result of earthquakes.

The potential adverse environmental impacts of project implementation will be limited and temporary, and are mainly related to construction works which may include:

- increased pollution due to waste resulted from retrofitting and functional upgrading activities.;
- increased noise and dust level during retrofitting, extending and functional upgrading works
- generation of dust, noise, and vibration due to the movement of construction vehicles and machinery;
- risks of water, soil and subsoil pollution due to improper disposal of construction waste, asbestos and asbestos-containing materials, or minor operational or accidental spills of fuel and lubricants from the construction machinery;
- increase in traffic during construction which may impact community;
- impact on workers and community health and safety during construction activities;
- improper reinstatement of construction sites upon completion of works;
- unsafe practices during operation of the building
- cutting down trees and other local vegetation

The risks listed above are anticipated in advance of project implementation and direct mitigation activities will be designed, implemented, monitored and evaluated during pre-construction, construction and operation in a way consistent with national legislation, WB OPs and international good practice.

Use of construction materials that are hazardous to human health (e.g., asbestos, asbestos contained materials) will not be permitted. Asbestos-contained materials waste will be collected, transported and finally disposed by applying special protective measures in accordance with the hazardous waste handling standards.

5.2 PROJECT SOCIAL IMPACTS AND RISKS

Socio-economic context

The municipality of Constanța is located in Constanța county in the extreme south-east of Romania, on the Black Sea coast.

According to the census in 2021 the population of the locality is 263.688 inhabitants, with a majority of Romanians (76,47%) and a minority of Tatars (2.58%) and Turks (1.66%). For 17,82% the ethnicity is unknown.

Social Impact Assessment of the Sub-Project

The analysis of social impacts involves the benefits and risks at the level of the local community served by Constanța-Port Fire-Fighting Detachment, current workforce of the unit, staff employed in the retrofitting, extending and functional upgrading phases, neighboring properties, institutions and persons. The main

finding of the screening process and the feasibility study involves the conclusion that there will be no need for land acquisition or using private properties in the construction process.
The project is expected to mainly have a positive social impact by:

- Providing a safe and healthy environment for the 150 members of staff and 1 volunteer currently working at Constanța-Port Fire-Fighting Detachment (and for future employees);
- Reducing the risks of collapse and human accidents in case of an earthquake, thus providing emergency services to the community in such a situation;
- Contributing to the climate change adaptation process, by reducing the pressure on natural resources and creating an example of good practice in terms of energy efficient public buildings;
- Providing gender equality and universal access in the newly built facilities, promoting the equal treatment of all current and future members of staff and citizens accessing the building;

In relation to the potential negative impacts and risks identified at this stage, these are related to:

- Discomfort of the neighboring properties and the relocated CPFD on the same site, due to noise and dust pollution;
- Potential interruptions in utilities for neighboring properties, at the time of connecting the new buildings to gas, water, sewerage, electricity.
- Potential shortages of the CPFD service delivery during temporary relocation process;
- Health and safety risks related to the working conditions at the temporary relocation sites, the in-house relocation of the CPFD staff;
- Temporary increase of traffic congestion and road accident risks during transport of retrofitting waste and building materials;
- Increased pollution from construction and dismantling waste

The only main areas of concern in relation to social negative impacts is related to the relocation process for CPFD staff, in the temporary building on the same land plot. Appropriate planning, monitoring, consultations with affected parties and a grievance procedure are expected to keep this impact at a minimum low.

6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

As part of the site specific ESMP, all project-supported activities for retrofitting and functional upgrading of the Constanța ESI and Constanța-Port Fire-Fighting Detachment will be subjected to a site-specific environmental screening and review process, according to the requirements of the Environmental Protection Law. In accordance with the national legislation, the local environmental authorities have the obligation to submit an environmental permit (Accord) for the anticipated civil works. This process is based on the mitigation of site-specific environmental impacts and uses a standardized appraisal format that includes, but is not limited to the reviewing of:

a) current environmental problems on respective site (soil erosion, water supply contamination, etc.);
b) potential environmental impacts, if any, due to the project (disposal of waste from construction, waste handling and disposal, construction noise and dust etc.);
c) any cultural assets that might be found in the place of construction, taking into account that the building is located in the old town, and
d) potential pedestrian and vehicle traffic disruption and associated public safety risks.

A social screening process also included site-visits to collect information on potentially affected parties, proximity to public institutions, relocation options for the staff, community engagement.

In this context, specific measures to prevent and minimize the negative impact of planned project activities have been developed and proposed for implementation (see **Annex 8**). It should be noted, that in order to make the proposed measures more effective, the potential impact and appropriate prevention and minimization actions ***will be regularly updated*** during the implementation of the sub-project.

6.1 ENVIRONMENTAL GUIDELINES

The Environmental Guidelines section details the specifics to be addressed during retrofitting and functional upgrading works on the existing buildings and cover the handling of construction debris generated, selection of construction materials and construction methods with limited impact on the environment and energy saving methods. (Annex.1)

The Site

The site-specific screening and review have carefully considered the following issues:

- Dust and noise due to the retrofitting and functional upgrade activities;
- Dumping of construction wastes accidental spillage of machine oil, lubricants etc.;
- Inadequate handling of hazardous materials such as asbestos and paint from transportation and handling of construction works will be minimized by water and other means such as enclosure of construction sites.
- To reduce noise, construction will be restricted during certain hours.
- All debris, construction and wood waste will be stored within the work site.
- Wood waste will be stored separately and arranged to be recycled instead of disposing it.
- Open burning and illegal dumping will not be permitted.
- Proper sites for earth/clay and sand disposal will be determined and prior approval from relevant authority for disposal will be obtained.

- Stock piling of construction debris on site will be avoided and waste will be disposed of on a regular basis at the authorized government dumping ground. Debris chutes will be provided to transfer debris from higher floors to the ground.

Retrofitting work

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully stripped and the debris should be sorted and removed as directed by the ESMP. All valuable materials (doors, windows, sanitary fixtures etc.) should be carefully dismantled and transported to the storage area assigned for the purpose. Valuable materials should be recycled within the project or sold.

Selection of Construction Materials and Construction Methods

Environmentally sound goods and services should be selected. Priority should be given to products meeting standards for recognized international or national symbols. Traditionally well-tried materials and methods should be chosen before new and unknown techniques. Construction sites should be fenced off in order to prevent entry of public, and general safety measures would be imposed. Temporary inconveniences due to construction works should be minimized through planning and coordination with contractors, neighbors and authorities. In densely populated areas, noisy or vibration generating activities should be strictly confined to the daytime.

Waste management

The handling of construction debris will be according to local and national regulations, and as specified in the ESMP, and described above under site considerations. These regulations are developed and enforceable in Romania. Monitoring will be the responsibility of site supervisors working for the GIES-PIU. For asbestos and asbestos-containing materials please see **Annex 6** In all the specific cases for which contractors should demolish or remove asbestos-containing materials, these categories of works should be done only with qualified personnel and fully in line with the specific legislation related to this specific field.

The main materials resulting from construction retrofitting operations are waste, debris, dust, earth with stone. These do not pose any particular problems in terms of contamination potential.
This waste will be transported to a recycling facility and ultimately to the city's authorized landfill.
Household and similar waste will be collected inside the site organization at waste collection points provided with bin containers equipped with properly labeled containers. Periodically they will be transported safely to a waste collecting zone.
Steel waste will be collected in properly labeled containers and stored temporarily in the storage space organized at the site (e.g.: hall/barracks for storage waste resulting from the retrofitting of buildings with a temporary construction regime during the existence of the site to be dismantled after completion of the retrofitting/reconstruction works. Sizing hall/barracks will take into account: the area to be affected by the site organization, data about the type and quantity of waste that will result from the work of retrofitting based on documentary study/site visit/other supplementary activities aimed at ensuring data quality and the flow of recovery/reuse/disposal of the resulting waste respectively).

Wood waste will be selected, collected in properly labeled in containers and removed/reused.

Paper waste and office-specific waste will be collected in properly labeled containers and stored separately for recovery in the storage space organized at the site (e.g.: hall/barracks for storage waste resulting from the retrofitting of buildings with a temporary construction regime during the existence of the site to be dismantled after completion of the retrofitting/reconstruction works.

Materials with particularly high toxic potential, will be stored properly will be properly stored in recipients/containers/barrels inscribed according to the nature of the waste, in the storage space organized at the site (e.g.: hall/barracks storage waste resulting from retrofitting of buildings with a temporary construction regime during the existence of the site to be dismantled after the completion of retrofitting works.

The management of used oils will require to be collected separately from other categories of waste, by categories/types of oils (e.g. lubricating, hydraulic, etc.), in sealed containers/barrels, resistant to mechanical or thermal shock, properly labeled, stored in a suitable space arranged in the enclosure of the site, fenced and secured, to prevent uncontrolled leaks and transported to the collection points.

Paints, diluents, and other dangerous substances will be stored in tightly sealed containers/barrels, mechanical or thermal shock resistant, properly labeled, stored in a suitable space arranged in the enclosure of the site, fenced/concrete and CIP secured, to prevent uncontrolled leaks or possible fires and handled with maximum safety by trained personnel for loading/transporting/unloading containers/barrels in safe conditions and for intervention in case of accidents.

NOTE: The evidence of the waste resulting from demolition/construction should be made based on a waste management plan from retrofitting and functional upgrading activities, prepared by the contractor, which will highlight for the activities carried out the quantities of waste generated for each type of generated waste, identified according to Annex 2 of the GD no. 856/2002.
The transport of hazardous and non-hazardous waste generated will be carried out according to the provisions of GD no. 1061/2008 regarding the transport of hazardous and non-hazardous waste on the territory of Romania.

6.2. OCCUPATIONAL HEALTH AND SAFETY

Occupational health and safety hazards may occur during construction, maintenance, and operation of new facilities and equipment, and must be carefully managed.

The Contractor will develop a Method Statement before starting construction works on site, and this document will be approved by the Employer.
Many workers will be exposed to occupational health and safety hazards, primarily including, but not limited to:

- Lack of awareness on occupational health and safety requirements such as the use of personal protective equipment (PPE) and safe workplace practices;
- Electrical works;
- Exposure to chemicals (as paints, solvents, lubricants, and fuels);
- Traffic accidents;
- Excavations hazards;
- Lifting of heavy structures;

- Exposure to construction airborne agents (dust, silica and asbestos);
- Welding hazards (fumes, burns and radiation).

In particular, prevention and control measures must ensure that only trained and certified workers access the facilities or any area that could present occupational health and safety hazards, with the necessary safety devices and respect for minimum setback distances.

7. ENVIRONMENTAL AND SOCIAL MONITORING PLAN

The mitigation measures proposed in ESMP will be carried out by the responsible units during the implementation of the sub-project. In order to verify the proper implementation of these measures, environmental monitoring is essential.

The monitoring will:

i) track and report on the effectiveness of the mitigation measures and responsibilities identified and achieved;
ii) inform about the need to extend, increase or adjust mitigation measures;
iii) identify any new areas potentially exposed to impact that have not been considered in the ESMP.

The monitoring will begin with the start of construction work and implemented in all phases of the project. A summary of the Environmental and Social Monitoring Plan is presented in **Annex 9.**

It should be noted that this ESMP is a general document for this sub-project and the implementer will take it into account and will develop detailed monitoring plans for the specific interventions of the project according to the detailed planning of the project (ref. **Annex 9)**.

8. IMPLEMENTATION ARRANGEMENTS

8.1. INSTITUTIONAL ARRANGEMENT FOR PROJECT IMPLEMENTATION

The General Inspectorate for Emergency Situations (GIES) acts as the Project Implementing Agency. The PIU within the GIES is responsible for all Project implementation activities. PIU will be assisted in the process by a TD & TA Consultant, Contractor for Works, specialized technical verifiers (including environmental verifiers), site managers, contract managers, who will be contracted in different phases of the Project. In relation to collaborating with other institutional stakeholders, the PIU will maintain a collaborative relationship with the General Logistics Directorate within the MoIA, responsible for issuing the Urban Certificate and the Building Permits.

Role of the Technical Design & Technical Assistance Consultant

At the time of writing this report, GIES was in the process of procuring the services of a Consultant who would provide the Technical Design documentation for the retrofitting and functional upgrading activities and Technical Assistance during works execution. In more detail, the Consultant will be responsible with the development of the Inception Report, of the Documentation for obtaining the Building Permit, of the development of the Technical Design and of the Execution Detail Design for the proposed construction, and of providing the Technical Assistance Services for the works execution, as well as preparing the necessary documentations for obtaining the operational permits, and other necessary services in order to achieve the investment objective at CPFD. In relation to the ESMP, the Consultant will:

- Provides the supervision of the quality assurance of works, including, according to Law no. 10/1995 – provisions related to human hygiene & health measures, environment safety and protection regulations (under Requirement D) but also noise protection measures (under requirement F)
- Provision of detailed data on sources of water and interference with existing networks (potential shortages in utility provision in the area);
- The worksite organization (including details on waste management, sewerage during works, toilets, dining and resting spaces, health and safety signage, grievance board, project information board);
- Provide the specifications for the works, where ESMP provisions should be included;

The PIU E&S experts will be involved in regular meetings with the Consultant, and will participate in site visits together, review the monthly reports submitted by the Consultant in relation to ESMP provisions, and update the ESMP based on details and specifications that will have surfaced during the technical design phase. The public consultation is also planned at around 70 days into the Consultant's contract, before the submission of Phase I and II of the assignment, allowing the participation of the public in the design and planning process.

Role of the Environmental and social Specialists

Environmental and Social Specialists within GIES will be responsible for full coordination and supervision of the Environmental and Social plans and risk mitigation measures undertaken within the project. The Specialists will work in close coordination with supervision project coordination staff and technical staff in courts and will:

a) disseminate existing environmental and social management guidelines and develop guidelines in relation to issues not covered by the existing regulations, in line with the Bank and EU standards for implementation, monitoring and evaluation of mitigation measures;
b) ensure that procurement processes for construction works and supply of equipment include reference to appropriate guidelines and standards;
c) conduct periodic site visits to inspect and approve plans and monitor compliance.
d) ensure the uniformity in all activities related to the preparation and implementation of Environmental and Social Management Plans
e) Keeps permanent contact with Environmental and Social safeguards specialists of the World Bank, and asks for advice on any problem that requires guidance regarding the activity in the field.

In particular the Environmental Specialist will:
a) perform activities related to compliance of environmental activities as specified in the Annex 8;
b) prepare activity plans for Environmental impact mitigation of the construction activity outcomes and the Environmental monitoring plan;
c) ensure that the systematic supervision in relation with qualitative and quantitative indicators and perform analysis for underlining the achievements and the evolution of the implementation process is done by Contractors according to the monitoring plan;
d) prepare periodical reports for the World Bank and Government Agencies;
e) coordinate environmental training for staff, designers and local contractors, related to responsibilities on environmental protection.

In particular the Social Specialist will:

a) Ensure that the terms of reference for any design consultancy services incorporate the World Bank safeguards and corporate requirements including public disclosure and public consultation on the results of environmental and social impact assessments, citizen engagement and gender aspects;
b) Responsible for carrying out activities related to social safeguards within the framework of component 1 of the project in accordance with the provisions of the loan agreement;
c) Manages the GRM, as well as communications, consultations and engagement with direct beneficiaries and the wider public with the construction of buildings;
d) Inform the project manager and deputy project manager whenever there is a deviation from the pre-established program, in order to review the work plans;

Role of the H&S Specialist
a) coordinates the activity of Designated Responsible (DR) within the County Emergency Inspectorates;
b) centralizes the control reports drawn up by the DRs following the checks carried out and forwards them to the PIU Project Officer;
c) analyses the issues raised by the checks carried out on the sites and proposes measures to improve the activity;
d) participates in the investigation/coordinates, where appropriate, the investigation of events occurring on the site of construction sites involving IGSU workers;
e) carries out planned or unannounced checks on the application of occupational safety and health provisions on construction sites, as required by national and European legislation and conventions.

Role of the Contractor

The contractor shall be responsible for implementing the provisions under the ESMP. The final version of the ESMP, with updated actions based on the technical design and specifications provided by the TD&TA Consultant, will be approved after the contribution of the public, collected during public disclosure and consultations and organized during the technical design phase. Once the contract is signed, with the ESMP acting as an annex, the Contractor can bring contributions to the plan, following negotiations with the E&S experts within the PIU and the TD&TA Consultant.

Contractor ESMP (C-ESMP)

The construction contractor will prepare his own ESMP based on the framework of the approved site-specific ESMP. The C-ESMP will be reviewed and approved by the Supervising Engineer and will form part of the contractual obligations. The C-ESMP will be specific to the contracted services but will consider the impact of these services at the construction site.

Occupational Health and Safety at Work

The contractor has the obligation to ensure all necessary protective equipment and materials, and the workers have the obligation to use all such protective equipment - helmets, gloves, goggles where appropriate and work uniforms. All these minimum protection rules, doubled by avoiding over-exhaustion of workers, prevent ergonomic injuries and other work-related accidents resulting from repetitive, excessive and manual handling of building materials.

Recommendations for their prevention and control include knowledge of the most common causes of wounds in construction and decommissioning by:

- Training of workers in the lifting and handling of materials, techniques in construction and decommissioning projects, including placement of weight limits over which mechanical assistance is required.
- Workplace site planning to minimize the need for manual heavy load transfer.
- Selecting tools and designing workstations that reduce the need for strength.
- Implement administrative controls in work processes, such as job rotation and rest breaks.

Contractor H&SP and ERP

Contractor will be required to produce a Health and Safety Plan (H&SP) and an Emergency Response Plan (ERP) to protect his employees during the works he shall undertake. The C-EMP shall be considered when preparing contractor's H&SP and ERP. Environmental controls and exposure levels associated with worker protection shall be included in the contractor's ESMP. Work practices required by the ESMP are not intended to compromise health and safety in any way. Each H&SP and ERP will be approved by the Supervising Engineer prior to the contractor commencing works to ensure adequate health and safety controls and procedures have been developed, that are appropriate to the works to be undertaken.

8.2 INSTITUTIONAL ARRANGEMENTS FOR ESMP IMPLEMENTATION

The PIU's environmental and social experts are directly responsible with the implementation of the ESMP during all phases of the project. Many of the responsibilities under the mitigation measures fall under the responsibility of contractors, meaning that the E&S experts will need to supervise and monitor their implementation, either directly (e.g. site visits, monitoring visits) or through contracted third parties, such as the TD&TA Consultant or the Environmental Verifiers, responsible for quantitative data collection and processing in terms of environmental indicators (e.g. air pollution, dust, noise, etc.).

At the level of each sub-project, however, local expertise is needed to support the preparation of the ESMP (e.g. baseline data, current status of environmental compliance, press contacts, public consultation organization, etc.) but also during implementation. The following staff members at the level of Emergency Situations Inspectorates, in the counties where sub-projects are located, are expected to fulfill the following roles (the roles and specific tasks will be further detailed and subject to GIES approval in the detail design phase):

- **Environmental responsible** at the level of County ESI together with GIES representatives will support PIU with legislative updates and good environmental practices
- **Health and Safety responsible** review, evaluate, and analyze work environments and monitor programs and procedures to control, eliminate, and prevent disease or injury caused construction activities.
- **Public Relation officer** at the level of Constanța ESI, will coordinate with the PIU social expert the PIU communication expert to support press releases, public consultations, stakeholder mapping, press exposure in relation to the project, etc.
- **Grievance handler** at the level of Constanța ESI will support the PIU expert with reporting grievances collected at the level of Constanța ESI in relation to the project, and will fill weekly reports, when the case applies, with grievances and their status.
- In relation to **social expertise** the responsibilities will be fulfilled by either technical coordinator, environmental or health and safety specialist

8.3 CAPACITY BUILDING AND TRAINING

Capacity building programs will be conducted to all PIU members of staff on the provisions of the ESMP, in order to integrate the requirements and mitigation measures into procurement, communication, engineering and other project management functions. The ESMP will also need to be disseminated to the TD&TA Consultant team, County ESI management and operational team with responsibilities in the implementation of the PIU, the Contractor team and the Environmental Verification team. Other trainings may be included in a later stage in the Training Program.

In relation to the capacity of the E&S PIU staff members, coaching and training will be provided by the WB through E&S consultants involved in the development of the ESMF for the entire SDRM project. The table below indicates the content of trainings, participants, trainers and planned schedule.

Contents	Participants	Trainer	Schedule
ESMP provisions and responsibilities within GIES/PIU/County ESI, timing of mitigation actions, monitoring tools, procedural and operational steps, communication channels	Environmental, H&S, PR staff members from County ESI	PIU E&S Experts	At the time of signing the contract with the Contractor for works
ESMP Provisions, mitigation measures, legal vs. WB requirements, reporting	TD & TA Consultant Team Contractor Team	PIU E&S Experts	At early stage of detail design phase (1 session) At early stage of works contract (1 session)

process, monitoring visits, documentation requests, data collection, communication channels, responsibilities			
ESMP provision, Environmental indicators to be monitored, frequency and schedule, reporting format and tools, communication channels, responsibilities	Authorized Environmental Firm for carrying out monitoring activities Contractor	PIU Environmental Expert	At early stage of works contract (1 session)

9. MONITORING, SUPERVISION AND REPORTING

Based on the actions that are presented under the E&S management and monitoring plans, the safeguard specialists will keep track of direct and indirect activities that have an impact on the identified social risks related to the retrofitting, functional upgrading with new attic and operational phases of the investment.
The ESMP implementation will be supervised by social safeguard specialist and PIU's staff periodically (as per monitoring schedule), as well as by the WB (during its supervision missions) and by the local environmental guard inspectors. Furthermore, the social and environmental safeguard specialists will present semiannually short information about the ESMP implementation as part of the Progress Reports to be presented to the WB by the client.

Integration of the ESMP into project documents. The ESMP provisions will form part of the design documents for the Constanța-Port sub-project and will be included in construction contracts for proposed activities, both into specifications and bills of quantities. Furthermore, the Contractors will be required to include the associated to ESMP mitigation and monitoring costs in their financial bids and required to comply with the ESMP provisions while implementing the sub-project activities.

10. STAKEHOLDERS ENGAGEMENT AND INFORMATION DISCLOSURE

10.1. STAKEHOLDER MAPPING

The project is expected to have limited negative impact on current CPFD staff and on neighboring properties. However, noise and dust from construction and other disturbances that may be experienced by the local community in Constanța-Port , as a result of to the retrofitting, functional upgrading with new attic works, means that the project affects the lives of others and it should take all the means to engage with these affected parties, in order to understand their concerns, their discomfort and suggestions, and mitigate as much as possible the adverse impacts towards them. In relation to the staff and volunteers within the CPFD will be affected by temporary relocation and disturbances during construction works.
The stakeholders identified are listed below.

- National Company Maritim Ports Administration S.A. Constanta
- Representatives of economic operators using the facilities near the site:
    - Linde Gas Romania
    - Swad wash SRL
    - The Green Seas
    - Vulmar Pro - tyre vulcanization
    - Tomini Trading SRL
- Staff members of CPFD and volunteer;
- Media outlets in Constanța-Port, Constanța County Environmental Agency, Environmental Guard
- General public - the 90 000 persons that are served by the CPFD,
- Employees of the consultants and contractors carrying tasks on site,
- Local and county NGOs on social development and environment.

Disclosure to stakeholders
GIES will disclose project information to allow stakeholders to understand the environmental risks and impacts of the project, including the proposed mitigation measures, as well. GIES will provide stakeholders with access to the following information that provide environmental interest:

- The purpose, nature, and scale of the project;
- The duration of proposed project activities;
- Potential risks and impacts of the project on local environment, and the proposals for mitigating these potential risks and impacts
- The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate;

While the main responsibility of stakeholder engagement is with the PIU Social expert, the PIU Environmental specialist will be expected to provide inputs to ensure an elaborate identification, analysis and engagement of relevant stakeholders, as well as presentation of the mitigation measures related to environmental aspects during public consultation process.

10.2. STAKEHOLDER ENGAGEMENT

The engagement actions foreseen under this ESMP include public disclosure procedures, public consultations, media coverage and direct interaction with affected parties. The communication actions will be shared by the PIU social expert, together with the PIU's communication officer, and with the support of the Constanța ESI communication staff, under the responsibility of the Communication officer within PIU. These will include:

- Press Releases on project milestones, including the ESMP provisions and results of monitoring efforts related to environmental and social compliance (e.g., public consultations) – at least two press releases;
- Website section on the GIES website with project information and ESMP report.

In relation to project affected persons, the PIU social expert will coordinate engagement activities or will oversee the ones performed by others, including, but not limited to the following:

- Information disclosure and consultations on project outcomes, duration and relocation details to the staff members at Constanța Emergency Situation Inspectorate and Constanța-Port Fire-Fighting Section (via the existing WhatsApp group, flyers, documentary resources);
- Discussions with workers on site, when constructions will be commenced, specifically with foreign workers and those accommodated on site, to assess any risks related to the health and safety provisions of the Project.
- Engagement activities with the immediate neighbors and institutions in vicinity of the site at the beginning, during and after the completion of the construction works.
- Public consultation with the affected parties and other interested parties;
- Direct conversations with neighbors of the construction site, to collect their views on the retrofitting and functional upgrading works and to encourage them to provide feedback as it proved to be the most effective way to involve this category of stakeholders in the consultation process;
- Communication with the institutions involved in reporting and mitigating safeguards issues related to the subproject.
- Facilitation Meetings within the PIU and the local sub-project team on the outcomes of engagement actions: grievances, public consultations, citizens interactions, etc.
- Project and Grievance Board on site and letters sent to neighbors residing in the vicinity of the construction site.

Engagement actions will be documented in writing (minutes of the meeting, brief report, press coverage) and, whenever possible, photo and video documentation will be applied (public consultations, direct conversations, etc.).

Communities and individuals who believe that they are adversely affected by the project may submit complaints to existing institutional redress mechanism at the level of the Project, the MoIA's Public Relations Department or the WB's Grievance Redress Service (GRS).

11. GRIEVANCE REDRESS MECHANISM

Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing institutional redress mechanism including the MoIA's Public Relations Department or the WB's Grievance Redress Service (GRS).

GIES and the Constanța ESI have operational petitioning systems in line with the provisions of Romanian legislation (GO no. 27/2002) that collect requests or complaints through a number of channels:
- in person or by mail at GIES headquarters in Bucharest, No. 46, Banu Dumitrache Street
- by phone at the PIU secretariat 021 208 61 50 int. 27330
- via email at petitii.uip@igsu.ro
- or the designated form on IGSU website https://www.igsu.ro/Contact

PIU social expert will interact, under a procedural internal norm, with the secretariat at County ESI, in order to collect project related grievances and monitor their resolution. An excel-based template will be filled with all related project feedback and will be sent on a weekly basis to the PIU social expert for review.
In addition to the existing channels, a grievance board and a box will be installed at the construction site. In this respect, although not usually registered, anonymous complaints will be taken into consideration and included in the weekly review by the PIU's social expert. The website section on GIES and Constanța ESI websites will include, where possible, a feedback form, with mandatory fields to be completed and will be forwarded to the GIES/Constanța ESI secretariat, where they will be centralized with other project related complaints and sent to PIU for review.
The Project GRM provides **safe and confidential reporting on GBV incidence, separate from the channels used for all other grievances.**
The GBV component of the GRM refers primarily to situations of Sexual Harassment (SH) or Sexual Exploitation and Abuse (SEA) that might occur as a result of implementing the Project, either within the working places, at the level of the PIU, Contractors, Consultants or Service Providers, as well as at community level, around the construction site or related to the construction site or personnel.
For GBV related grievances a dedicated email address is available, namely:
- petiții.vbg.uip@igsu.ro

World Bank GRS
The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. The project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond.

For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

12. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

Public consultation meeting on the ESMP took place on 23 May 25, 2024 in the late period of the TD & TA Consultancy contract, in order to fixate the dates associated with the mitigation measures, to define the construction works details, as well as to bring clarity to the responsibilities shared among different entities (PIU, Contractor, Supervisor, Site Manager, Environmental Verifier, Certified Works verifiers, etc.).

To cover all communication opportunities with stakeholders, a mixed face to face and virtual public consultation was organized. To this end, the PIU has made appropriate arrangements for interested persons to participate to the consultation either online or in person – at CPFD headquarter. Information regarding this subproject was shared with the invitees 10 days in advance of the consultation. Press release, letters to neighbors and invitations sent by email and social media were used to reach interested parties and potentially affected parties.

During the video consultation event after the presentation of the main project activities and main findings from the ESMP, attending stakeholders had the opportunity to raise their comments, questions, suggestions and any concern about the project.

This document is the final version of the ESMP approved by the Bank and includes a detailed description of the activities carried out to prepare and organize the event, the list of participants, the minutes of the meeting, the ideas expressed and the responses provided.

A detailed description of the consultation process, stakeholder engagement actions and public consultation meeting conducted for this sub-project is presented in Annex 11.

ANNEX 1. GENERAL ENVIRONMENTAL FRAMEWORK AND GUIDELINES

The legal framework for environmental protection and related activities include the Emergency Governmental Ordinance (EGO) 195/2005 approved by Law no.265/2006, other organic and major laws on various domains, International Conventions and treaties signed and ratified by Romania, different governmental decisions or ministerial orders, and National Sustainable Development Strategy and National Environmental Action Plan (NEAP) define The national environmental legislation is based on EU standards and sets four general principles of environmental policy (polluter-pays, integrated monitoring, sustainable development, NGOs and public participation, international cooperation, rehabilitation of degraded areas). It also adopts the general ways for the enforcement of these principles, such as: harmonization of environmental policies and economic and social development programs of the territory, correlation between special and environmental development, compulsory use of the environmental permitting procedure for the economic and social activities with significant environmental impacts, use of economic incentives.

County emergencies inspectorates that propose new investment projects that are likely to have a significant environmental impact are required to apply for an environmental permit to the County Environmental Protection Agencies (by submitting a notification regarding the intention to carry out the project, accompanied by the certificate of urbanism issued according to the law regarding the authorization of the execution of the construction works, the plans annexed to it and the proof of the payment of the tariff related to this stage. Annex no.5 B to the procedure of Law no. 292/2018) in the situation in which it is not requested by the GIES the application by the central authority for environmental protection of the provisions of art.5 and respectively Annex 5, art.40 of the cap. VI 'Exceptions from the environmental impact assessment procedure', from Law no.292 / 2018 regarding the evaluation of the impact of certain public and private projects on the environment (respectively the exemption from applying the provisions of the law taking into account the objective of the project "reaction to emergency situations" and observing the provisions of art. .17 of Law no.292 / 2018 respectively the lack of transboundary impact of the investment). This might be awarded only after an environmental impact assessment is conducted by certified experts to identify potential impacts, mitigation measures and monitoring arrangements should be outlined in this process.

After the project has been ended: when assigning, to take into account article 2 of the OM of Foreign Affairs no. 140/2015 regarding the organization, coordination and control of the environment protection activity in the units of the Ministry of Internal Affairs elaborated on the basis of article 89 letter 'b' of the EGO no. .195/2005 approved by Law no. 265/2006), an environmental permit (for operation) is required, according to the provisions of the MMGA Order no. 1798/2007 (!!! Attention!!! The environmental authorization is requested at the County Environmental Protection Agency's headquarters on the basis of which the investment site is located. The environmental authorization is issued to establish the conditions/parameters of functioning of an existing activity or a new activity with possible significant impact on the environment, compulsory upon commissioning. The categories of activities for which it is necessary to obtain the environmental authorization are provided in annex no.1 of the Order of the MMGA no. 1798/2007). Without these permits, the proposed activity is not allowed to proceed. The environmental agreement is issues simultaneously with other approvals. The environmental permit is preceded by obtaining of other approvals (for telecommunication utilities, for natural gas network, for electric power, from the Fire Commandment, etc.) the Water Permit being one of the most important. The Beneficiary (the proponent of respective investment) has the obligation to set up its own internal or self-monitoring

system for environmental protection. Parameters to be monitored are established according to the provisions included within environmental agreement and further in the environmental permit. Data must be registered and made available for Environmental Protection Agency, where applicable, in compliance with the MoIA's Order no. 140/2015 regarding the organization, coordination and control of the environment protection activity in the units of the Ministry of Internal Affairs.

Environmental Impact Assessment (EIA). The accomplishment of full EIA on which basis the environmental agreement would be issued, is mandatory for all projects listed in Appendix I of Law no.292 / 2018 on the evaluation of the impact of certain public and private projects on the environment, as well as all projects proposed for the coastal zone and those proposed in protected hydro-geological areas. Projects listed in Appendix II of the same normative act are subject to the screening procedure. The result of the screening procedure is a decision based on which the project is further subject to the EIA or not. The current regulations require that the information provided by the developer of the EIA process shall include the measures envisaged in order to avoid, reduce and where possible, offset the significant adverse effects.

The EIA procedure comprises a mandatory involvement of the public and all public comments are considered in the EIA procedure. The environmental protection authority's setup and manage Technical Review Committees, which represent a mandatory requirement of the national EIA procedure.

The national EIA procedure is detailed within the Official Journal (OJ) 1043/10.12.2018 and it is applied according to the environmental impact assessment procedure detailed in Annex no.5 to the Law and, as appropriate, by the transboundary EIA procedure.

The proposed investments are not expected to trigger the requirement for a complete EIA under Romanian law (EGO 195/2005 on environmental protection, published in the OJ of Romania, Part I, no. 1.196 of December 30, 2005, approved with modifications and completions by Law no. 265/2016, with the subsequent modifications and completions and art. 5 of Law no. 292/2018). Still, there might be situations where a simplified EIA procedure might be requested by the national/local environmental authorities. In such cases, the guidelines on EIA preparation presented in the procedure for assessing the impact on the environment detailed in Annex no.5 to Law no.292 / 2018 on the evaluation of the impact of certain public and private projects on the environment will be applied.

Use of construction materials that are hazardous to human health (e.g., asbestos, asbestos contained materials) will not be permitted. Asbestos-contained materials waste will be collected, transported and finally disposed by applying special protective measures in accordance with the hazardous waste handling standards. (according to the provisions of GD no. 124/2003 regarding the prevention, reduction and control of asbestos pollution, published in the Official Journal of Romania, Part I, no. 109 of February 20, 2003, as amended and supplemented + GD no. 856/2002 regarding the evidence of the waste management and for the approval of the list of waste, including hazardous waste, published in the Official Journal of Romania, Part I, no. 659 of September 5, 2002, with subsequent completions).

The below list of recommendation is not an exhaustive one but it is highlighting the most relevant mitigation measures that will be considered during construction period. The below sections include more detailed recommendations as per type of impacts:

- Inadequate handling of hazardous materials such as asbestos and paint based on lead from transportation and handling of construction works will be minimized by water and other means such as enclosure of construction sites.
- To reduce noise, construction will be restricted during certain hours.
- All debris construction and wood waste will be stored within the work site.
- Wood waste will be stored separately and arranged to be recycled instead of disposing it.
- Open burning and illegal dumping will not be permitted.
- Proper sites for earth/clay and sand disposal will be determined and prior approval from relevant authority for disposal will be obtained.
- Stock piling of construction debris on site will be avoided and waste will be disposed of on a regular basis at the authorized government dumping ground. Debris chutes will be provided to transfer debris from higher floors to the ground.
- Traffic disruption must be avoided by internal planning.

Contractors will be obliged to apply environmentally sound construction standards and procedures. A short list can be found in Annex no. 5.

Energy efficiency, insulation and ventilation

- Insulation should be tailored to the seasonal impacts of climate, internal thermal load, and characteristics of exposure. Vapor barriers should prevent moisture intrusion in the roof insulation and outer wall cavities and using damp course.
- Window location should be determined on view, ventilation, light, thermal gain, privacy control and interior space functions.
- High-efficiency systems for heating domestic water (including solar systems) and for interior space heating should be selected with maintenance and long-term running costs in mind.
- Plumbing should be coordinated to minimize this activity and also water service to toilets and utility rooms. Water-saving faucets, ring mains and other devices also require consideration. Construction materials will conform to national regulations and internationally accepted standards of safety and environmental impacts.

Electrical Systems

Incoming cables should be located underground. Main entrance feed and panel located away from places of work and waiting is prudent in avoidance of electromagnetic fields. Ground faulty wiring near any plumbing fixture is a precaution. Selecting the most energy efficient light fixtures, lamps, appliances and equipment will reduce energy demand but can introduce undesirable electromagnetic fields. Be aware that close proximity to table, floor and desk halogen, fluorescent and other high-efficiency fixtures and lamps can cause an exposure to harmful electromagnetic fields.

Retrofitting Work

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully stripped and the debris should be sorted and removed as directed by the ESMP (to be determined during the preparation phase of the project). All valuable materials (doors, windows, sanitary fixtures etc.) should be carefully

dismantled and transported to the storage area assigned for the purpose. Valuable materials should be recycled within the project or sold.

Selection of Construction Materials and Construction Methods

Environmentally sound goods and services should be selected. Priority should be given to products meeting standards for recognized international or national symbols. Traditionally well-tried materials and methods should be chosen before new and unknown techniques. Construction sites should be fenced off in order to prevent entry of public, and general safety measures would be imposed. Temporary inconveniences due to construction works should be minimized through planning and coordination with contractors, neighbors and authorities. In densely populated areas, noisy or vibration generating activities should be strictly confined to the daytime.

Waste Management

The handling of construction debris will be according to local and national regulations, and as specified in the EMP, and described above under site considerations. These regulations are developed and enforceable in Romania. Monitoring will be the responsibility of site supervisors and environmental safeguard specialist working for the GIES- PIU. In all the specific cases for which contractors should demolish or remove asbestos-containing materials, these categories of works should be done only with qualified personnel and fully in line with the specific legislation related to this specific field.

Annex no. 5 present the special requirements for handling and management of asbestos-containing materials.

Traffic management

Based on the location of each proposed building to be included in the project, there might be situations where during construction period a disturbance of local traffic to occur. A traffic management plan would be drafted and prepared by GIES-PIU if the construction work will have a direct impact on roads or pedestrian walks.

Occupational health and safety at work

There are obligations to use helmets, gloves, goggles where appropriate and work uniforms. All these minimum protection rules, doubled by avoiding over-exhaustion of workers, prevent ergonomic injuries and other work-related accidents resulting from repetitive, excessive and manual handling of building materials.

Recommendations for their prevention and control include knowledge of the most common causes of wounds in construction and decommissioning by:

- Training of workers in the lifting and handling of materials, techniques in construction and decommissioning projects, including placement of weight limits over which mechanical assistance is required.
- Workplace site planning to minimize the need for manual heavy load transfer.
- Selecting tools and designing workstations that reduce the need for strength.
- Implement administrative controls in work processes, such as job rotation and rest breaks.

ANNEX 2. LEGAL AND INSTITUTIONAL FRAMEWORK ON EIA

International Laws

1. Article 11(2) of Romania's Constitution (as revised by Law No. 429/2003) provides that treaties ratified by Parliament according to the law are part of national law.
2. The following treaties to which Romania is party relate to the protection of natural habitats:

- Ramsar Convention on Wetlands (Ramsar, 1971), ratified by Romania on 21/9/91.
- The Danube Delta and Small Island of Braila have been designated as Ramsar Sites.
- Convention on the Conservation of Migratory Species (Bonn, 1979), ratified by Romania on 1/7/98.
- Convention on Biological Diversity (Rio de Janeiro, 1992), ratified by Romania on 17/8/94.
- Convention on the Conservation of European Wildlife and Natural Habitats (Berne, 1979). Accession by Romania on 18/5/93.
- Convention concerning the protection of the World Cultural and Natural Heritage (Paris, 1972). Accession by Romania on 16/5/90. Several areas, including the Danube Delta are designated as UNESCO World Heritage Site.
- Danube River Protection Convention signed in 1994.

3. On environmental assessment, relevant treaties ratified by Romania include:

- UN/ECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998), ratified by Romania by Law no.86/2000.
- Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991), ratified by Romania by Law no.22/2001.

4. The following treaties ratified by Romania relate to cultural property:

- European Convention on the Protection of the Archaeological Heritage (revised) (Valetta, 1992), ratified by Romania 20/11/97.
- Convention concerning the protection of the World Cultural and Natural Heritage (Paris, 1972). Accession by Romania on 16/5/90. Several areas, including the Danube Delta are designated as UNESCO World Heritage Site.

European Union's *"acquis communautaire"*

Relevant legal texts include:

- Treaty concerning the Accession of the Republic of Bulgaria and Romania to the European Union, signed by the EU Member States and Bulgaria and Romania in Luxembourg on 25 April 2005.
- Protocol concerning the conditions and arrangements for admission of the Republic of Bulgaria and Romania to the European Union (Annex VII; list referred to in Article 20 of the protocol; transitional measures, Romania; Section 9 on environment).

- Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.
- Directive 2001/42/EC on Strategic Environmental Assessment.

Pollution Prevention and Control; Integrated Permitting

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).

Waste Management

- Council Directive 1999/31/EC of 26 April 1999, on the landfill of waste.
- Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste.
- Commission Decision 2014/955/EU of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council
- Council Directive 86/278/EEC of 12 June 1986, on the protection of the environment, and in particular the soil, when sewage sludge is used in agriculture (as amended by Directive 91/692/EEC, EC No. 807/2003 of 14 April 2003, EC No. 219/2009).
- Council Directive 94/62/EC of 20N December 1994 on packaging and packaging of waste (as implemented by Commission Decisions 97/129/EC and 97/138/EC and amended by Directive 2004/12, Directive 2005/20, Regulation 219/2009, Directive 2/2013, Directive 720/2015).

Water and Waste Water

- Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment, as amended by Commission Directive 98/15/EC, Regulation 1882/2003, Regulation 1137/2008, Directive 2013/64/EU.
- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption as amended by Regulation 1882/2003, Regulation 596/2009.
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.
- Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

Nature Protection

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna.

Air Quality

Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

Romanian Law

Relevant Romanian law includes the following:

Environmental Assessment

- EGO 195/2005 on environmental protection, approved by Law no.265/2006. Framework Law on Protection of the Environment.
- Law no. 292/2018 (published in M.Of no. 1043 of 10/12/2018) on the assessment of impact of certain public and private projects on the environment
- MO 864/2002 (published in M.Of. no. 397 of 06/09/2003) on procedures and public consultation in case of transboundary impacts.
- MO 1134/2020 (published in M.Of 445 on 25/05/2020) approval of the conditions for the development of environmental studies, the criteria for the attestation of natural and legal persons and the composition and Regulation on the organization and functioning of the Attestation Commission
- MO 1798/2007 (published in M.Of. 808 on 11/27/2007) Methodology for the environmental permit issuance.

Strategic Environmental Assessment

- GD 1076/2004 (published in M. Of nr. 707 of 05.08.2004) on procedures for environmental assessment of plans and programs.
- MO 995/2006 on the list of plans and programs subject to the environmental assessment procedure.

Nature Protection

- EO 57/2007 regarding the protected natural areas and the conservation of natural habitats, wild flora and fauna.
- GD 230/2003.
- MO 552/2003.
- MO 1052/2014.

Waste, Waste Water, Air and Noise Pollution

- MO 662/2006 for the approval of the procedure and competencies for issuing water management permits and authorizations
- Water Law 107/1996 with subsequent modifications
- MO no. 1012/ 2005 for the approval of the procedure for public information access related to the water management field
- MO no. 1182/2005 MoEWM and 1270 /2005 MoAFRD for the approval of the Code of the agricultural good practices for the protection of the waters against pollution with nitrates from agricultural sources, as it was amended by MO 990/2015.

- MO no. 296/216/2005 regarding the framework Program of actions for the elaboration of the action programs in vulnerable zones at the pollution with nitrates from agricultural sources
- MO no. 242/197/2005 regarding the monitoring system of the sole from the vulnerable and potential vulnerable zones
- Law 458/2002 regarding drinking water quality, republished
- GD 974/2004 on inspection and monitoring of drinking water
- GD 349/2005 regarding management of solid waste
- GD 188/2002 for the approval of certain norms concerning the conditions of discharging waste water into the aquatic environment
- GD 235/2007 regarding management of oil waste
- Law 249/2015 regarding management of packaging and packaging of waste
- GD 856/2002 regarding records of disposal and collection of solid waste and approval of list including hazardous waste
- GO 92/2021 regarding solid waste
- 1 regarding solid waste
- Law 104/2011 regarding ambient air quality.
- GD 1470/2004 regarding approval of National strategy for solid waste management and National Plan for solid waste management.
- GD 1061/2008 regarding the transport of hazardous and non-hazardous waste on the territory of Romania.
- Directive no. 75/439 / EEC on the disposal of waste oils, published in the Official Journal no. L 194/1975, amended by the Directive no. 87/101 / EEC, published in the Official Journal no. L 42/1987, regarding the disposal of waste oils

Cultural Property

- Law 422/2001 on protection of historic monuments, republished
- GO 43/2000 on protection of the archaeological heritage, republished

Law 150/1997 ratification of the European Convention on the Protection of Archeological Heritage (Valetta, 1996).

ANNEX 3. ROMANIAN LICENSING AND PERMITTING PROCEDURES

Introduction

In conformity with Emergency Ordinance for Environmental Protection No.195/2005 including the respective updates - the Law no. 292/2018 on the assessment of impact of certain public and private projects on the environment, and present in detail the procedures for EIA and for issuing the environmental license.

Based on the Romanian law, any development of a new facility or modification of an existing one requires the approval of an EIA before the environmental license (environmental agreement) and permit to operate (environmental authorization) is approved by LEPAs. For any activities not covered in the list of mandatory EIA (Annexes I and II of the Law no. 292/2018), the LEPAs use selection criteria to determine whether such activities could have a significant environmental impact. Existing facilities require an environmental permit from the LEPAs, which includes assessment of compliance with the environmental standards (e.g., conditions related to air, water, and soil reflecting existing standards).

The annex 5 to Law no. 292/2018 presents the steps of the procedure, the requirements that the physical or legal certified persons to prepare the impact studies, and the list of activities which are subject to the EIA procedure. Overall, the EIA procedure includes a screening stage, a scoping stage, and a validation stage.

Procedures for Receiving an Environmental License to Construct (or the Environmental Agreement)

The procedure for issuing the environmental license to construct is described in detail in the following steps and briefly presented in the flow chart.

Step 1. The initial screening of the new project/investment

This is determined by the local EPA responsible for the location (commune, city) where the investment will develop. When requesting the Environmental License to Construct, *the Beneficiary is responsible to* present to the local EPA or MEWF *a Technical File* including the following documentation:

- Request Form of the EA in conformity with the Law no. 292/2018; this request is attention to the local EPA or to the MEWF depending on the geographical location of the project;
- Urban Planning Certificate and the corresponding licenses and permits (obtained at the level of Feasibility Study) based on the corresponding law;
- Contracts with the local solid waste company for collection of the solid wastes and with "*Apele Romane*" for water supply and sewage discharges (other authorizations from local utilities may be required based on necessity);
- Technical Memorandum (standard form) in conformity with Annex .2 of the MO No. 1798/2007 (prepared by the Consultant/Firm that developed the Feasibility Study);
- Technical Note (standard technical form) in conformity with the OM No. 839/2009 (prepared by the Consultant/Firm that developed the Feasibility Study);
- Fee (differs depending on the stage of the EA process);
- Public announcement/debate regarding the request to obtain the Environmental Permit in conformity with Annex 3 of the MO No. 1798/2007.

Within the EPA, a Technical Review Committee (TRC) is formed, which includes members of the local EPA, the National Environmental Guard (NAG), the National Water Administration "*Apele Romane*", Sanitary and Urban Institutes and those authorities responsible for environmental permits authorizations. The TRC members analyze the documentation presented within the Technical File and issue one of the

following three classifications of the project investments: (i) activities are of insignificant environmental impact and therefore the project is NOT subject to environmental procedure; (ii) activities are of low environmental impact and the simplified licensing procedure will apply; and (iii) activities are of significant environmental impact and the full environmental permitting procedure will apply. Furthermore, (for cases (ii) and (iii)) the EPA authorities together with the members of TRC and the Beneficiary are visiting the site of the future investment to: (i) verify its location as presented in the Technical File; and (ii) complete the List of Control developed according to the OM No. 269/2020.

Step 2. EIA Report Preparation

The EPA reviews and approves the List of Control which includes the conclusion presented by the TRC, based on which documents it announces the Beneficiary of his obligation to develop the EIA study (the impact study).

The Beneficiary is obliged to:

- Prepare the EIA report in conformity with the Law no. 292/2018. The EIA report should be developed only by physical persons or consulting firms independent of the Beneficiary and the person who developed the Feasibility Study, that are accredited for developing such technical studies for Infrastructure Projects/Investments including the legal conditions stipulated in the OM No. 1.134 / 2020;
- Hire based on contract and competition through expression of interest/invitation to submit proposals process the firm/physical person who will develop the EA report;
- Prepare and sponsor the public announcement of the definition of the project (this is the 2nd public information in the EIA process approval).

Step 3. The Review of the EIA Report

At this stage, the EPA is in charge with the following steps: (i) completes the List of Control for the EIA Report analysis process; (ii) prepares the Public Consultation; and (iii) communicates the results to the Beneficiary.

The Beneficiary is obliged to:

- Present to the local EPA the EIA report, with the help of the consulting firm that developed the EIA;
- Prepare and launch the public consultation in the presence of those affected, NGOs, or interested persons including presentation of the project and the EIA Report during of a public debate;
- Evaluate the discussions and conclusions received during the public consultation;
- Reply to the public comments and requests with a valid technical solution.

Step 4. Decision and Approval of the Environmental License to construct

The EPA issues the Environmental License to start construction of the investment within 30 days after the final decision.

The Beneficiary is obliged to:

- Announce the public about the approval of the Environmental License;
- Request of Environmental Permit to Operate

Additional points:

- The EIA report is prepared at the level of the project's Feasibility Study, in conformity with Law no. 292/2018;

- The minimum information presented by the Beneficiary during the request to obtain the Environmental License should be also completed based on conditions recommended by the foreign donors (EBRD, WB, EIB) and/or as required by the EU legislation and the Romanian legislation in force;
- For those investments obtained through ISPA or SAPARD funds, the conditions during the project operation established through the Environmental Permit will take in consideration the limits of the pollutants' discharges required by the EU and Romanian legislation. However, the national limits will prevail if they are more restrictive than those imposed by the EU legislation.
- The Environmental License is valid during the entire period of the project construction, but will expire if the investment works will not start in maximum 2 years from its approval. During the period of investment constructions, the local environmental protection authorities will monitor those conditions imposed by the Environmental License (please note detailed information on the monitoring process in the next section);
- The Beneficiary is obliged by law to inform the environmental protection authorities in writing any time when there is a significant modification of the initial conditions of the project based on which the current Environmental License was issued.

Procedures for Obtaining an Environmental Permit to Operate

The Environmental Permit to Operate investments with significant impact on the environment is issued by the EPA in conformity with OM No. 1798/2007. The local EPA together with the local National Environmental Guard as well as representatives of National Agency "Apele Romane" is inspecting the site after construction and issue a technical note with observations at the site (e.g., Environmental Audit).

The Environmental Audit of existing facilities is carried out only by certified persons paid by the Investor and includes: (i) a checklist including characteristic elements of the investment; (ii) an environmental study including data collection and technical review of all environmental aspects, before taking a decision on the scale of potential or existing environmental impacts from the site; and (iii) site investigations to quantify the potential scale of contamination of the site. Compliance programs are usually required based on the result of the environmental audit.

The Beneficiary is in charge with:

- Request the Environmental Permit to the local EPA;
- Prepare a *Technical File* as in the previous case;
- Announce the public about the request to start operations;
- Annual renewal of the permit once it is issued (it is valid for 5 years).

Standards (ambient and emission limits) are usually followed to comply with the environmental protection as requested by EU. Currently there are ambient standards for air, noise, waste and discharges of certain substances in the water.

Monitoring capacity during the Construction Period and After the Issuance of the Environmental Permit to Operate

During constructions, LEPAs together with the NGA and "Apele Romane" are in charge with visiting the site of the project and inspecting the environmental compliances stipulated in the Environmental License and Environmental Permit.

The NGA inspectors may accompany the LEPAs' inspectors for site visits according to an inspection program. Following the site visit and checking the compliance, the inspectors prepare a report based on which they may advise the operators on how to meet standards and permit conditions. If a facility/project

does not comply with relevant standards, it will first receive a warning from the inspector followed by a certain amount of time necessary to take care of the steps that comply with the permit.

Implementation of EMP

The environmental impact mitigation and monitoring activities will be carried out in parallel with the construction activities. As these are existing facilities that are already under operation, the project will not monitor operations after implementation of the retrofitting activities.

Collection of Data: monitoring data will be collected by Local Consultants/Private companies accredited by MoE on monthly basis, with monthly reports.

Analysis of Data: will be carried out by the Environmental specialist. The results of the analysis will be used to check the effectiveness of mitigation measures, and if required, to revise/modify the mitigation plan.

Reporting: environment specialist on quarterly basis will prepare the report of monitoring.

ANNEX 4. SAFEGUARDS POLICIES OF THE WORLD BANK

Below are the key extracts from OP that give the idea of preventive mechanisms of the World Bank and help to understand and analyze information on environmental, social and legal policies.

OP 4.01 Environmental Assessment

EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation.

EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); and transboundary and global environmental aspects.

EA considers natural and social aspects in an integrated way. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project

OP 4.04 Natural habitats

The Bank promotes and supports natural habitat conservation and improved land use by financing projects designed for environmental conservation. The Bank promotes the rehabilitation of degraded natural habitats and does not support projects that involve the significant conversion or degradation of critical natural habitats.

OP 4.09 Pest Management

In assisting borrowers to manage pests that affect either agriculture or public health, the Bank supports a strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides.

The Bank requires that any pesticides it finances be manufactured, packaged, labeled, handled, stored, disposed of, and applied according to standards acceptable to the Bank. The FAO's Guidelines for Packaging and Storage of Pesticides (Rome, 1985), Guidelines on Good Labeling Practice for Pesticides (Rome, 1985), and Guidelines for the Disposal of Waste Pesticide and Pesticide Containers on the Farm (Rome, 1985) are used as minimum standards.

OP 4.11 Physical Cultural Resources

This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources include everything that remained after ancient inhabitants (holy places and battlefields) and unique natural sites such as waterfalls and canyons.

The Bank does not support projects threatening cultural resources that are property of population. The Bank supports only those projects that are located or designed in such a way as to prevent damage to the environment.

OP 4.36 Forests

Management, protection and sustainable development of forest ecosystem and its resources are necessary for reducing poverty and sustainable development.

The Bank does not finance plantations that involve any conversion or degradation of critical natural habitats due to potential risk to biodiversity.

The Bank may finance harvesting operations conducted by small-scale landholders, by local communities under community forest management, or by such entities under joint forest management arrangements, if these operations:

(a) have achieved a standard of forest management developed with the meaningful participation of locally affected communities, consistent with the principles and criteria of responsible forest management; or

(b) adhere to a time-bound phased action plan to achieve such a standard. The action plan must be developed with the meaningful participation of locally-affected communities and be acceptable to the Bank.

OP 4.37 Safety of dams

The Bank distinguishes between small and large dams. Small dams are normally less than 15 meters in height. This category includes, for example, farm ponds, local silt retention dams, and low embankment tanks. For small dams, generic dam safety measures designed by qualified engineers are usually adequate.

OP 7.50 Projects on international waterways

This policy applies to the following types of international waterways: (a) any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states; (b) any tributary or other body of surface water that is a component of any waterway described in (a) above.

This policy applies to the following types of projects: hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways as described above.

OP 7.60 Projects in disputed areas

Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries, but also between the country in which the project is carried out and one or more neighboring countries. In order not to prejudice the position of either the Bank or the countries concerned, any dispute over an area in which a proposed project is located is dealt with at the earliest possible stage.

Document references to OP WB, Procedures for Environmental Assessment of WB and Environmental Protection Policy of WB are presented below.

ANNEX 5. ENVIRONMENTAL GUIDELINES FOR CIVIL WORKS CONTRACTS

Contractors will be obliged to apply environmentally sound construction standards and procedures. All civil works contracts will have the following environment-protecting provisions:

1. Take measures and precautions to avoid adverse environmental impacts, nuisance or disturbances arising from the execution of the works. This shall be done by avoidance or suppression whenever possible rather than abatement or mitigation of the impact once generated.

2. Comply with all national and local environmental laws and regulation. Assign responsibilities for implementation of environmental actions and to receive guidance and instructions from the engineer or environmental authorities.

3. Minimize dust emissions to avoid or minimize adverse impacts on air quality.

4. Maintain foot and vehicular traffic flows and public access to neighboring sites and facilities. Provide markers, lights and temporary connections by bypasses for safety and convenience.

5. Prevent or minimize vibration and noise from vehicles, equipment and blasting operations.

6. Minimize disturbance to and restore vegetation where it is disturbed as a consequence of the works.

7. Protect surface and groundwater and soil quality from pollution. Appropriately collect and dispose of water material.

ANNEX 6. MAIN ISSUES REGARDING ASBESTOS WASTE

Asbestos is a group of naturally occurring fibrous silicate minerals. It was once used widely in the production of many industrial and household products because of its useful properties, including fire retardation, electrical and thermal insulation, chemical and thermal stability, and high tensile strength.

Today, however, asbestos is recognized as a cause of various diseases and cancers and is considered a health hazard if inhaled. Because the health risks associated with exposure to asbestos area now widely recognized, global health and worker organizations, research institutes, and some governments have enacted bans on the commercial use of asbestos.

In the European Union the use of asbestos is banned since January 1, 2005, and in Romania through a Governmental Decision no. 734/2006 this was banned only for new materials. Products containing asbestos and which have been installed or were in operation before the date 1 January 2005 can be used until the end of their lifecycle.

Good practice is to minimize the health risks associated with ACM by avoiding their use in new construction and renovation, and, if installed asbestos-containing materials are encountered, by using internationally recognized standards and best practices to mitigate their impact. In all cases, the World Bank expects borrowers and other clients to use alternative materials wherever feasible. ACM must be avoided in new construction.

In reconstruction, retrofitting, and removal of damaged infrastructure, asbestos hazards must be identified and a risk management plan adopted that includes disposal techniques and end-of-life sites. Asbestos-containing (AC) products include flat panels, corrugated panels used for roofing, water storage tanks, water, and sewer pipes etc.. Thermal insulation containing asbestos and sprayed asbestos for insulation and acoustic damping were widely used through the 1970s and should be looked for in any project involving boilers and insulated pipes.

As asbestos is often used in construction (mainly for roofing) in many countries including Romania, it can present a risk for the health of workers and population, who live near buildings that need capital repair with replacement of roofing or retrofitting.

GIES-PIU specialists must inform beneficiaries on potential risk for their health and instruct not using asbestos as construction material during construction/rehabilitation works.

Any asbestos product or material that is ready for disposal is defined as asbestos waste. Asbestos waste also includes contaminated building materials, tools that cannot be decontaminated, personal protective equipment and damp rags used for cleaning. Always this type of waste must be treated as ‘Hazardous Waste’.

In this regards, ACM and asbestos waste must be properly removed, stored in a separate closed area and disposed (with the consent of local administration and environmental inspectors) on a landfill on the special area for disposal of that type of waste.

GIES-PIU must require the contractors that the removal, repair, and disposal of ACM shall be carried out in a way that minimizes worker and community asbestos exposure. During reconstruction works, workers must avoid destroying asbestos sheets and properly dispose them at

construction sites until final disposal happens. Workers must wear protective over garment, gloves and respirators during work with asbestos sheets. Proper disposal of ACM is important not only to protect the community and environment but also to prevent scavenging and reuse of removed material. ACM must be transported in leak tight containers to a secure landfill operated in a manner that precludes air and water contamination that could result from ruptured containers. The removal and disposal of ACM and asbestos waste as well as all other ESMP measures have to be included in both the technical specifications and bill of quantities (BoQs). Contractor shall develop site-specific ESMP where requirements to ACM and asbestos waste will be contained.

ANNEX 7. DESCRIPTION OF RETROFITTING AND FUNCTIONAL UPGRADING WORKS

The main characteristics of the Constanta Port subproject are:
- Existing height regime: B+ GF + 3F (basement + ground floor + 3 floors)
- Existing built area - Sc = 330 sqm;
- Existing developed area - Sd = 1650 sqm;
- Existing usable area - Su = 1400,54 sqm

The free height of the levels is:
- 179 cm in the basement;
- 273 cm in the case of rooms on the upper floors finished with suspended plasterboard ceiling and 325 cm in the case of those finished with plaster and washable paint.

Class of importance of the building: CLASS I buildings of particular importance for public safety (Regulation P100-1/2013), Category "B" of importance (according to HGR no. 766/1997).
Seismic risk: Class Rs II of seismic risk - According to the Technical Expertise Report

TELECOMMUNICATION TOWER:
The tower will be made of a metal structure of equilateral triangle shape, having the base with side B=6.0m and in the highest area b=3.0m. The height of the tower is H=35m.

ARCHITECTURE

For the investment objective located in the Municipality of Constanta, with administrative function, consisting of a section and having a height regime of B+GF+3Storeys, consolidation works and architectural modifications will be carried out at the interior level.
The proposed functions following the reorganization are: administrative spaces (offices), spaces for the staff of the fire department (dining room, study room, multipurpose room, gymnasium), social administrative spaces (rest rooms, toilets, changing rooms), technical storage and maintenance spaces.
The building is designed as a unitary volume, adapted to the needs of the staff.
Access/egress to the building:
The main and secondary access to the building is on the ground floor via a set of 8 steps measuring 33.50 x 16cm, the secondary access is accompanied by a ramp for disabled people in wheelchairs and for children in prams, with a slope of 8%.
Access from the ground floor to the first floor is via a set of 20 steps measuring 33.5 x 17.5. The same interior staircase layout is from the 1st floor to the upper levels. The staircase provided for each level is straight, in two flights with an intermediate landing and is made of reinforced concrete. The proposed finish is non-slip sandstone.
Emergency vehicles (rescue, fire brigade) have access to all sides of the building.
Access to the non-circulating terrace (circulating only occasionally in case of maintenance of the equipment mounted on it) will be via a technical metal ladder mounted on the eastern facade of the building. Access to this staircase is from the outside of the building.

The existing construction system of the building is as follows:

- Infrastructure - According to the technical expertise, the existing construction is provided with continuous reinforced concrete foundations.
- Superstructure - According to the technical expertise, the superstructure of the existing construction is a mixed structure consisting of masonry panels confined with reinforced concrete pillars and belts on the outside of the building and reinforced concrete frames (reinforced concrete pillars and beams) on the inside.
- Roofing - the existing building is provided with a non-circulating terrace roof. It is proposed to keep it and to rebuild the finishing layers for a better thermal resistance and to increase its waterproof capacity.
The consolidation solution is detailed in the chapter on the structure of the building.
The exterior enclosures and interior partitions will be made as follows:
- According to the technical expertise the external enclosures are represented by confined masonry panels. The design theme will not intervene on the external enclosures.
- The existing interior partitions are made of 25 cm brickwork.
The proposed interior partitions are made of 15 cm BCA masonry or plasterboard panels mounted on a metal structure, as appropriate.
- The walls will be finished by applying light plaster-based plaster over which various layers will be applied prior to the finished finishes, depending on the use of the space.
- Certain partitions will be made of gypsum board mounted on a metal profile structure, according to the technical product sheet. The boards used will comply with fire or moisture resistance requirements, as appropriate. The joints between the gypsum plasterboards will be finished by applying adhesive sealing strips and special gypsum plasters.

The cladding will be made of bituminous waterproofing installed according to the manufacturer's specifications and in accordance with the product technical data sheet.
The proposed interior finishes for the building are as follows:
Floor finishes
- Over the reinforced reenforced concrete, a concrete screed with an average thickness of 9 cm will be made to achieve the proper covering of the plumbing pipes laid on the reinforced concrete;
- If the final finish requires a very good flatness over the concrete screed a layer of self-levelling screed will be applied;
- In wet areas and on circulation areas - storage rooms, technical areas, dining and study rooms, cloakrooms, sanitary facilities - non-slip tiles with a thickness of 10-12mm will be glued in place. The joints between them will be finished with grout in the general colour of the tiles;
- In the other areas - offices, rest rooms, multipurpose room, gymnasium - three-layer heavy traffic flooring will be installed on a 6mm thick expanded polystyrene board backing for noise attenuation;
- An Antistatic PVC finish will be installed in the main switchboard area and bonded to the backing layer;
- In the dispatch room a non-slip and anti-slip floor will be installed.

Wall finishes
- In spaces without excessive moisture, coarse and finishing plaster will be applied over the plaster, which will then be sanded, and the resulting dust removed before applying primers and washable or decorative interior paints;
- In areas where there are washbasins, ceramic tile finishes will be installed on an adhesive backing and the joints will be filled with grout;
- In the case of partition walls made of gypsum plasterboard, the special plaster will be sanded before applying primers and washable paints;
- In damp areas, the walls will be covered with ceramic tiles and the joints will be filled with grout according to the stereotomies presented in the technical project.

Ceiling finishes
- The ceilings will be plastered, and coarse and finishing plaster will be applied over the plaster, which after drying will be sanded and the resulting dust will be removed before applying primer and washable interior paints.
- The ceilings will be made in a suspended cassette system, with metal profiles in two directions according to the technical product sheet. The appropriate plates will be installed for each type of space.

The proposed exterior finishes for the building are as follows:
For the exterior walls of the building over the exterior enclosing brickwork on the exterior of the perimeter

- 15 cm thick basalt plaster mats will be installed. A spackling mass and reinforcement mesh will be applied on top of the basalt mats. Afterwards, the finishing coat of decorative mineral plaster and possibly water-repellent plaster treatment will be applied;
- on the base area will be applied adhesive for bonding extruded polystyrene boards with a thickness of 8cm. On the extruded polystyrene boards, at the level of the plinth, will be applied a spackling mass and welded reinforcement mesh incorporated in this layer to make a reinforced plaster. On these areas will be applied decorative plaster for the plinth.
- A metal profile structure will be installed to support the Bond composite panels to create a ventilated facade. Thermal insulation will be achieved by installing 10cm thick basalt wool mats.
For external ceilings of balconies, loggias or consoles, the following shall be made
- cladding with 15 cm thick basaltic mineral wool tiles, glued with adhesive and fixed in dowels, over which a structure of closed metal profiles will be mounted with a Bond composite board finish.
The exterior floors will be finished as follows:
- Access platforms will be finished with non-slip ceramic tiles;
- Protective walkways around the building will be made of concrete, over which natural stone paving will be applied.

The exterior joinery will be made as follows:
- The external joinery - windows - will be made of aluminium profiles with thermal insulating joinery with performance, with triple insulating glass 4+10+4+10+4 mm, 4 seasons, with R'min = 1 m^2K/W (U'max = 1 W/m^2K), equipped with hygroscopic adjustable slits (in areas where there is no mechanical ventilation).
- Exterior doors made of high-performance aluminium thermal insulation joinery with triple glazing, 4 seasons, R'min = 0,77 m^2K/W (U'max = 1,30 W/m^2K), provided without threshold;

- The glazed surfaces will be made of double-glazed thermopane glass with a total thickness of the glass package of 16cm, in 4-8-4 system, respectively the outer sheet with a thickness of 4mm Low-E glass, 8mmm spacer rod and 4mm clear glass;
- The movable eyes of the cabinet can be fitted with insect screens, with hinged opening or by rolling in the box;
- All the details of the external joinery are provided in the External Joinery Table, present in the drawings of the Technical Project phase.

The interior joinery will be made as follows:
- Doors between rooms are on cellular structure with perimeter wood structure and white painted MDF panels, standard painted multilayer wood frame.
- The doors provided on corridors/hallways will comply with the minimum requirements according to NP118/99 table 3.4.4, white colour;
- Fire resistant metal doors shall have white door leaf and frame;

- All the details concerning the interior carpentry are provided in the Interior Carpentry Table, present in the drawings related to the Technical Project phase.

THE RESISTANCE STRUCTURE

It is proposed to over concrete the existing floor in the basement area with a 20 cm thick, double reinforced slab to stiffen the embedment at the base of the pillars. The reduction in height does not affect the functionality of the building, as it only serves as a technical basement. The concrete class used is C20/25 and the reinforcement will be made with two rows of welded mesh Ø10/150x150mm.
The central pillars in the basement area will be bedded with 10 cm thick reinforced concrete applied by twisting with concrete class min C25/30 and BST 500S reinforcing bars min diameter 3 xΦ20 per side. They will be fixed with Φ10 to 15 cm or metal plates of 20*4 mm fixed in the pillars by metal connectors.
Reinforcement of the superstructure columns by bedding with 10 cm thick reinforced concrete applied by twisting with concrete class min C25/30 and reinforcing bars BST 500S min diameter min 3 xΦ20 per side. They will be fixed with Φ10 to 15 cm or 1.5 mm metal plates fixed in the posts by metal connectors.
Reinforce the beams with concrete applied by twisting min 7.5 cm and reinforce the intrados of the beams with BST 500S reinforcing bars min diameter 3 xΦ20 for beams <30 cm and 4 xΦ20 for beams >30 cm. They will be fixed with U-type threaded rods of Φ10 at 15 cm fixed at the top in the 8 cm overhang of the floor above the basement and 15 cm (at the rest of the floor) with 25*5 mm metal plates.
Over-concrete the hollow-core slabs by creating a new 15 cm thick slab without connection to the hollow-core slabs, the existing slab being used only as a formwork. The connection of the floor slabs of the over-concreting will be made by holes in the masonry walls of Φ30 mm every 25 cm and the use of reinforcing blocks of 80 cm length.
5 cm reinforcement of the masonry walls by twisting on both sides with Φ8/150*150 mm nets anchored in the superstructure and in belts and beams with metallic connectors.
As the terrace over-concreting is also necessary, the thermal insulation layers will be removed. After the consolidation and over-concreting works on the floor, the terrace layers will be re-laid using the same slopes as the existing situation and the thickness of the insulation layer greater than 30 cm.
CONSTRUCTION OF A TOWER TO HOUSE COMMUNICATION SYSTEMS:
The tower will be made of a metal structure of equilateral triangle shape, having a base with side B=6.0m and in the highest area b=3.0m. The height of the tower is H=35m.
The sections of the elements are RO219.1x 10mm, RO168.3x8mm, RO133.7x6.3mm for the main structure, RO101.6x4mm, RO88.9x4mm, RO76.1x4mm.
The base of the tower will be embedded in a 50cm thick general raft over which 50x1.0m section foundation beams are placed. The load relief from the raft to the ground is done by a system of drilled piles under each leg of the tower. The concrete grade used for the infrastructure is C25/30 and the steel used for the tower is S355K2G4.
ADDITIONAL MEASURES WITHOUT REINFORCEMENT ROLE:
Resurfacing the perimeter pavements so that they are watertight and ensure the removal of storm water.
Overhaul of all plumbing, new plumbing to be inserted into masonry slots before consolidation work is carried out or it will be fitted as a visible fixture if it is to be reinstated after consolidation
Reinsulation of basement waterproofing from the inside, by applying osmotic mortars resistant to negative water pressure.

ELECTRICAL INSTALLATIONS

- Electricity supply

Electricity supply is provided from the existing public electricity distribution network in the area.
This is done by means of a BMPT type connection at a voltage of 400V, 50Hz.
This will supply the general electrical panel of the building concerned by this project.
It will be positioned in the room
TEG technical space, and the panel will have a metal casing and a protection degree of IP56.
All consumers in the building will be supplied from the TEG, according to the "General distribution scheme" plan.
From the TEG general electrical panel will be supplied also the electrical consumers with fire safety role in the building, namely: the power supply circuit of the fire detection, signalling and warning control panel (this circuit being connected before the general switch of the TEG).
The TEG electrical panel will have a control button located on the wall in the hallway of the building (or on the panel casing), which will disconnect in case of emergency the power supply to the general circuit breaker on this panel.
The general circuit breaker on the TEG will additionally have 300mA differential protection. In addition to the function of an automatic circuit breaker for short-circuit or overload currents, the general circuit breaker will also have a separator function.

The TEVit electrical panel (vital panel) will have a double power supply, i.e. from the street electrical network and from an electrical generator, located near the building, the switching being done by means of an AAR type automation, positioned in the Technical Space - TEG.
The renewable sources are composed of photovoltaic panels (the kit contains 57 photovoltaic panels with an installed power of 31Kw), they will be placed according to the terrace plan. This electricity generation system will be of the ON GRID type and will inject the electricity produced directly into the grid, or will be consumed directly by the consumers in the building.

- Characteristics of the designed electrical panels
The switchboards will be made with automatic circuit breakers with short-circuit and overcurrent protection, and will be provided with spare circuits.

- Electrical circuits
The project provides for the distribution of electricity in the site through a network of low-voltage circuits supplying the consumers mentioned.
The electrical wiring for lighting and sockets is made of N2XH 3x1.5mmp cables for lighting and N2XH 3x2.5mmp for sockets, mounted in halogen-free fireproof protection tubes, buried in plaster, and on metal cable ducts.
In this project, according to SR EN 62606, the installation does not need to be equipped with automatic circuit breakers of the AFDD (arc fault detection device) type.
Due to the need to implement solutions to reduce carbon dioxide emissions, it has been chosen that the studied objective will be equipped with a 44kW electric car charging station, which will serve two parking spaces and will be able to charge simultaneously two electric or hybrid cars, at 22kW each.

- Lighting installations
The lighting circuits will be executed with NHXH 3x1.5 mmp type cable, mounted in a halogen-free fireproof protective tube and on metal cable duct.
The lighting will be made with lighting fixtures that will be equipped with LED source, with IP protection degree specific for each site.
The stairwell and hallways will be equipped with lighting fixtures equipped with motion and presence sensor with a minimum detection radius of 7m.

The lighting control shall be provided by local wiring technically and aesthetically appropriate to the space served.
The switchgear will be ST type and will be mounted 10-15 cm from the door frame. Switches and switches shall only be mounted on phase conductors. They shall be chosen for a rated current of 10A. Their mounting dimension shall be as specified in the drawings.
Outside the building the perimeter circulation lighting will be made by LED floodlights, IP 65, 30W, 3000lm, the actuation of these fixtures will be made by motion sensors. The mounting height will be 3.00m above the 0 level.
In the area of the exit doors of the building will be placed LED lighting fixtures, IP44, 24W, 2100lm, which will be operated by motion sensors, they will be equipped with emergency kit, 2 hours autonomy, serving the security lighting for evacuation, but also for normal lighting.
The designed lighting levels comply with the specifications of NP-061/02.
- Electrical installations for emergency lighting
For the security lighting for evacuation will be provided (in all three building bodies related to the present project) lighting fixtures - LED luminaires with dry batteries included, 2 hours autonomy, in permanent operation (the luminaire works both during the power supply from the network and in case of lack of voltage from the network, powered from the batteries, according to the autonomy), which will be connected grouped, to common circuits or independent of the normal lighting, according to the I 7/2011 regulation.
Safety lighting for evacuation has been provided:
- on escape routes;
- at all exits from the building;
- near each fire-fighting equipment.
Evacuation lighting will be provided with foil indicating the direction of evacuation.
The escape escape lighting shall be in permanent operation in the building during the period of activity in the building; if the escape lighting is provided by natural lighting, no further operation is required during this period.
Safety lighting for marking the hydrants has been provided (in all three building blocks of the present project), for each individual indoor hydrant illuminating all the distinctive signs of its use.
It will be made with LED luminaires with emergency kit with a 2 hours autonomy included.
Panic safety lighting has been foreseen in rooms larger than 60m.
Panic lighting will be provided with self-contained luminaires used for normal lighting. In addition to the automatic control of its operation, the panic lighting will also be provided with manual controls accessible to qualified building personnel. The panic lighting shall be switched off from a single point accessible to the personnel responsible for the panic lighting.
The lighting fixtures shall also be switched on automatically from the emergency kit automation, when it detects a lack of mains voltage.
The luminaires for the panic safety lighting are of LED type with 2 hours autonomy.
The emergency lighting for interventions is foreseen in the rooms that have as destination Technical Spaces, the luminaires will be equipped with emergency kit with autonomy of 2 hours.
Safety lighting for the continuation of the work was provided in the room where the fire detection and warning system (ECS) is located, by means of an LED luminaire equipped with an emergency kit with an autonomy of 3 hours (all the luminaires in this room are also connected to the electric generator).
The circuits for the emergency lighting will be executed with N2XH 3x1.5 sqmm and 4x1.5 sqmm cable mounted in fireproof protection tube, Dn 25 mm.

- Installation of standard sockets
The socket circuits are executed with N2XH 3x2.5mmp cable, this type of cable being mounted in flexible halogen-free flame-retardant PVC tube and on metal cable duct.

Wall-mounted ST sockets with protective contact, shutter for protection against the introduction of foreign bodies, plus protection with automatic circuit breakers have been provided.
They will be protected with 16A/30mA differential circuit breakers.
The power supply to the sockets in the laboratories (intended for student computers), which are equipped with electrical panels, will be made only after the key switches on the doors of the corresponding distribution panels have been operated.
- Protection installations against electrocution. Protection by bonding to the protection null
Protection by bonding to the protective earth is to be used as the main protective measure for apparatus and equipment which, in the event of an insulation fault, can potentially become phase faulted.
The protective null conductor shall be designed in a similar way to the active conductors. In order to avoid accidental interruptions of the protective null network, it shall be distinctly marked (insulation colour usually alternating green, yellow) and shall be earthed near the power supply.

- Protection by earthing
Protection by earthing consists of connecting conductive metallic elements which are not part of the working circuit to the earthing socket.
The earth electrode will be made of vertical Ol-Zn cross profile electrodes L=2m, joined by OLZn 40x4 mm plates and installed in the ground, at -1 m from the level of the landscaped area. All connections to the earth connection will be made by means of separating pieces.

The value of the leakage resistance of the socket shall be 1Ω maximum. If the value is not respected by the measurement, vertical electrodes of Ol-Zn cross profile L=2m, joined by OL-Zn 40x4 mm plate and mounted in the ground, at -1 m from the level of the landscaped land, will be added. All connections to the earth connection will be made by means of separating pieces.
The earth connection against electric shocks will also be connected to the inner belts of the technical rooms. Each inner protective belt will be closed/continuous around the perimeter of the rooms, and each one will be connected to the earth connection by means of two separating pieces.
The main electrical panels will be equipped with SPD-type devices to protect against overvoltages that may be induced by atmospheric discharges in the electrical installation.

- Protection against atmospheric discharges
The lightning protection installation and the earthing installation shall be designed with a common earthing socket, with a maximum earth leakage resistance of 1ohm.
The lightning protection installation, foreseen in the project, constitutes a complete set of elements which serve to take up overvoltages of atmospheric origin and to drain them to the ground.

The installation will consist of :
- a PDA type T=60µs lightning arrester;
- Ol-Zn mast on which the PDA will be fixed at a minimum height of 2.5 m, in relation to the highest element of the building protecting it;
- down conductors and grounding elements;
- lightning strike counter.
At the down conductors of the lightning arrester, the down conductors shall keep a distance of at least 50 cm from French windows or balconies.
At 2m above the ground, the conductor will be interrupted; the electrical connection with the earth connection will be made with a separation piece (P.S.). from the pavement to the flat separation piece and will be protected by a special protective sheath.
The minimum protection radius of the PDA will be 50 m at protection level II.

SANITATION
WATER SUPPLY INSTALLATIONS

- Cold drinking water supply

The water supply to the site will be provided from the public water mains via the existing connection and metering house.
It is proposed to resize the domestic water distribution pipes to cope with the new consumers.
In the immediate vicinity of the connection house a water distribution house will be provided for the body under study and the water supply to the fire basin.
From the distribution chimney a distribution network is proposed as follows:
- HDPE40 to provide cold water flow for domestic consumption.
- PEHD90 for the water supply to the fire basin.

- Water distribution to consumers

The studied objective will be provided with separate sanitary facilities by gender, equipped with washbasins, toilets, urinals, and shower tubs. The number and location of the sanitary objects has been determined according to the number of people who will use these spaces. In the sanitary group for people with disabilities special sanitary objects have been provided for them.

Sanitary fittings will be provided according to the architectural plans.
The pipes for the drinking water installation and the connections to the sanitary ware are made of polypropylene pipe for drinking water and will be installed buried in the wall or in the trench. The distribution from the ground floor will be made at ceiling level then through columns to the top level.
The installation will include ball valves - mounted on the branches to the sanitary units, shut-off and regulating corner valves - mounted on the connections to the sanitary units. The connections to the sanitary ware are mounted buried in the wall. When passing pipes through floors and walls, protective tubes shall be fitted.

- Preparation of domestic hot water

Domestic hot water preparation will be done in a 2000 l bivalent boiler with double coil. The upper coil is fed from the central heating plant and the lower coil is fed from a solar panel installation mounted on the terrace of the building, according to the thermal installation project.
- Piping provided:
- multilayer polypropylene pipes assembled by polyfusion for the main pipes and columns
assembled with specific fittings;
- multilayer polypropylene pipes assembled by polyfusion with specific fittings for connections to sanitary ware.

- Pipe insulation
Water pipes shall be thermally, and condensation insulated as follows:
- the main hot and cold-water pipes (distribution pipes and risers) are insulated with Tubolit type rubber sponge.

- cold and hot water pipes made of polypropylene for connections to sanitary ware are insulated with Tubolit rubber sponge.
The pipes shall be thermally insulated with 5 mm insulation after testing.

FIRE PROTECTION AND FIRE EXTINGUISHING INSTALLATIONS

- Installation of internal hydrants
1 indoor fire hydrant is proposed at each level, located on the stairwell.
The distribution network of the indoor hydrant installation will be branched. The installation will be made of galvanized steel pipe and will be executed in apparent assembly.

- External hydrant installation
The flow rate required to extinguish the fire outside is 15 l/s.
It is proposed to install an above ground external hydrant, Dn80, 15 l/s, located in the building so as to ensure the necessary flow for fire fighting at each point of the two buildings.
The flow will be provided from the proposed waterworks and the pressure required for the network of outdoor and indoor hydrants will be provided from the pumping station.

- Water household

water reserve
The water supply for the fire-fighting installations with internal and external hydrants will be provided from the fire water supply consisting of an above-ground cylindrical tank with a usable volume of 175 m3 and an underground pumping station equipped with a pumping unit. From this pumping station a HDPE63 pipe is proposed to supply water to the internal hydrants and a HDPE110 pipe to the external hydrants. A polyethylene/metal transition piece will be installed before the entrance to the building to supply the indoor hydrants, to connect the HDPE distribution pipe to the OL pipe.
For permanent supervision of the water supply to the reservoir, optical and acoustic signalling installations will be provided.
For fire extinguishing installations with internal and external hydrants, provision will be made:
- A pumping unit for internal and external hydrants, consisting of an active pump, a reserve pump and a pilot pump.
Accidental water is taken by a base pump and pumped through a pipe to the nearest sewage chimney.

SEWAGE AND STORM WATER DRAINAGE

- Indoor domestic sewage installation

For all the proposed sanitary objects, sewerage connections will be made in accordance with the current regulations (PP40 for washbasins and PP110 for toilets).
Regarding the accidental water discharge, we specify that all sanitary groups/bathrooms have been provided with floor drains Dn 50. To restore the hydraulic seal of the floor drains, the washbasins will be connected to the sewage system via the floor drains. All technical spaces will be provided with floor drains.
The solution chosen for the internal sewerage network will be with polyethylene pipes specially designed for building sewerage installations.
Ventilation of the domestic sewage system is achieved by extending the vertical drainage column 0.5 m above the terrace, terminating with PVC (PP) weather protection caps or aerators mounted in the sanitary group.

- External domestic sewage installation

Domestic wastewater from the sanitary facilities will be discharged by gravity and collected by the existing external domestic sewerage network.
The external network will discharge domestic wastewater to the local sewerage network.
- Rainwater drainage system
Rainwater will be drained through the receptacles located on the terrace and will be directed to the external network by means of horizontal pipes and vertical columns made of fireproof polypropylene tubes. A storm sewerage network is proposed in the premises consisting of PVC-KG pipes and storm sewerage chimneys.
The external network will discharge stormwater to the local storm sewer network.

THERMAL INSTALLATIONS

- Heat source
The heat source is located on the ground floor of the building and consists of 2 boilers with a capacity of 100 kW each. The heating will be done with static radiators. The distribution system will consist of polypropylene pipes with composite fibre and cross-linked polyethylene pipes. The cooling of the building will be done with VRV/VRF type systems.
The heat source and the equipment for the heating/cooling and preparation of the cold water are as follows:
-2x Wall-mounted condensing gas-fired central heating system,
Nominal maximum heat output 27-91KW at 80/60°C
Nominal maximum heat output 30-100KW at 50/30°C.
-2 x closed expansion vessels with volume 100 litres;
-1 x closed expansion vessel with volume 300 litres;
-1 x bivalent boiler for hot water preparation V=2000 litres;
- 2xcirculation pumps for central heating circuits (P1);
- radiator circuit circulation pump (P2)
- circulation pump for the ACM boiler (P3);
- 1000l capacity puffer type thermal agent storage tank;
-locking and safety fittings mounted on each equipment;
-fully equipped electrical and automation cabinet, automation circuit.
-thermal agent pipes made of polypropylene pipe;

The thermal agent piping in the thermal power plant will be made apparent and suspended and steel and PPR-Al pipes with insert will be used.
The pipe connections will be removable. Threaded fittings, Dutch connections with gaskets will be used.
Also, the expansion compensation in the central heating plant is done by direction changes. At the highest points of the installation automatic venting devices are installed.
Condensate from appliances or accidental water leakage is drained into the floor drain in the technical room with a PP pipe or equivalent material.
The central heating system will have its own automation panel that will ensure the safe operation of the installation.
The installation will be protected against pressure and temperature increase above the limits allowed by expansion vessels and safety valves calibrated at 3 bars.

- Heating installation

The heating requirement for heating and water preparation will be 187 KW (according to STAS 1907/1,2-2014). The heating load will be provided by two gas-fired heating plants. Each thermal power plant will have a capacity of 100 kW thermal.
The boilers will be condensing boilers and will operate at maximum efficiency during transition periods.

Hot water for consumption will be prepared locally by means of a bivalent boiler with a capacity of 2000lt.The circulation of the thermal agent on the D/C - boiler circuit will be done by means of an electronic circulation pump.In addition, the thermal storage unit will be equipped with a coil at the bottom to provide the possibility to connect to a battery of 6 solar panels. Thus, during the hot season the hot water consumption will be provided entirely by the thermal energy from the 6 solar collectors with evacuated tubes that will be placed on the roof of the building.The solution of storing water in the storage tank offers the possibility to use the excess thermal energy from the solar panels to heat the building when the external climatic parameters allow it, besides the advantage of preparing hot water for consumption.
The thermal storage tank will be insulated with a minimum of 12 cm of thermal insulation (polyurethane). In addition, 3 temperature probes will be mounted on the storage tank at different heights so that the temperature evolution between the lap/return connections connecting to the thermal boiler can be monitored.

To prevent the temperature of the water in the storage tank from rising excessively during the hot season, a protection system will be provided.The main component of the system will be a thermostatic valve which will allow a tap on the domestic hot water circuit to be opened.In this way the surplus thermal energy will be consumed.
The valve will close as soon as the maximum temperature inside the storage tank drops below 90°C.
The room of the central heating plant will be provided with a glazed surface equal to 2% of the useful volume of the room and with a gas sensor that will operate a solenoid valve mounted on the gas supply pipe outside the room of the central heating plant.
The flue gas exhaust will be done by an individual system for each boiler.The system consists of pipe-in-pipe sections that allow both flue gas discharge and fresh air intake for combustion of the fuel gas.

Flue gas evacuation:

The flue gas exhaust from boilers operating with natural gas fuel is forced directly into the atmosphere through the plant's flue gas pipe (exhaust kit).

Supply of combustion air:

The combustion air is taken directly from outside through the boiler kit :flue gas exhaust / fresh air intake.
The installation/assembly of the boilers is carried out by their manufacturer or by legal entities authorised by ISCIR.
A twin-tube thermal distribution system will be provided, made of PPR pipes with composite fibre.The supply of the distribution system will be realized by means of a distributor/collector located in the room of the heating plant.
The hydraulic balancing of the circuits will be done by means of thermostatic head valves. If there are pipe joints, they will be mounted in a visible position, hidden at the bottom of the room as close as possible to the wall. The thermal agent will be a mixture of water + ethylene glycol to protect the installation at indoor temperatures down to -10 degrees Celsius.

- The air conditioning system

The cooling source will be composed of 2 outdoor units that will form together with the indoor units 2 VRF/VRV cooling systems.
The VRV system has been chosen for reasons of route flexibility and building aesthetics. All rooms will use indoor units with casings. The refrigeration system will have an output of 90 kW and will operate independently.
It is recommended to purchase low sound pressure cooling units.
The outdoor unit will be mounted on anti-vibration connectors.
A split air-conditioning system will be installed in the server room to ensure optimum operating temperature of the equipment. The room can also be cooled by mechanical ventilation when the outside temperature allows this.
- Mechanical ventilation installation with heat recovery for energy efficiency of the building

The airflow will be distributed according to the occupancy and air volume of the room.
Tubular air-to-air heat recovery units will be installed in office rooms.
The air recuperator ensures a permanent flow of fresh air, normalises the humidity in the room and eliminates the causes of condensation on windows, damp and mould.The air recuperator will be mounted/hidden entirely in the thickness of the outer wall of each room, leaving only the ventilation grilles outside. The air intake and exhaust are done simultaneously (no pressure differences in the room).
In rooms with no glazed surface, exhaust fans connected to the exhaust ducts must be provided.
The air inlet will be through transfer grilles mounted in the doors.Otherwise, the doors of the sanitary units must have a minimum clearance to the plate to allow air circulation.

NATURAL GAS INSTALLATIONS
It is desired to build a new natural gas installation from the connection point of the regulating station.
Two new thermal power plants with a flow rate of 12.00 Nmc/h each are to be installed.
For the outdoor natural gas installation, the buried pipe solution has been chosen. The expert use installation will be installed in low pressure mode. When installing the buried natural gas pipeline, the safety distances from different constructions and other types of installations will be considered, according to NTPEE approved by ANRE Order 89/2018.
It is foreseen to install an electric fan outside the building and an automatic natural gas detector with a sensitivity limit of 2% CH4 in air, mounted in the CT room.
Pressure regime- The natural gas consumers will be supplied at a pressure of 20 mbar.

ANNEX 8. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

1. Pre-construction phase

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
Introduction of E&S requirements in the bidding documents	Overall impact on the environmental and social components of the project area	• Participation in the regular meetings with the detail design (DD) consultant to understand the potential implications on the environment and local community; • Collect costing data and introduce in bidding document (both in the description and BOQ) the E&S chapter requirements as applicable to the Contractor or other Consultants;	DD Consultant	PIU E&S Expert
Improper waste management	The generation of construction waste is caused by improper management of building materials in construction projects	• The Technical Design consultant will draw up an environmental management plan that also includes the waste management plan from construction activities in accordance with the waste hierarchy • Construction works waste will be classified/coded/estimated in accordance with the provisions of the waste legislation.	Technical Design	PIU Environmental Expert
Lack of responsibility of contractors and consultants	The lack of clear responsibilities from bidding documents with Contractor and other Consultants would jeopardize the implementation of the ESMP	• Coordinate with procurement teams on E&S related input in bidding documents; • Detail the tasks and update ESMP accordingly	PIU E&S Expert	PIU Management
Delays in obtaining the environmental permit	These delays may impact on the cost and timeframe of the sub-project implementation	• Elaborating environmental documentation and obtaining the environmental permit and participation in the process	DD Consultant	PIU Environmental Expert

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
Non- compliant construction site	The construction site should be planned in accordance with the principles outlined under the current ESMP	• Elaboration of the Construction Site Organization Plan, that should include provisions on: - Social Aspects: separate toilets on the site for women, fences and secured entrance, construction details board at the entrance, grievance mechanism board and box; assurance of minimum conditions for containers used by workers (changing rooms, eating area, sleeping areas) and construction team, health and safety requirements on site - Environmental: identification of waste deposit on site, reduction of construction site effects on existing vegetation, wastewater system on site, construction vehicle washing station, watering system for dust reduction;	DD Consultant	PIU E&S Expert
Aligning ESMP to execution graph	The ESMP should be updated to include monitoring timeframe	Update mitigation measures in the ESMP based on retrofitting and functional upgrading execution graph - establish the supervision visits based on construction stages - update monitoring plan in line with execution timeframe - public consultation, engagement and outreach activities updated based on the timeframe	PIU E&S Expert	PIU manager
Legal compliance of environmental permitting and other applicable norms	Updating the ESMP with the requirements outlined in the detailed design so that monitoring is aligned with these requirements	Align ESMP **environmental requirements** with the legal norms applicable for the detailed design process - waste management requirements (site separate collection, contracting of authorized WM services, recycling of materials; - hazardous material management and spill control requirements - Wastewater discharges - Air and noise emissions - Water supply and sanitation - Traffic management	PIU Environmental Expert	PIU manager PIU architect

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
Include ESMP requirements into detailed design	Assure that requirements for social compliance are included in the requirements for the retrofitting and functional upgrading process	Align ESMP **social requirements** with the legal norms applicable for the detailed design process - health and safety requirements for the construction site (showers, changing rooms, etc.) - grievance mechanism on site (board, grievance box, etc.) - health and safety trainings for construction personnel;	PIU Social Expert	PIU manager PIU architect
Reduce relocation impacts on staff and community	The impact on the H&S of staff during relocation and at the temporary relocation site, as well as the impacts on the delivery of the service	Assure health and safety standards and potential relocation impacts at the level of the Relocation Management Plan - participate in meetings with the relocation site owner and establish minimum requirements for operation, assisted by GIES Health and Safety Expert (heating, separate facilities for women, indoor air quality, water connection, sewerage connection, safety of electrical system); - provide training for CESI and CPFD personal in relation to health and safety related to moving the equipment and in relation to the new conditions in the relocated site; - inform staff on grievance mechanism in relation to the conditions at the new relocation site	PIU Social Expert GIES H&S expert	PIU manager
Understanding the requirements of ESMP at local level	Informing the detachment staff and Constanța county inspectorate on the provisions of the ESMP and their expected contribution during all phases of the project	• Disseminate ESMP provisions at county and local level in training sessions; • Inform CESI and CPFD on their contribution in achieving ESMP objectives (public information, grievance mechanism, environmental and health and safety monitoring support, etc).; • Obtain approvals from GIES/DES on delegation of tasks to local staff;	PIU E&S Experts PIU/GIES/Constanța ESI Management	PIU Management GIES Management
Transparency and public information	The pre-construction phase should include activities that assure transparency and	Collaborate with GIES/PIU and Constanța IES's public relation officers in the promotion of the project and the ESMP provisions	PIU Communication Expert	PIU Management

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
	information disclosure on the project and ESMP outcomes,	- dissemination of project materials, public consultations, citizen engagement, grievance mechanisms; - press releases and conferences on the project;	PIU Social Expert	
Inclusion of general public, affected parties and interested stakeholders in the detail design phase	Actively work towards informing neighbors and the general public on the outcomes of the project.	Organize public consultation on the ESMP - identification of potential stakeholders (neighbors, local institutions - such as local police, municipality, local environmental agency, NGOs, etc.); - send invitations via email/mail with printed brief versions of the ESMP; - upload the document on the GIES/ Constanța IES websites for public disclosure and provide contact details for feedback; - identify a location that suits the purpose of the public consultation (min capacity: 40 participants, snack & coffee corner, projector and projector screen, sound system, air ventilation/conditioning, etc.); - send a press release and invite journalists and media outlets to the consultation; - collaborate with MoIA publishing house for editing purposes in relation to documents; - prepare an agenda and presentation of ESMP provisions and co-moderate discussions; - keep minutes of the meeting, photo documentation, and update the ESMP and disclose the final version;	PIU Social and Environmental Expert	PIU Manager
Grievance redress process	Assuring that all the channels for receiving complaints and suggestions will direct grievances to PIU	Update current PIU procedure on Grievance Mechanism to include responsibilities at the level of county ESI grievance officers, create a template for recording grievances, define competencies in relation to the project, and create reporting templates	PIU Social Expert	PIU Management

2. Retrofitting and functional upgrading phase

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
Wastes generation during retrofitting and functional upgrading works	Assure that waste is collected in an appropriate manner and disposal is not done in unauthorized areas	• Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities • Mineral/solid retrofitting wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate places • Construction waste will be collected and disposed properly on authorized landfills by licensed collectors • Construction waste will be collected/recycled/recovery and handed over to authorized economic operators to reduce the amount of waste sent to the ecological landfill. • Only non-recyclable waste will be sent to compliant landfill • The contractor will elaborate an environmental management plan that also includes the waste management plan from construction and/or dismanteling activities, respecting the waste hierarchy. It will also ensure that optimum levels of waste reduction, re-use and recycling are achieved. • Retrofitting of and attic adding to the headquarters wastes will be sorted, if necessary, on-site and will be stored in proper places; • The transport of waste generated from retrofitting of and attic adding to the headquarters waste activity will be done with covered means of transport; • The builder of the work must comply with the waste management plan from the construction and dismantling activities during the duration of the work • Waste collection and disposal pathways and sites will be identified for all major waste types expected from	Contractor selected for works	PIU Environmental Expert Authorized Environmental Company for carrying monitoring activities

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
		retrofitting of and attic adding to the headquarters activities; • Inventory and record: Construction and dismantling waste will be classified/coded/estimated in accordance with the provisions of the waste legislation • The records of waste disposal will be maintained as proof for proper management as designed Whenever feasible the contractor will reuse and recycle appropriate and viable materials		
Noise pollution during retrofitting and functional upgrading works	Taking all measures to reduce noise pollution for retrofitting staff and local community	• Organize work so that time spent in noisy areas is limited • Planning the noise-producing activities so that their performance affects as fewer workers as possible • Implementing work programs to control exposure to noise Use of sound absorbing materials and filters/barriers to reduce reflected sounds	Contractor selected for works	PIU Environmental Expert Authorized Environmental Company for carrying monitoring activities
Air pollution during retrofitting and functional upgrading works		• During retrofitting activities, it is necessary to reduce dust by spraying with water and/or installation of dust absorption devices • It is strictly forbidden to burn building materials/waste on the ground • For transporting any other dusty material at the work site, it is necessary to moisten or cover the load • Dust reduction on land during the dry season of the year is done by moistening the soil surface. • On the site, all routes will be arranged so that they do not lead to skidding, mud, ponding, etc. • Vehicles and machines will be properly maintained and will have up-to-date technical revisions.	Contractor selected for works	PIU Environmental Expert Authorized Environmental Firm for carrying monitoring activities

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
		• Workers who carry out the work must wear protective clothing and breathing masks.		
Health and safety hazards during retrofitting and functional upgrading works	Ensuring that all conditions are fulfilled on site for the staff and that passers-by or children do not enter the site at any time.	• Ensure construction workers are given safety instruction, equipment and working clothes • Special instruction/warning signs must be installed on the facility • Ensure safety officers on site • Provide appropriate sanitary and solid waste disposal facilities for use by construction workers • Provide first aid and protection kits • Ensure effective signage for the public and ensure that all exposed construction areas are fenced from public access. Security should enforce that access on site is made through an ID and in strict connection to the works	Contractor selected for works	PIU Social Expert H&S expert within GIES and at the level of Consta ESI
Loss of soil resources, land/soil degradation and pollution during retrofitting and functional upgrading works		• Compliance of the construction Detail Design with the national environmental, industrial safety, construction, architectural, technological and public health regulations • If unfeasible, ensure soil protection through dead and live soil protection structures • Dislocate excavated fertile topsoil (if any) to adjacent agricultural lands • Incorporate protective design features (e.g., drainage structures and plant vegetation on slopes) • A proper rainwater/drainage system should be installed in order to exclude the flooding potential, landslide and/or erosion processes • Avoid cutting and damages of trees and other existing local vegetation, etc.	Contractor selected for works	PIU Environmental Expert
Increased risk of traffic congestion and accident due to	Organising transport in such a way as to avoid peak times and reduce the risk of accidents	• Organize the transportations related to the construction works as to avoid the hours with high vehicles or pedestrian traffic	Contractor selected for Construction works	

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
works related transportation		• Ensure that the personnel involved in transportation activities is qualified, trained, and authorized to carry such activities • Assure that the vehicles are appropriate and meet the technical conditions to be used		
Grievance Mechanism	Assuring that the panel at the entrance gives all details on the grievance mechanisms	• Panel installed next to the construction board, outlining the grievance mechanism provisions and principles, as well as a letter box • Weekly check-up of the letter box • Assuring answers are being formulated to all grievances related to the project, received through all channels	Contractor selected for works PIU Social Expert	PIU Management
Disturbances encountered by neighbors	Unstructured interviews with the neighbors on the disturbances encountered during retrofitting and functional upgrading works, Information to neighbors (letters, door to door) and general public in cases of disturbances to utility networks	• Discuss with neighbors during functional upgrading works to collect their feedback on any disturbances or damages to their properties or public property (at least once during retrofitting works and two during functional upgrading works); • Write report on collected information and inform the site supervision team/contractor on any wrongdoings raised by neighbors • Public information campaign and coordination with utility providers to inform citizens on potential temporary disturbances in relation to their utility supply;	PIU Social Expert	PIU Management

3. Operation phase

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
Excessive energy consumption	The operation of the new facilities should take into account best practices in terms of	• Elaborating the plan and implementing the energy efficiency measures in the activity of the new command center	Contractor	Beneficiary

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
	using energy in an efficient way	• Use of electrical installations and high energy efficiency equipment • Optimal and high-efficiency lighting can reduce the energy consumption • Training the local staff in good practice on equipment maintenance and energy efficiency, including optimal air conditioning • Design and implementation of the energy management system in line with good international practices		
Waste generation, including special (electro-technical, etc.)	The new facilities should be equipped with separate collection and staff should be informed through signaling	• Implementation of the appropriate waste management system, separate collection and storage, provision of recycling and reuse; • Signaling and special marking; • Inventory and record	Contractor	Beneficiary
Excessive consumption and contamination of water resources	Monitoring the data consumption and maintenance can considerably reduce the loss of water	• Ensure the proper water consumption recording system and means • Planning and implementation of adequate maintenance measures of the distribution system, avoiding leakage and excessive consumption, etc.	Contractor	Beneficiary
Air pollution (heating and ventilation systems such as car transport are the major sources of pollutant emissions in air)	Considering all measures to reduce the impact on air emissions generated by the new facility	• compliance of the thermo-energy sources with the quality standards with obtaining the Pollutant emissions permit in the atmosphere • inventory and reporting of the resource's consumption • the proper management of site generated wastes • maintenance and operation of the transportation means in the appropriate way, etc.	Contractor	Beneficiary+PIU Environmental Expert+Authorised Environmental Firm by analysis reports
Noise, acoustic pollution	Assuring that the new buildings is compliant with the norms and does not bring any disturbances to the local	• identification of sources generating noise, • monitoring and measurement of noise levels, • monitor the health state of staff and inmates, • applying technical measures to reduce the noise level, • appropriate signaling of high-noise locations,	Contractor	Beneficiary+PIU Environmental Expert+Authorised Environmental

Risk/Impact/Issue	*Description*	*Suggested mitigation measures*	*Responsible*	*Supervision*
	community during operation	• training employees about the risks they are exposed to, etc.		Firm by analysis reportsiciary+
Human Health and Safety	Avoiding any work-related accidents with training, protective equipment and regular check-ups	• Regular training on safety and health • Informing the local staff about the exceptional situations • Displaying in an open place the Action Plan in exceptional circumstances • Training on individual and collective protection procedures and measures applied in exceptional situations • Provide protection equipment according to the requirements and the rules in force • Annual medical examination of the OFD personnel, etc.	Contractor	Beneficiary+PIU Environmental Expert+PIU Social expert
Public disclosure and citizen engagement	Inform the public on the outcomes of the project, impact at the level of OFD and community	• Press release and press conference	PIU Communication Expert	PIU Management

ANNEX 9 - ENVIRONMENTAL AND SOCIAL MONITORING PLAN

The monitoring plan will be updated during the detail design phase of the TD&TA Consultant contract and the public disclosure phase, in order to reflect the clear responsibilities of monitoring and supervision actions from different parties in the process. Chapter 7 details on the generic responsibilities that have been defined prior to the signing of the TD&TA Consultancy contract.

Stage	Risk to be monitored	Place of monitoring	How is the risk to be monitored?	When is the risk to be monitored? (frequency)?	Reason for monitoring	Responsibility
Retrofitting	Air quality: dust, smog etc.	On-site	Visual monitoring	Daily during retrofitting works	Prevention of air pollution and health risks	Construction company/ PIU Environmental Expert
Retrofitting	Construction wastes	On-site	Regular visual inspection	Weekly during retrofitting works	Prevention of onsite soil and water pollution, minimizing waste generation	Construction company/ PIU Environmental Expert
Retrofitting	Level of noise	On-site	Regular inspection	Daily during retrofitting works	Prevention of risks for human health	Construction company/ PIU Environmental Expert
Retrofitting	Human health and safety	On-site	Regular supervision, registering the accidents and risk events, registering road and pedestrian accidents caused by construction vehicles/works, registering trainings, work planning, presence of separate toilets on site, compliant dining and rest conditions, signage on site. etc.	Continuous basis	Safety and health protection of workers, accident prevention,	Construction company/ PIU Environmental Expert/PIU Social Expert

Stage	Risk to be monitored	Place of monitoring	How is the risk to be monitored?	When is the risk to be monitored? (frequency)?	Reason for monitoring	Responsibility
			Minutes of Meeting with Road Police and Local Police to assure community safety measures are enforced and support is provided whenever needed			
Retrofitting	Noise and dust (transportation activities)	On-site, access roads	Regular supervision	Unannounced inspection during transportation	Avoiding dust and noise; avoiding damage and pollution of the infrastructure	Construction company, PIU Environmental Expert
Retrofitting	Public discontent	Grievance registries, on-site letter box	Review of grievances, collection of grievances through interviews, grievance box on site, meetings with the staff Public consultations Media coverage	Weekly	Assuring that the project is compliant with the norms, that the public has been timely and appropriately informed, that conflicts are solved in their initial phase	

Stage	Risk to be monitored	Place of monitoring	How is the risk to be monitored?	When is the risk to be monitored? (frequency)?	Reason for monitoring	Responsibility
Works for new upper floor and functional upgrading	Loss of soils	Construction site	Visual	During excavation works and transportation	In compliance with Detail Design and official authorizations	Construction company, PIU Environmental Expert

Stage	Risk to be monitored	Place of monitoring	How is the risk to be monitored?	When is the risk to be monitored? (frequency)?	Reason for monitoring	Responsibility
Works for new upper floor and functional upgrading	Air quality: dust, smog etc.	On-site	Visual monitoring	Daily during works for new upper floor and functional upgrading	Prevention of air pollution and health risks	Construction company, PIU Environmental Expert)
Works for new upper floor and functional upgrading	Construction wastes	On-site	Regular visual inspection	Weekly during works for new upper floor and functional upgrading	Prevention of onsite soil and water pollution, minimizing waste generation	Construction company/ PIU Environmental Expert
Works for new upper floor and functional upgrading	Level of noise	On-site	Regular inspection	Daily during works for new upper floor and functional upgrading	Prevention of risks for human health	Construction company/ PIU Environmental Expert
Works for new upper floor and functional upgrading	Human health and safety	On-site	Regular supervision, registering the accidents and risk events, registering trainings, work planning etc.	Continue	Safety and health protection of workers, accident prevention	Construction company, PIU Environnemental Expert/PIU Social expert
Works for new upper floor and functional upgrading	Noise and dust (transportation activities)	On-site, access roads	Regular supervision	Unannounced inspection during transportation	Avoiding dust and noise; avoiding damage and pollution of the infrastructure	Construction company, PIU Environmental Expert)
Operation	Air quality: dust, smog, air polluants etc.	On-site	Visual monitoring	Daily during operation	Prevention of air pollution	Construction company, beneficiary, Inspection for Environmental

Stage	Risk to be monitored	Place of monitoring	How is the risk to be monitored?	When is the risk to be monitored? (frequency)?	Reason for monitoring	Responsibility
						Protection (IEP), Public Health Center (PHC)
Operation	Air pollution generated by technological equipment	On-site, parking area	Regular technical inspection	Daily during operation	Prevention of air pollution	Construction company, PIU Environmental Expert, SLI, PHC
Operation	Special wastes and materials (electrical/office equipment etc.)	On-site	Regular inspection	Continue	Prevention of risks for human health and environment	Construction company, beneficiary, PIU Environmental Expert SLI, PHC
Operation	Household wastes	On-site	Regular visual inspection	Daily during operation	Prevention of environmental pollution	Construction company, PIU Environmental Expert, IEP, PHC
Operation	Noise level (generated by technological equipment)	On-site	Regular inspection	Regular during operation	Prevention of risks for human health	Construction company, PIU Environmental Expert, PHC
Operation	Human health and safety (occupational safety)	On-site	Regular supervision, registering the accidents and risk events, registering trainings, planning of works etc.	Continue	Safety and health protection of workers, accident prevention	Construction company, PIU Environmental Expert, SLI, PHC
Operation	Noise and dust generated by transport traffic	On-site, access roads	Regular supervision	Unannounced inspection during transportation	Avoiding dust and noise; avoiding damage and pollution of the infrastructure	Construction company, PIU Environmental Expert, NPI

ANNEX 10. FORM FOR SUBMITTING COMMENTS

Form for submitting comments and suggestions for Environmental and Social Management Plan for Constanța Emergency Situation Inspectorate and Constanța-Port Fire-Figting Detachment

Brief description of the project - Retrofitting, extending, and functional upgrading of the headquarter of Constanța Emergency Situation Inspectorate and Constanța-Port Fire-Figting Detachment.

Electronic version of ESMP for the subproject, Retrofitting, extending, and functional upgrading of the headquarter of Constanța Port Firefighting Detachment is available on the following web page:

- https://www.igsu.ro/FinantareExterna/Proiect BIRD

Name and surname of the person who provides comment*	
Contact information*	**E-mail:** _____ **Phone:** _____
Comment on the ESMP:	
Signature _____	**Date** _____

If you have any comments/suggestions or amendments to the proposed measures of Environmental and Social Management Plan ESMP for the project "P166302", in Constanța Emergency Situation Inspectorate and Constanța-Port Fire-Figting Detachment please submit it to the responsible persons from the following institution:
Contact person:
Calin Grigoras, PIU, GIES – social expert
e-mail: petitii.uip@igsu.ro
Adress: 10A Dimitrie Pompeiu Blvd. Bucharest 2nd District
Within the 14 days period after the announcement/disclosure of ESMP for the above-mentioned project
(date of announcement: ……..

Referent number: _____
(fulfilled by the responsible persons for the project implementation)

*** Fulfillment of the fields with personal data is not obligatory**

ANNEX 11. PUBLIC CONSULTATION AND FINALISATION OF THE PLAN

As foreseen in the ESMP, the activities of disclosure and dissemination of information related to the expected impacts and mitigation measures in the plan, involvement of stakeholders and institutions and public consultation were carried out as follows:

- The ESMP was published on the GIES and Constanta ESI websites

- an information campaign was carried out, including a press release, distribution of information leaflets and face-to-face discussions with representatives of economic operators in the vicinity, e-mailing to potentially interested institutions the invitation to participate in the public consultation, as well as the necessary information and references.

No feedback forms were received during the public consultation period.

The public consultation meeting was held on 23 May 2024 at the headquarters of the Constanta Port Fire-fighting Detachment in a hybrid system, giving the opportunity to interested persons or institutions to participate either in person or online. The meeting was attended by 19 people, members of the project implementation unit, representatives of the Inspectorate and the Fire-fighting Detachment, representatives of local authorities and interested institutions from Constanta Municipality as well as economic operators from the vicinity of the site, a representative of the company developing the technical design for the new construction.

Representatives of the Project Implementation Unit presented relevant information on the Project, the works to be carried out, the anticipated environmental and social impacts and the measures designed to mitigate them.

The PIU social expert raised the following subjects:

1. The road traffic situation in the Port of Constanta, especially on the route used by the intervention vehicles of the Detachment, given that recently the activity in the port has intensified a lot and the traffic has become very crowded.

2. Status of the relocation of staff currently using the building included in the Project.

The representative of ISU Constanta provided the following clarifications:

1. In order to improve the traffic situation in the port area that could affect the intervention capacity of the Detachment, steps have been taken with the competent institutions in order to identify and implement solutions to avoid traffic jams or traffic jams on the route of the intervention vehicles. So far, no situations have been reported where the intervention capacity of the sub-unit has been affected due to traffic problems.

2. In line with the initial proposal to relocate the staff of the two units to a modular building located on the sub-unit's land near the garage, a number of containers have been allocated and will be installed and arranged in such a way that they can provide appropriate conditions for the two subunits staff during the rehabilitation work on the building included in the project

Participants:

PIU:

- Architect
- Environmental expert
- Social expert
- OHS specialist

Representatives of ISUJ Vaslui and Fire Department Constanta - 4 persons
Representative of the Environmental Protection Agency Constanta
Representative of the Environmental Guard Constanta
Representative of the Constanta County Police Inspectorate
Representative of Constanta County Council
Representative of Constanta City Hall
Representative of the Public Health Directorate Constanta
Representatives of economic operators in the vicinity - 3 persons
Representative of the company carrying out the project for the new construction
World Bank representative