



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

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN  
(ESMP)  
ZIMNICEA FIREFIGHTING DETACHMENT**



**JUNE 2024**

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## ABBREVIATIONS

DRM	Disaster risk management
EA	Environmental Assessment
EGO	Emergency Governmental Ordinance
EIA	Environmental Impact Assessment
EP	Environmental Permit
EPAT	Environmental Protection Agency Teleorman
ESIA	Environmental Social Impact Assessment
ESMF	Environmental Social Management Framework
ESMP	Environmental Social Management Plan
GD	Governmental Decision
GIES	General Inspectorate for Emergency Situations
ZFD	Zimnicea 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
TESI	Teleorman Emergency Situation Inspectorate "A.D.Ghica"
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 demolition of existing structures and the construction of a new building for the Zimnicea Fire-Fighting Detachment (ZFD), 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 demolition of the current building and the construction of a multifunctional building, that will 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 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 demolition and construction 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 Zimnicea Fire Fighting Detachment operates in the buildings located in Zimnicea, Republicii Avenue 44, Teleorman County. The land that houses the buildings is identified by cadastral no. 20253 according to the land register no. 20253 of Zimnicea, consisting of 4050 square meters of land (from the deeds 4036 square meters). The main section of the operational building used by the fire brigade and SMURD personnel was built in 1978.

The Zimnicea Fire Fighting Detachment (ZFD) is one of the five intervention sub-units that are organized within the Teleorman County Emergency Inspectorate and covers interventions in the south-east area of Teleorman County over an area of 473,75 square km including a city, 16 communes with a total of about 33711 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 construction and demolition 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 demolition and construction 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 ZFD, 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 main areas of concern in relation to social negative 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 properties.

These are related to: discomfort of the neighbors 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 damages to private properties, in the event of accidents during demolition works; health and safety risks related to demolition, construction and relocation of the unit's staff, temporary increase of traffic congestion and road accident risks during transport of demolition 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; demolition of old buildings and structures and conducting construction works for new 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 ZFD staff, the activity of the ZFD relocation in other buildings on the site, neighboring properties, and community members in Zimnicea. In relation to demolition and construction 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 Zimnicea 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 Teleorman Emergency Situations Inspectorates 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 Zimnicea sub-project are the local community served by unit, current workforce of the ZFD, staff employed in the demolition and construction phases, owners and users of the neighboring properties, and institutions in the area.

The project is expected to have limited negative impact on current ZFD 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 Teleorman 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 14 July 2024 in hybrid system, at the ZFD headquarters in Zimnicea 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, 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 demolition of existing structures and the construction of a new building for the **Zimnicea Fire-Fighting Detachment**, 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 demolition of the current building and the construction of a multifunctional building, that will accommodate improved working conditions for the units' staff, energy efficient features and inclusive facilities for disabled persons and women.

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## 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).

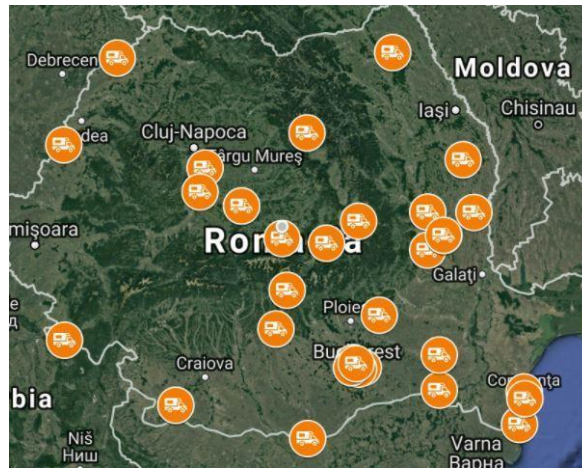
**Component 2: Enhancing technical capacity for risk reduction investment planning.** The objective of this component is to improve the understanding of disaster and climate risks in Romania, with a focus on developing a national risk reduction program and investment strategy to guide future investments 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 Zimnicea 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;
- 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 demolition, construction 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 the 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 demolishing of existing structures and construction of a new building for Zimnicea 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 demolition and construction 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



<p>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)</p>	<p>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.</p>
<p>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</p>	<p>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</p> <p>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</p>
<p>Law no. 50/1991 regarding the authorization of the execution of the construction works, republished, with subsequent modifications and completions (2019).</p>	<p>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</p>
<p>Law no. 10/1995 regarding quality in construction</p>	<p>Regulates the field of construction/demolition</p>
<p>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.</p>	<p>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</p>
<p>Normative NP 055-88</p>	<p>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",</p>
<p>Guide on the execution GE 022-1997</p>	<p>Guide on the execution of the demolition works of the concrete constructions and reinforced concrete</p>
<p>GD 856/2002 on the record of waste management and for the approval of</p>	<p>Loading, transport, take-over and treatment - final disposal of waste resulting from construction and demolition work</p>

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<sup>1</sup>.

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<sup>2</sup>.

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.

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<sup>1</sup> 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.

<sup>2</sup> 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. ZIMNICEA SUB-PROJECT DESCRIPTION

### 4.1 SUB-PROJECT SITE LOCATION AND CHARACTERISTICS

#### Site Location and Description

The building that is the subject of the Zimnicea investment sub-project is located in Zimnicea, Republicii Boulevard No. 44 and houses the headquarters of the Zimnicea Fire Fighting Detachment. The surface of the land on which the building is located measures 4050 sqm.

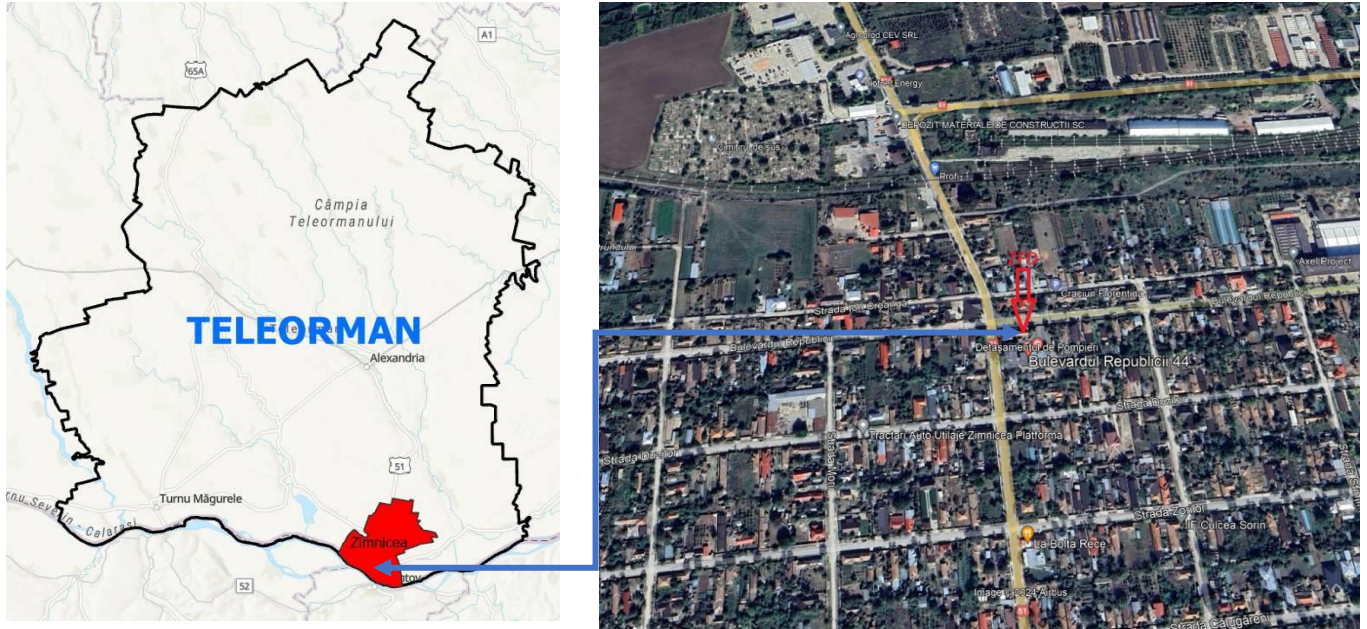


Figure 2 The positioning of ZFD in Zimnicea City

The site includes the central pavilion C1 - which is the subject of investment works under the Project and 4 other buildings and annexes as follows:

- C3 - Used in the past as workshop, currently used for storage
- C4 - Basement (unused)
- C5 - Warehouse
- C6 - Religious shrine
- C7 - Access control post

The C1 building consists of two different bodies, separated by a seismic joint, which are interlinked functionally - administrative pavilion (C1A) and garage (C1B).

On the land plot there are also two disused underground fuel tanks situated on the south and on the east sides of the premises.

The figure below presents the buildings and facilities existing on the land plot and the proposed positioning of the new construction. The proposed area to be used for the construction activities is marked with a green line.

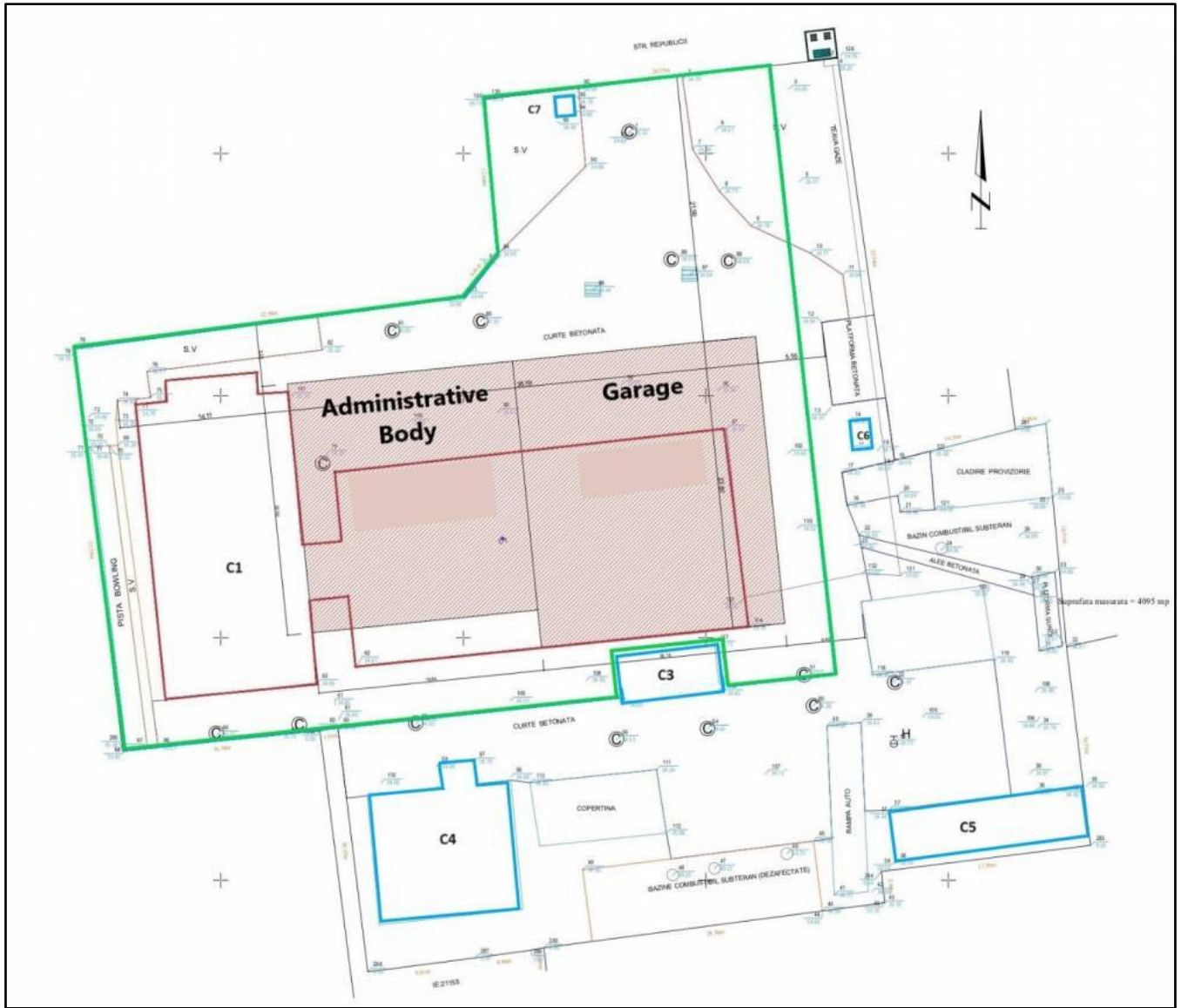


Figure 3 Proposed positioning of the new construction (sketched in orange) on the land plot.  
The main body C1 - marked with red - will be demolished

Building C1 will be demolished and a new building will be built partially on the same place, on the land of the Zimnicea Fire Fighting Detachment.

There are no buildings on the marginal land plots that are expected to be affected by the demolition and construction works.

During demolition and construction works the religious shrine in the east side of the building will be particularly protected from any damages that might result from inappropriate maneuvering of materials or machineries on the site.

### The activity of the ZFD

The Zimnicea Fire Fighting Detachment (ZFD) is one of the five intervention sub-units that are organized within the Teleorman County Emergency Inspectorate.

The subunit was established in 1981 as a Fire Company, with 3 officers and 17 soldiers on duty.



At present the unit covers interventions in the south-western part of Teleorman County over an area of 473,75 square km including a city and 16 communes. In order to reduce the intervention time in the designated area, ZFD include an intervention guard in Furculești.

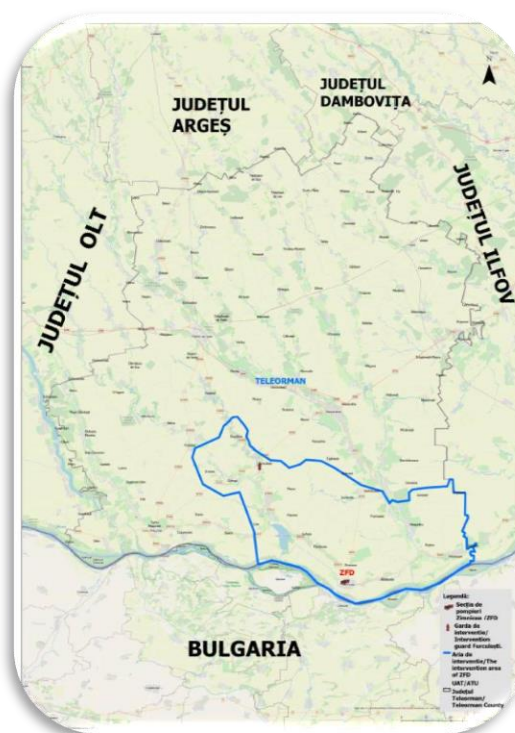


Figure 4 Teleorman County map. The intervention area of ZFD is marked with blue

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 ZFD has been involved in an average of 1617 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 Zimnicea Fire Fighting Detachment.

Table 2. Evolution of interventions at ZFD

Year	SMURD	Emergency situations	Total
2019	788	447	1235
2020	806	645	1451
2021	1062	831	1893
2022	1056	505	1561
2023	1512	437	1949

### Description of neighboring area

The land is located in a residential area with vicinities consisting exclusively of private property residential houses. The northern and western sides of the land plot are bordering the Republicii Boulevard - where is also situated the access - and Turnu Măgurele street - National Road 51.

No significant risks related to the demolition process are anticipated as the building is situated at a safe distance from the property boundaries.

All the works will be carried on inside the property limits. It is not anticipated that the works will require access on the neighboring properties or temporary use of the public domain.

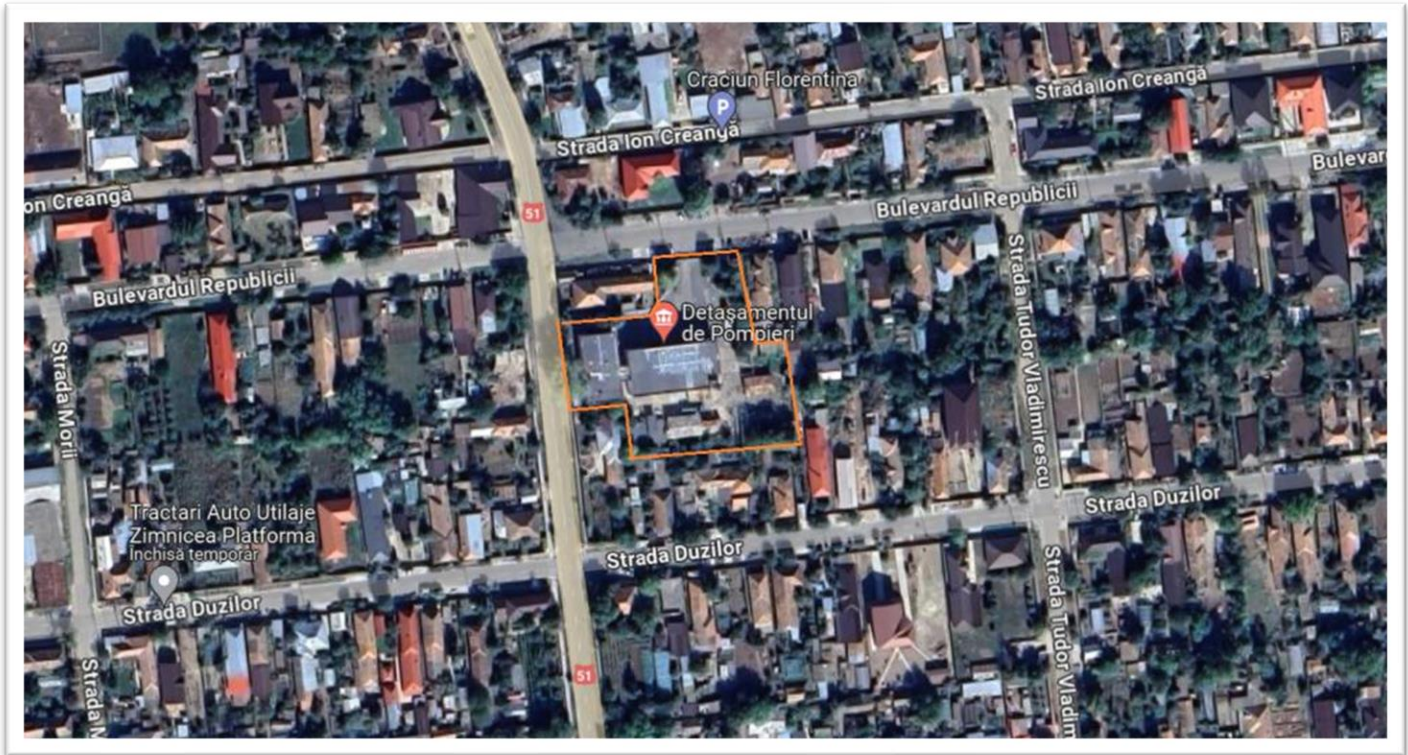


Figure 5 Neighboring area of Zimnicea Fire-Fighting Detachment

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 ZFD

Currently, the Zimnicea Fire-Fighting Detachment employs 100 people, at Zimnicea headquarter and 30 at Furculești Intervention Guard. At the time of writing this document, the ZFD staff include one a woman, that works in an 8 hours day schedule as administrative non-commissioned officer.

A number of 4 volunteer contracts, three women and one man, are registered at the Zimnicea Fire-Fighting Detachment, but only one woman is regularly carrying out activities in the Detachment. She is present on 8-hour shifts only during the day and is involved in activities consisting in campaigns of preventive information, maintenance of the intervention equipment.

Gender-specific sanitary facilities are provided in the Detachment building.

### Relocation of staff during construction works

During the demolition and construction of the ZFD building, the SMURD staff and vehicles will be relocated to the Zimnicea City Hospital, in an area that offers appropriate conditions for this activity.

A suitable building for the intervention staff and equipment of the DPZ was identified at the time of publication of this document at the former premises of the local High School, currently unused as the High School was relocated to another, recently built premises. The building allocated for the fire subunit formerly housed mechanical workshops used for teaching practice. The building has not been technically assessed



by a technical expert, but it is considered reasonably safe as it was built after the 1977 earthquake and over the years it has been repaired and well maintained, so that it is currently in good condition. In addition, a large tent made of special materials and equipped with a heating system will be erected on one of the two former sports fields of the high school, which are currently unused, to provide the necessary conditions for parking the water fire-fighting vehicles so that they can be used in the cold season.



Fig. 6 Current positioning (marked in orange) and relocation area (in red) of ZFD

This relocation solution is agreed with the responsible institutions and is already being implemented. A consultation with staff of the sub-unit is planned in the coming period to assess the impact on them and on the sub-unit's activities, as well as the mitigation measures needed to ensure that any negative effects are minimized.

Once the relocation process of the two DPZ components - firefighting and EMS - is finalized, this document will be updated as necessary to reflect the final details of the relocation.

#### 4.2 CURRENT STATE OF EXISTING BUILDINGS

The land on which the building is located is situated in the urban area of Zimnicea, Republicii Avenue no. 44, in the northern part of the locality, with an area of 4050 m<sup>2</sup>, and is in public ownership of the Romanian State through the Inspectorate for Emergency Situations "A.D.Ghica" of Teleorman County.

The building that is subject to the investment is the administrative building and garage used by ZFD, have a built area of 864 m<sup>2</sup> and is composed of ground floor and first floor.

The building was built in 1978 and consists of two sections C1A - administrative pavilion and C1B - Garage, that are separated by a seismic joint.

In 2011 a religious chapel was accommodated in the subunit assembly hall. In recent years the chapel was not used anymore and recently it was decommissioned. The dismantling of the chapel was carried out with the consent and under the guidance of the competent ecclesiastical authority - the Diocese of Teleorman, and the objects of worship and valuables were inventoried and properly managed: some were returned to the church from which they were received when the chapel was established and some were put in conservation, in the TESI patrimony.



The building is in a state of deterioration due to water infiltration and damp and also due to subsidence and seismic action during its operation.



Figure 7 Visible deterioration of the existing ZFD's buildings

Following an expert assessment by an authorized technical expert, the building was classified in seismic risk class I (SR I) which includes buildings under a high risk of collapse under the effect of an earthquake. Taking into account that the joint between the buildings body C1A and body C1B is very small 8 cm, through consolidation works connecting body will be shortened and there is a risk of collision of the two buildings, the demolition of both bodies is proposed. The existing buildings will be demolished and a new building will be erected partially on the same site. The current buildings are provided with separate toilets for women, but not provide universal access for staff and visitors.

#### 4.3 PROPOSED DEMOLITION WORKS

The demolition process is expected to take two months and will be carried under strict guidance outlined in the technical design documentation. The process will involve the disconnection of the current buildings from utilities, the set-up of the construction site within the premises (offices, toilets, changing rooms for staff) and temporary connection to utilities, the fencing and restrictions of accessing the site, equipping the site with health and safety equipment, providing training to workers on site, set-up of environmental protection measures (vehicles washing, transport of debris, protection of green spaces on the construction site).

Given that the building is not considered to have an architectural value and not being in a protected area of historical monuments, the materials will be recovered, sorted and transported to an authorised economic operator for recycling waste and only non-recyclable waste will be transported to an authorised landfill that will be indicated by local authorities. The technological process of demolition will involve the use of bulldozers, excavators, jackhammers and dump trucks. The trucks that will go in and out of the site will undergo a wheel washing process and will be covered to avoid the overspill of debris on public roads. A project information board and a grievance system board and letter box will assure that both community members and site workers will be able to communicate any grievances and suggestions to the project team, in relation to the demolition process.

Demolition takes place in stages, in the reverse order of construction, after the power supply, water, and other utilities have been interrupted. The demolition works will be supervised throughout the execution works and the uncovered parts of the construction will be staged.

The actual demolition works will be carried out as follows:

- Given that the building was initially created in 1978 there is a probability of identifying asbestos products like flat panels, corrugated panels used for roofing, water storage tanks, and pressure, water, and sewer pipes that may be revealed during demolition process. Thermal insulation containing asbestos and sprayed asbestos for insulation and acoustic damping were widely used through the 1960-70s and should be looked for in any project involving boilers and insulated pipes. The microscopic methodology for analyzing bulk samples for the presence of asbestos is available in specialized laboratory in the country.
- Demolition of buildings by dismantling functional installations, finishing and insulation
- Removing parts and construction elements starting with chimneys and roofing. The stripping operation must be carried out carefully to avoid accidents.
- The detachment of the roof must be done carefully in order to prevent the collapse by fixing supports and bracing, where appropriate;
  - dismantling of interior and exterior joinery.
  - floors will be demolished starting from a corner.
  - demolition of fixed parts - masonry, resistance structure, including foundations. Walls demolition from the top to down on the whole surface of the building avoiding leaving un-stretchable high areas which might collapse.
    - filling the gaps resulted from demolition (foundations and car pit) with well compacted soil. When filling the voids, do not use the demolition material (debris)!
    - dismantling parts and components of construction and facilities, recovery of components and materials and sorting.
    - demolition materials will be stacked by categories; unusable and non-recyclable waste will be discharged into specially designated areas.
- The dismantling of the building components will be done mechanically or manually without producing strong vibrations that would lead to the loss of the building's overall stability and uncontrolled downfall.
- The demolition is carried out in compliance with the demolition project developed by the general designer and based on the demolition/dismantling authorization obtained prior to the commencement of the operations.
- The construction company that will perform the demolition works will follow the technical documentation elaborated and will draw up a chart of the works, which will show the succession of the decommissioning of the building, observing the health and safety norms specific to this kind of works.

#### **4.4 PROPOSED NEW BUILDING CONSTRUCTION**

The new construction will include two sections, one dedicated to administrative functions and an additional section for the garage of the unit.

The objective to be achieved as a result of the investment is to ensure the optimum conditions for the daily activities of intervention personnel at ZFD, but also the intervention vehicles parking spaces, in order to maintain the necessary parameters of the operative intervention activity in emergency situations. At the

same time conditions for the preparation of the population in the area will be created in order to ensure effective responsibility for various types of risks.



**Figure 8 The proposed new building design**

In addition, the building will correspond to the latest energy efficiency requirements and will be equipped to provide high standards for the ZFD firefighters and SMURD staff operating in the facility.

The new construction design takes into account the high 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 headquarters of Zimnicea Fire-Fighting Detachment (including the garage for the emergency situation subunit).

Also, the building will provide universal access in the newly built facilities, including access ramp, sanitary facilities to accommodate the access of citizens into the building. In relation to the gender equality objectives of the Project, the new building will provide gendered sanitary spaces for women working at ZFD and also gendered dormitories, changing rooms and sanitary spaces for the volunteers and the future female staff of the Detachment.

There are no utility networks that are crossing the site and that would create limitations to the new constructions or that could create disruptions at the level of the local community.

The seizure of utilities prior to the demolition process, and the reconnection for the construction site and for the new buildings will be made with assistance from utility companies in Zimnicea. No disruptions are expected to affect neighboring properties.

Demolition of buildings abutting the property line on the south side of the site shall be designed and constructed in such a manner as not to affect the adjoining property. No access onto the adjoining property will be required to perform demolition work.

Associated risks arising from demolition and construction works that could impact on neighbouring buildings and their management measures are listed in Annex 8, together with responsibilities for their implementation and monitoring.

Also, there are no cultural heritage buildings in the area and the sub-project activities are not expected to have an impact on the landscape or the cultural and ethnic conditions of the surroundings.

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**

Construction 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 demolition/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, wastewater 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 construction and demolition works.;
- increased noise and dust level during demolition works and construction activities
- 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**

Zimnicea is located in the the southern part of Romania, in the south of Teleorman county, 42 km from the county residence, Alexandria, 130 km from Bucharest and 180 km from Craiova. With an area of 131.31 km<sup>2</sup>, Zimnicea is the fourth largest city in Teleorman County.

According to the 2021 census, the population of Zimnicea was 12.589 inhabitants, down from the previous census in 2011, when 14.058 inhabitants were registered. The majority of inhabitants are Romanians (84.76%), with a minority of Roma (5.83%), and for 9.36% the ethnicity is unknown. In terms of religion, most inhabitants are Orthodox (88.39%), and for 9.76% the religious affiliation is not known.

#### **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 Zimnicea Fire-Fighting Detachment, current workforce of the unit, staff employed in the demolition and construction 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 at the level of the community by:

- Providing a safe and healthy environment for the staff and volunteers working at Zimnicea 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:

- Increase discomfort of the neighboring properties, 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 ZFD service delivery during the relocation process;
- Health and safety risks related to the working conditions at the temporary relocation sites;
- Health and safety risks at construction site level for workers, in particular for foreign workers, who may have difficult access due to language barriers to H&S resources and workers' rights;
- Temporary increase of traffic congestion and road accident risks during transport of demolition waste and building materials;

The two main areas of concern in relation to social negative impacts are related to the relocation process and the working conditions in the temporary site for ZFD staff, as well as the disturbances created by construction works and teams to neighboring properties. Appropriate planning, monitoring, consultations with affected parties and a grievance procedure are expected to keep these impacts at a minimum low.

## 6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

As part of the site specific ESMP, all project-supported activities for demolition and construction of Zimnicea 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 city, 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 demolition and construction of new 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 demolition and construction;
- 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.

### **Demolition work**

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully demolished 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 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 demolition 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 demolition of buildings with a temporary construction regime during the existence of the site to be dismantled after completion of the demolition/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 demolition 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 demolition of buildings with a temporary construction regime during the existence of the site to be dismantled after completion of the demolition/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 demolition of buildings with a temporary construction regime during the existence of the site to be dismantled after the completion of demolition/reconstruction 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 demolition/construction 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 Demolition and Building Permits.

#### **Role of the Technical Design & Technical Assistance Consultant**

The Technical Design and Technical Assistance Consultant contracted for the subproject will be responsible of the development of the Technical Design and of the Execution Detail Design for the proposed Demolition and construction works, 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 SESI and SFD.

The consultant will also be responsible with the delivery of the Documentation for obtaining the Building Permit, At the time of writing this report, the Technical Design documentation was in an advanced stage; the technical solution for the construction of the new building is available and is detailed in annex 7. In relation to the ESMP, the Consultant will provide:

- 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)
- detailed data on sources of water and interference with existing networks (potential shortages in utility provision in the area);
- the worksite organization plan (including details on waste management, sewerage during works, toilets, dining and resting spaces, health and safety signage, grievance board, project information board);
- 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 Teleorman 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 Teleorman ESI will support the PIU expert with reporting grievances collected at the level of Teleorman 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 process, monitoring visits, documentation requests,	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)

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 demolition, construction 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 Zimnicea 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 ZFD staff and on neighboring properties. However, noise and dust from construction and other disturbances that may be experienced by the local community in Zimnicea, as a result of demolition and construction 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 ZFD will be affected by temporary relocation and disturbances during construction works.

The stakeholders identified are listed below.

- Residents of the houses in the vicinity of the subunit;
- Staff members of ZFD and volunteers` representatives;
- Citizens potentially affected by utility shortages during works, workers from the companies neighboring the construction site;
- Local authorities in Zimnicea, Media outlets in Zimnicea, Teleorman County Environmental Agency, Environmental Guard, Road Police, Local Police
- General public - the 33711 persons that are served by the ZFD,
- 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 Teleorman 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 Zimnicea Fire-Fighting Detachment (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 demolition and construction 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 Fighting Detachment 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 Teleorman 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](mailto: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 Teleorman ESI websites will include, where possible, a feedback form, with mandatory fields to be completed and will be forwarded to the GIES/Teleorman 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:

- [petitii.vbg.uip@igsu.ro](mailto:petitii.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](http://www.inspectionpanel.org).

## **12. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE**

The public consultation meeting on the ESMP took place on 14 July 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 ZFD 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.

### **Demolition Work**

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully demolished 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).

### *Environmental Assessment*

- 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 LEPA. For any activities not covered in the list of mandatory EIA (Annexes I and II of the Law no. 292/2018), the LEPA use selection criteria to determine whether such activities could have a significant environmental impact. Existing facilities require an environmental permit from the LEPA, 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 are 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, demolition, 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 demolition.

GRES-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.

GRES-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 DEMOLITION AND CONSTRUCTION WORKS**

### **ANNEX 7. DESCRIPTION OF DEMOLITION AND CONSTRUCTION WORKS**

The main characteristics are:

- Proposed height: Gf + 1F for the administrative pavilion and Gf for the garage.
- Built area: 883.42 sqm;
- Proposed built area: 1271.05 sqm;
- Foundations: reinforced concrete;
- Structural system: reinforced concrete frames;
- Roof: non-circulating terrace;
- Maximum height: 8.35 m from the level of the developed land;
- The garage is a high ground floor construction with 4(four) openings and 4(four) hatches;
- The total height from the level of the landscaped land will be correlated with the height of the administrative body -8.35 m.
- The  $\pm 0.00$  elevation proposed in the investment is +35.4

### **ARCHITECTURE**

The exterior masonry for the administrative area will be made of 30cm thick concrete blocks, to be insulated with 15cm mineral wool, finished with decorative exterior plaster, weatherproof and resistant to mechanical shocks, in colors according to the architectural plans.

The brickwork with BCA elements will be made of whole elements and fractions of elements obtained by cutting whole elements with a special saw.

The interior partitions will be made of 15 cm thick concrete blocks, and for the rooms related to the heating plant and compressor rooms, the walls will be made of brick masonry with a thickness of 30 cm and 25 cm respectively.

Finishes for floors:

The garage floor will be made of helical concrete and will have a buried access channel underneath the vehicles, fitted with grate-type protective covers, access ladder and bathtub;

- compressed air cylinder room and dispatch room: anti-slip and anti-skid floor;
- compressor room: dustproof floor;
- offices, rest rooms, multi-purpose room and gym: natural parquet flooring triple-layered for heavy traffic, mounted on extruded polystyrene foil backing.

In the gymnasium, rubberised shock-absorbing tiles will be installed locally in the areas of the weight machines;

- In the gym, rubberised shock-absorbing tiles will be installed locally in the weight machine areas;
- circulation areas, storage areas, technical areas, dining room and study room, changing rooms and in all sanitary facilities: indoor non-slip tiled flooring;
  - electrical switchboard room: antistatic PVC;

- technical rooms: antistatic technological floor with a minimum height of 30 cm, cassette with the possibility of cable routing and air flow circulation.

Wall finishes:

- Interior wet plastering with glet and washable paint;
- Interior ceramic tiling in all sanitary units up to door frame height;
- Vertical plumbing fixtures with gypsum board tiles with appropriate fire resistance. Clearances for the passage of cables, pipes, tubing through floorboards, floors or walls shall be sealed to prevent flames, smoke or gases.

Ceilings:

- storage and technical spaces: plaster and finish with washable paint;
- circulation areas, office spaces, rest rooms, dining room, study room, multi-purpose room and gymnasium: suspended demountable false ceiling;
- toilets and cloakrooms: suspended demountable damp-proof false ceiling.

Indoor and outdoor stairs

Steps - rectified, non-slip, high-traffic, high mechanical resistance, minimum thickness 10 mm, porcelain stoneware in consistency, a non-slip strip will be made in the depth of the material of minimum 7 cm width, 2-3 mm depth, arranged over the whole opening of the step, provided with non-slip system. The installation shall be carried out without expansion joints, including skirting boards.

Risers - rectified, non-slip, high-traffic, high-strength, high-mechanical resistance, minimum thickness 10 mm.

Balustrade - made of stainless-steel round profile, minimum diameter 50 mm and maximum 55 mm, material thickness min. 3 mm, natural colour, rustproof treated, with rounded caps of the same material at the ends;

Access to the non-circulating terrace level will be via a metal ladder with a protective basket, which provides access for the maintenance of the photovoltaic panels and solar panels mounted on the terrace of the building.

## **STRUCTURE**

Section Gf+1- administrative:

The foundation solution will be realized with reinforced concrete foundation beams (C20/25), isolated foundations, with variable dimensions according to the loads resulting from the calculation brief, direct foundation.

In section, from bottom to top, the floor construction system will be made of the following layers:

- compacted fill
- distribution layer (gravel)
- polyethylene sheeting
- extruded polystyrene: 15 cm thick
- floor support plate: 15cm thick

The materials used to make the infrastructure elements will be:

- concrete class C12/15: levelling
- concrete class C16/20: pavements
- concrete class C20/25 - paving



- concrete class C20/25: foundation beams
- BST 500S concrete, ductility class "C": foundation beams, floor slab

#### Section P-Garage:

The foundation solution will be realized with reinforced concrete foundation beams ( C20/25) , insulated foundations, with variable dimensions according to the loads resulting from the calculation brief.

In section, from bottom to top, the floor construction system will be made of the following layers:

- compacted and stabilized loess layer under the floor, approx 40cm, 98%Proctor
- compacted filler
- polyethylene sheeting
- floor support plate: 22cm thick

The materials used to make the infrastructure elements will be:

- concrete class C12/15: levelling
- concrete class C16/20: pavements
- concrete class C20/25 - paving
- concrete class C20/25: foundation beams
- BST 500S concrete, ductility class "C": foundation beams, floor slab

#### Superstructure:

Class of importance 1 and the provisions of P100-1/2013 required the building to be sectioned and seismic joints to be made between sections with different height regimes.

By applying the truncation solution, a reduction in the amplification of sectional forces due to the difference in position between the centre of mass and the centre of rigidity of the building was obtained.

#### Section G+1 - Administrative building:

The proposed construction will be a reinforced concrete frame structure, with a height of P+1E, non-circular roof terrace.

The level height will be 3.65 m.

Following the SLS and SLU checks of the building under the design earthquake action the following sections for the structural elements have resulted:

- structures: 30x90cm, 45x45cm
- grid 30x60cm, 30x50cm
- floors: 15/20cm

The materials used for the construction of the superstructure resistance elements will be:

- concrete class C30/37: columns, beams, slabs, diaphragms, stairs
- BST 500S concrete, ductility class "C": columns, beams, floor slabs, stairs

#### Section P- garage:

The proposed construction will be a reinforced concrete frame structure of P height, non-circular roof terrace.

The level height will be 7.40 m.

Following the SLS and SLU checks of the building under the design earthquake action the following sections for the structural elements have resulted:

- structures: 50x80cm, 50x60 cm
- girders: 30x60cm, 30x45 cm
- terrace floor composed of corrugated sheet, mineral wool insulation, waterproofing

The materials used to make the resistance elements of the superstructure will be:

- concrete class C30/37: pillars, beams, slabs
- BST 500S concrete, ductility class "C": columns, beams, slabs.

## **ELECTRICAL INSTALLATIONS**

The electricity supply of the studied building (administrative pavilion and garage) will be made from the public electricity distribution network through a BMPT (three-phase metering and protection block).

In order to ensure the continuity of the electricity supply to the receptors of the whole building and to the fire safety consumers, a back-up power supply will be implemented from a 210kVA diesel internal combustion engine generator set mounted on a concrete platform outside.

The electric generator will be with AAR, with soundproof outdoor mounting enclosure with, remote control and command.

This will design the general electrical switchboard for the building, TEG, which will be located in a specially designed room on the ground floor of the building with direct access from the outside.

## **SANITARY INSTALLATIONS**

At the moment there are several buildings in the area that are connected to the drinking water network and to the existing street sewage network in the area. The existing piping will be replaced with a HDPE110 pipe, water meter, dirt filter, and shut-off fittings. The service entrance is located at the entrance to the premises. In this resized connection, a distribution manifold is proposed from which the water supply to the existing buildings is maintained (no intervention on the water network in the premises), a PEHD110 network to supply water to the external hydrants and a PEHD63 supply network to the heating plant area to provide cold water flow for domestic consumption.

The studied objective will be provided with separate sanitary facilities per gender, equipped with washbasins, toilets, urinals and showers. 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. The sanitary fittings will be provided according to the architectural plans.

Sanitary sewage installation

The sewage installations have been designed in a separate system.

Internal 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).

The connections of the sanitary objects will be made apparent, and will be masked after the tightness and effectiveness test. The normal slopes for the connection of sanitary objects to the columns shall be respected, according to the provisions of STAS 1795 (for Dn40 -  $i=0.035$ , for Dn50 -  $i=0.035$ , for Dn110 -  $i=0.02$ ).

Regarding the accidental water discharge, we point out that all sanitary groups/bathrooms have been provided with floor drains Dn 50. In order to restore the hydraulic seal of the floor drains, the washbasins will be connected to the sewage system through them. All technical spaces will be provided with floor drains. Changes of direction will be made only by bends at 45.

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 vertically extending the drainage column by 0.5 m, ending with PVC (PP) weather protection caps or aerators mounted in the sanitary group. A grease separator is provided under the kitchen sink.

In the SMURD disinfection room for wastewater, a decanter is proposed, followed by an underdrain and then drained to the domestic sewerage network.

External domestic sewage installation

Domestic wastewater from the sanitary facilities will be discharged by gravity and collected by the proposed external domestic sewerage network on the premises and then drained to the existing sewerage stack.

Sewage will be discharged to the public street sewer. In the vicinity of the studied objective there is an existing street sanitary sewer chimney.

Storm drainage system

The storm water discharge will be done through the receptacles located on the terrace and will be directed to the external network. A negative pressure system is proposed due to horizontal pipes without slope and saving vertical columns. These waters being conventionally clean will be discharged through PVC-KG pipes into the rainwater retention basin.

Water from melting snow, from the wheels of cars or from rain (from the inside of the garage) will be collected by a network of gutters and then drained to the external network of hydrocarbon water pipes.

Gutters will also be installed at the outside access doors. Rainwater from the parking area and driveways will be collected via storm drains and directed to a hydrocarbon separator with by-pass, nominal flow 8 l/s and total flow 50 l/s, then directed to a buried 100mc retention basin. The water can be used for watering green spaces.

There is a combined sewerage network (domestic + rainwater) on 44 Republicii Street.

## **THERMAL INSTALLATIONS**

The heat requirement for heating and the technical solution adopted are regulated by SR1907/1-2014 - (Heating installations. Calculation heat requirement. Calculation requirements), SR 1907/2-2014 - (Heating installations. Calculation heat demand. Conventional indoor design temperatures) and supplemented by the Regulations I 13/2015, on the design and execution of heating installations, C107/2005, on the thermotechnical calculation of building construction elements.

The heat source and the equipment related to the heating installation and the preparation of hot water for consumption will be as follows:

- 2x wall-mounted condensing gas-fired central heating units with a maximum heating capacity of 82.3KW each at 50/30°C;
- in-line circulation pumps mounted on the wall-mounted units: P1, P2;
- in-line circulation pumps for heating circuit with flag radiators: P3;
- in-line circulation pumps for the heating circuit with garage air heaters: P4;
- in-line circulation pumps for hot water boiler coil: P5;
- hot water boiler with 1500L capacity;
- distributor/collector with secondary circuits, namely:

- heating circuit for radiators of administrative building;
- heating circuit for garage air heaters;
- heating circuit for the ACM boiler coil;
- 2 x 80L expansion vessel each, mounted on each central heating unit;
- 1 x 150L expansion vessel mounted on the distributor/collector;
- thermal agent pipes made of black steel pipe;
- water supply/fill pipes made of polypropylene fibre composite pipe;
- closing, safety and control fittings; automation circuit;
- pressure equalization cylinder for 2 power plants with 1 primary/secondary circuit;

Pipes in the heating plant are to be mounted above ground and suspended. The pipe connections will be removable. Threaded fittings, Dutch connections with gaskets and screw flanges will be used. Also, expansion compensation in the central heating plant will be done by direction changes. At the highest points of the installation automatic venting devices will be installed.

The heating plant will have its own automation panel that will ensure the safe operation of the installation. The flue gas exhaust from each plant will be done through the coaxial/axial kit supplied with the plant.

The plant will be protected against pressure and temperature rise above the limits allowed by the expansion vessel and safety valve calibrated at 3 bars.

## **NATURAL GAS INSTALLATIONS**

According to the existing situation, the building to be demolished is connected to the natural gas network via a 3" steel and HDPE pipe. This pipe will be decommissioned.

From the existing regulating station the new OL 2", PE 63.0 mm DN 1 ¼", 1" pipes will be installed and will supply the room of the heating plant. The requirements of this room are  $V=41.124 \text{ mc}$ ,  $S_v \text{ nec} = 41.125 * 0.02 = 0.82 \text{ mp}$ ,  $S_v = 3.78 \text{ mp}$ .

In the room will be fed the 2 forced draught central heating plants that operate, each with methane gas burner that has a fuel consumption of 9 mc/h each => total consumption 18 mc/h.

The existing network will be dismantled and a new network will be built to supply the new condensing heating plants with a maximum heating capacity of 82.3KW each at 50/30°C;

## ANNEX 8. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

### 1. Pre-construction phase

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
<b>Introduction of E&amp;S requirements in the bidding documents</b>	Overall impact on the environmental and social components of the project area	<ul style="list-style-type: none"> <li>• Participation in the regular meetings with the detail design (DD) consultant to understand the potential implications on the environment and local community;</li> <li>• Collect costing data and introduce in bidding document where these costs are applicable to the Contractor or other Consultants;</li> </ul>	DD Consultant	PIU E&S Expert
<b>Improper waste management</b>	The generation of construction waste is caused by improper management of building materials in construction projects	<ul style="list-style-type: none"> <li>• The Technical Design consultant will draw up an environmental management plan that also includes the waste management plan from construction and/or demolition activities in accordance with the waste hierarchy</li> <li>• Construction and demolition waste will be classified/coded/estimated in accordance with the provisions of the waste legislation</li> </ul>	Technical Design	PIU Environmental Expert
<b>Lack of clear responsibilities for contractors and consultants</b>	The lack of clear responsibilities from bidding documents with Contractor and other Consultants would jeopardize the implementation of the ESMP	<ul style="list-style-type: none"> <li>• Coordinate with procurement teams on E&amp;S related input in bidding documents;</li> <li>• Detail the tasks and update ESMP accordingly</li> </ul>	PIU E&S Expert	PIU Management
<b>Delays in obtaining the environmental permit</b>	These delays may impact on the cost and timeframe of the sub-project implementation	<ul style="list-style-type: none"> <li>• Elaborating environmental documentation and obtaining the environmental permit and participation in the process</li> </ul>	DD Consultant	PIU Environmental Expert
<b>Non-compliant construction site</b>	The construction site should be planned in accordance with the principles outlined under the current ESMP	<ul style="list-style-type: none"> <li>• Elaboration of the Construction Site Organization Plan, that should include provisions on: <ul style="list-style-type: none"> <li>- 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</li> </ul> </li> </ul>	DD Consultant	PIU E&S Expert

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
		(changing rooms, eating area, sleeping areas) and construction team, health and safety requirements on site <ul style="list-style-type: none"> <li>- 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;</li> </ul>		
<b>Aligning ESMP to execution graph</b>	The ESMP should be updated to include monitoring timeframe	Update mitigation measures in the ESMP based on demolition and construction execution graph <ul style="list-style-type: none"> <li>- establish the supervision visits based on construction stages</li> <li>- update monitoring plan in line with execution timeframe</li> <li>- public consultation, engagement and outreach activities updated based on the timeframe</li> </ul>	PIU E&S Expert	PIU manager
<b>Legal compliance of environmental permitting and other applicable norms</b>	Updating the ESMP with the requirements outlined in the detailed design so that monitoring is aligned with these requirements	Align ESMP <b>environmental requirements</b> with the legal norms applicable for the detailed design process <ul style="list-style-type: none"> <li>- waste management requirements (site separate collection, contracting of authorized WM services, recycling of materials;</li> <li>- hazardous material management and spill control requirements</li> <li>- Wastewater discharges</li> <li>- Air and noise emissions</li> <li>- Water supply and sanitation</li> <li>- Traffic management</li> </ul>	PIU Environmental Expert	PIU manager PIU architect
<b>Include ESMP requirements into detailed design</b>	Assure that requirements for social compliance are included in the requirements for the demolition and construction process	Align ESMP <b>social requirements</b> with the legal norms applicable for the detailed design process <ul style="list-style-type: none"> <li>- health and safety requirements for the construction site (showers, changing rooms, etc.)</li> <li>- grievance mechanism on site (board, grievance box, etc.)</li> <li>- health and safety trainings for construction personnel;</li> </ul>	PIU Social Expert	PIU manager PIU architect
<b>Reduce relocation impacts on staff and community</b>	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	<ul style="list-style-type: none"> <li>- Develop a relocation management plan and consult on the relocation solution and actions with sub-unit management and staff.</li> <li>- Include measures to ensure health and safety standards and to manage the potential impact of the relocation in the Relocation Management Plan</li> </ul>	County ESI PIU Social Expert  GIES H&S expert	PIU manager

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
		<ul style="list-style-type: none"> <li>- Participate in the new site assessment process and provide input for the development of the Relocation Management Plan</li> <li>- Training of the RSFD personnel in health and safety issues related to the relocation of equipment and the new conditions at the relocation site;</li> <li>- informing staff about the grievance redress mechanism in relation to the conditions at the new relocation site</li> <li>-</li> </ul>		
<b>Understanding the requirements of ESMP at local level</b>	Informing the detachment staff and inspectorate on the provisions of the ESMP and their expected contribution during all phases of the project	<ul style="list-style-type: none"> <li>● Disseminate ESMP provisions at county and local level in training sessions;</li> <li>● Inform TESI and ZFD on their contribution in achieving ESMP objectives (public information, grievance mechanism, environmental and health and safety monitoring support, etc.);</li> <li>● Obtain approvals from GIES/DES on delegation of tasks to local staff;</li> </ul>	PIU E&S Experts  PIU/GIES/County ESI Management	PIU Management  GIES Management
<b>Transparency and public information</b>	The pre-construction phase should include activities that assure transparency and information disclosure on the project and ESMP outcomes,	Collaborate with GIES/PIU and Teleorman ESI's public relation officers in the promotion of the project and the ESMP provisions <ul style="list-style-type: none"> <li>- dissemination of project materials, public consultations, citizen engagement, grievance mechanisms;</li> <li>- press releases and conferences on the project;</li> </ul>	PIU Communication Expert  PIU Social Expert	PIU Management
<b>Inclusion of general public, affected parties and interested stakeholders in the detail design phase</b>	Actively work towards informing neighbors and the general public on the outcomes of the project.	Organize public consultation on the ESMP <ul style="list-style-type: none"> <li>- identification of potential stakeholders (neighbors, local institutions - such as local police, municipality, local environmental agency, NGOs, etc.);</li> <li>- send invitations via email/mail with printed brief versions of the ESMP;</li> <li>- upload the document on the GIES/Teleorman ESI websites for public disclosure and provide contact details for feedback;</li> <li>- identify a location that suits the purpose of the public consultation (projector and projector screen, sound system, air ventilation/conditioning, snack &amp; coffee corner, etc.);</li> <li>- send a press release and invite journalists and media outlets to the consultation;</li> <li>- collaborate with MoIA publishing house for editing purposes in relation to documents;</li> </ul>	PIU Social and Environmental Expert	PIU Manager

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
		<ul style="list-style-type: none"> <li>- prepare an agenda and presentation of ESMP provisions and co-moderate discussions;</li> <li>- keep minutes of the meeting, photo documentation, and update the ESMP and disclose the final version;</li> </ul>		
<b>Grievance redress process</b>	Assuring that all the channels for receiving complaints and suggestions will direct grievances to PIU	<ul style="list-style-type: none"> <li>- monitor the grievance channels on a regular basis to ensure all the Project related grievances rich the appropriate redress responsible</li> <li>- ensure that all petitions are addressed in a timely manner and in accordance with procedural and legal provisions</li> <li>- keep the grievances records up-to-date</li> </ul>	PIU Social Expert	PIU Management

## 2. Demolition phase

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
<b>Wastes generation during demolition works</b>	Assure that waste is collected in an appropriate manner and disposal is not done in unauthorized areas	<ul style="list-style-type: none"> <li>● Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition activities</li> <li>● Mineral/solid demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate places</li> <li>● Demolition waste will be selectively collected on site in specially arranged places and handed over to authorized operators for the purpose of transport, reuse, recycling, recovery</li> <li>● Waste that cannot be reused/recycled/recovery will be disposed of at the ecological landfill</li> <li>● The records of waste reuse, recycling, recovery and disposal will be maintained as proof for proper management as designed</li> <li>● Whenever feasible the contractor will reuse and recycle appropriate and viable materials</li> </ul>	Contractor selected for Demolition works	PIU Environmental Expert  Authorized Environmental Firm for carrying monitoring activities
		<ul style="list-style-type: none"> <li>● The contractor selected for Demolition works will elaborate and implement an environmental management plan that also includes the waste management plan from construction</li> </ul>		



<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
		<p>and/or demolition activities, respecting the waste hierarchy. It will also ensure that optimum levels of waste reduction, re-use and recycling are achieved</p> <ul style="list-style-type: none"> <li>• Inventory and evidence: Demolition waste will be classified/coded/estimated in accordance with the provisions of the waste legislation</li> <li>• Use of demolition techniques for maximum waste reuse and/or recycling</li> </ul>		
<b>Transport of waste</b>	Ensuring that the transportation of demolition waste is carried out properly	<ul style="list-style-type: none"> <li>• Waste transport is carried out by specialized economic operators or authorized according to the legislation in force for collection/treatment/recovery/disposal activities.</li> <li>• The waste loading-unloading forms will be completed by the Contractor selected for Demolition works, according to the legislation in force</li> </ul>	Contractor selected for Demolition works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports
<b>Noise pollution during demolition</b>	Taking all measures to reduce noise pollution for demolition staff and local community	<ul style="list-style-type: none"> <li>• Organize work so that time spent in noisy areas is limited</li> <li>• Planning the noise-producing activities so that their performance affects as fewer workers as possible</li> <li>• Implementing work programs to control exposure to noise</li> <li>• Use of sound absorbing materials and filters/barriers to reduce reflected sounds</li> </ul>	Contractor selected for Demolition works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports
<b>Air pollution during demolition works</b>	Taking all measures to reduce air pollution for demolition staff and local community	<ul style="list-style-type: none"> <li>• During demolition activities it is necessary to reduce dust by spraying with water and / or installation of dust absorption devices</li> <li>• It is strictly forbidden to burn building materials/waste on the ground</li> <li>• For transporting any other dusty material at the work site, it is necessary to moisten or cover the load</li> </ul>	Contractor selected for Demolition works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports
		<ul style="list-style-type: none"> <li>• Dust reduction on land during the dry season of the year is done by moistening the soil surface.</li> <li>• On the site, all routes will be arranged so that they do not lead to skidding, mud, ponding, etc.</li> </ul>		

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
		<ul style="list-style-type: none"> <li>• Vehicles and machines will be properly maintained and will have up-to-date technical revisions.</li> <li>• Workers who carry out the work must wear protective clothing and breathing masks.</li> </ul>		
<b>Health and safety hazards during demolition</b>	<p>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.</p> <p>Ensure access of migrant workers to work related information</p>	<ul style="list-style-type: none"> <li>• Ensure construction workers are given safety instruction, equipment and working clothes</li> <li>• Special instruction/warning signs must be installed on the facility</li> <li>• Ensure safety officers on site</li> <li>• Provide appropriate sanitary and solid waste disposal facilities for use by construction workers</li> <li>• Provide first aid and protection kits</li> <li>• 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</li> <li>• Provide trainings and instructions for migrant worker in a language they can understand.</li> <li>• Ensure access to feedback mechanisms such as Code of conduct and grievance redress mechanism for migrant workers</li> </ul>	Contractor selected for Demolition works	PIU Social Expert PIU Environmental Expert H&S expert within GIES and at the level of Teleorman County IES
<b>Grievance Mechanism</b>	Assuring that the panel at the entrance gives all details on the grievance mechanisms	<ul style="list-style-type: none"> <li>• Panel installed next to the construction board, outlining the grievance mechanism provisions and principles, as well as a letter box</li> <li>• Weekly check-up of the letter box</li> <li>• Assuring answers are being formulated to all grievances related to the project, received through all channels in accordance with the Internal Procedure on Grievance Mechanism dedicated to the Project</li> </ul>	Contractor selected for Demolition works PIU Social Expert	PIU Management
<b>Disturbances encountered by neighbours</b>	Unstructured interviews with the neighbours on the disturbances encountered during demolition and	<ul style="list-style-type: none"> <li>• Discuss with neighbours during demolition works to collect their feedback on any disturbances or damages to their properties or public property (at least once during demolition works and two during construction works);</li> </ul>	PIU Social Expert	PIU Management

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
	construction works Information to neighbours (letters, door to door) and general public in cases of disturbances to utility networks	<ul style="list-style-type: none"> <li>• Write report on collected information and inform the site supervision team/contractor on any wrongdoings raised by neighbours</li> <li>• Public information campaign and coordination with utility providers to inform citizens on potential temporary disturbances in relation to their utility supply;</li> </ul>		
<b>Damages to religious shrine on the site</b>	Risk of collapse for demolition/construction works;	<ul style="list-style-type: none"> <li>• establishment of a protection zone around the religious shrine</li> <li>• develop a checklist of risks</li> <li>• any damage to the religious shrine will be repaired</li> </ul>	Contractor selected for Demolition works	PIU Management PIU Environmental Expert within GIES and at the level of Teleorman County IES

### 3. Construction phase

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
<b>Wastes generation during construction</b>	Assure that waste is collected in an appropriate manner and disposal is not done in unauthorized areas	<ul style="list-style-type: none"> <li>• Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities</li> <li>• Mineral/solid construction wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate places</li> <li>• Construction waste will be selectively collected on site in specially arranged places and handed over to authorized</li> </ul>	Contractor selected for Construction works	PIU Environmental Expert + Authorized Environmental Firm for carrying monitoring activities

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
		<p>operators for the purpose of transport, reuse, recycling, recovery</p> <ul style="list-style-type: none"> <li>Waste that cannot be reused/recycled/recovery will be disposed of at the ecological landfill</li> <li>The contractor selected for Construction works will elaborate and implement an environmental management plan that also includes the waste management plan from construction and/or demolition activities, respecting the waste hierarchy. It will also ensure that optimum levels of waste reduction, re-use and recycling are achieved</li> <li>The records of waste reuse, recycling, recovery and disposal will be maintained as proof for proper management as designed</li> <li>Inventory and evidence: Construction waste will be classified/coded/estimated in accordance with the provisions of the waste legislation</li> <li>Whenever feasible the contractor will reuse and recycle appropriate and viable materials</li> </ul>		
<b>Transport of waste</b>	Ensuring that the transportation of Construction waste is carried out properly	<ul style="list-style-type: none"> <li>Waste transport is carried out by specialized economic operators or authorized according to the legislation in force for collection/treatment/recovery/disposal activities.</li> <li>The waste loading-unloading forms will be completed by the sender, according to the legislation in force</li> </ul>	Contractor selected for Construction works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports
<b>Noise pollution during construction</b>	Taking all measures to reduce noise pollution for construction staff and local community	<ul style="list-style-type: none"> <li>Organize work so that time spent in noisy areas is limited</li> <li>Planning the noise-producing activities so that their performance affects as fewer workers as possible</li> <li>Implementing work programs to control exposure to noise</li> <li>Use of sound absorbing materials and filters/barriers to reduce reflected sounds</li> </ul>	Contractor selected for Construction works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
<b>Air pollution during construction</b>	Taking all measures to reduce air pollution for construction staff and local community	<ul style="list-style-type: none"> <li>• During construction activities it is necessary to reduce dust by spraying with water and/or installation of dust absorption devices</li> <li>• It is strictly forbidden to burn building materials/waste on the ground</li> <li>• For transporting any other dusty material at the work site, it is necessary to moisten or cover the load</li> <li>• Dust reduction on land during the dry season of the year is done by moistening the soil surface.</li> <li>• On the site, all routes will be arranged so that they do not lead to skidding, mud, ponding, etc.</li> <li>• Vehicles and machines will be properly maintained and will have up-to-date technical revisions.</li> <li>• Workers who carry out the work must wear protective clothing and breathing masks.</li> </ul>	Contractor selected for Construction works	PIU Environmental Expert + Authorised Environmental Firm by analysis reports
<b>Loss of soil resources, land/soil degradation and pollution during construction</b>	Taking all measures to reduce soil degradation and pollution during construction activities	<ul style="list-style-type: none"> <li>• Compliance of the construction Detail Design with the national environmental, industrial safety, construction, architectural, technological and public health regulations</li> <li>• Location of building in place with low soil productivity</li> <li>• Proper design to minimize area under construction</li> <li>• If unfeasible, ensure soil protection through dead and live soil protection structures</li> <li>• Dislocate excavated fertile topsoil (if any) to adjacent agricultural lands</li> <li>• Incorporate protective design features (e.g., drainage structures and plant vegetation on slopes)</li> <li>• A proper rainwater/drainage system should be installed in order to exclude the flooding potential, landslide and/or erosion processes</li> <li>• Avoid, where possible, cutting of trees and other existing local vegetation, etc.</li> </ul>	Contractor selected for Construction works	PIU Environmental Expert
	Ensuring that all conditions are fulfilled on	<ul style="list-style-type: none"> <li>• Ensure construction workers are given safety instruction, equipment and working clothes</li> </ul>	Contractor selected for	PIU Social Expert

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
<b>Health and safety hazards during construction</b>	site for the staff and that passers-by or children do not enter the site at any time. Ensure access of migrant workers to work related information	<ul style="list-style-type: none"> <li>● Special instruction/warning signs must be installed on the facility</li> <li>● Ensure safety officers on site</li> </ul>	Construction works	PIU Environmental Expert H&S expert within GIES and at the level of <b>Teleorman</b> County IES
		<ul style="list-style-type: none"> <li>● Provide appropriate sanitary and solid waste disposal facilities for use by construction workers</li> <li>● Provide first aid and protection kits</li> <li>● Ensure effective signage for the public and ensure that all exposed construction areas are barricaded from public access</li> <li>● Provide trainings and instructions for migrant worker in a language they can understand.</li> <li>● Ensure access to feedback mechanisms such as Code of conduct and grievance redress mechanism for migrant workers</li> </ul>		
<b>Grievance Mechanism</b>	Assuring that the panel at the entrance gives all details on the grievance mechanisms	<ul style="list-style-type: none"> <li>● Panel installed next to the construction board, outlining the grievance mechanism provisions and principles, as well as a letter box</li> <li>● Weekly check-up of the letter box</li> <li>● Assuring answers are being formulated to all grievances related to the project, received through all channels in accordance with the Internal Procedure on Grievance Mechanism dedicated to the Project</li> </ul>	Contractor selected for Construction works PIU Social Expert	PIU Management
<b>Disturbances encountered by neighbours</b>	Unstructured interviews with the neighbours on the disturbances encountered during demolition and construction works Information to neighbours (letters, door to door) and general public in cases of disturbances to utility networks	<ul style="list-style-type: none"> <li>● Discuss with neighbours during construction works to collect their feedback on any disturbances or damages to their properties or public property (at least once during demolition works and two during construction works);</li> <li>● Write report on collected information and inform the site supervision team/contractor on any wrongdoings raised by neighbours</li> <li>● Public information campaign and coordination with utility providers to inform citizens on potential temporary disturbances in relation to their utility supply;</li> </ul>	PIU Social Expert	PIU Management
	Risk of collapse or necessity to enter on	<ul style="list-style-type: none"> <li>● Follow up on any potential risk identified in different technical stages of the project;</li> </ul>	PIU Social Expert DD Consultant	PIU Management

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
<b>Damages to neighbouring properties</b>	private properties for limited amount of time in order to operate demolition/construction works;	<ul style="list-style-type: none"> <li>Assess with the DD consultant the possibility of damages to the neighboring buildings of the ZFD unit;</li> <li>Assess with the DD consultant the impact of demolition and construction works on the vegetable gardens;</li> <li>Develop a checklist of risks and perform constant consultations with neighbours prior to the final DD;</li> <li>Inform the WB on the extent of damages, where the case, and develop compensation mechanisms in line with WB safeguard requirements.</li> </ul>	PIU Environmental Expert	
<b>Damages to religious shrine on the site</b>	Risk of collapse for demolition/construction works;	<ul style="list-style-type: none"> <li>establishment of a protection zone around the religious shrine</li> <li>develop a checklist of risks</li> <li>any damage to the religious shrine will be repaired</li> </ul>	Contractor selected for Construction works	PIU Management PIU Environmental Expert within GIES and at the level of Teleorman County ESI

#### 4. Operation phase

<i>Risk/Impact/Issue</i>	<i>Description</i>	<i>Suggested mitigation measures</i>	<i>Responsible</i>	<i>Supervision</i>
<b>Excessive energy consumption</b>	The operation of the new facilities should take into account best practices in terms of using energy in an efficient way	<ul style="list-style-type: none"> <li>Elaborating the plan and implementing the energy efficiency measures in the activity of the new command center</li> <li>Use of electrical installations and high energy efficiency equipment</li> <li>Optimal and high-efficiency lighting can reduce the energy consumption</li> </ul>	Contractor	Beneficiary

<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
		<ul style="list-style-type: none"> <li>• Training the local staff in good practice on equipment maintenance and energy efficiency, including optimal air conditioning</li> <li>• Design and implementation of the energy management system in line with good international practices</li> </ul>		
<b>Waste generation, including special (electro-technical, etc.)</b>	The new facilities should be equipped with separate collection and staff should be informed through signaling	<ul style="list-style-type: none"> <li>• Implementation of the appropriate waste management system, separate collection and storage, provision of recycling and reuse (if applicable);</li> <li>• Signaling and special marking; Inventory and record</li> </ul>	Contractor	Beneficiary
<b>Excessive consumption and contamination of water resources</b>	Monitoring the data consumption and maintenance can considerably reduce the loss of water	<ul style="list-style-type: none"> <li>• Ensure the proper water consumption recording system and means</li> <li>• Planning and implementation of adequate maintenance measures of the distribution system, avoiding leakage and excessive consumption, etc.</li> </ul>	Contractor	Beneficiary
<b>Air pollution (heating and ventilation systems such as car transport are the major sources of pollutant emissions in air)</b>	Considering all measures to reduce the impact on air emissions generated by the new facility	<ul style="list-style-type: none"> <li>• compliance of the thermo-energy sources with the quality standards with obtaining the Pollutant emissions permit in the atmosphere</li> <li>• inventory and reporting of the resource's consumption</li> <li>• the proper management of site generated wastes</li> <li>• maintenance and operation of the transportation means in the appropriate way, etc.</li> </ul>	Contractor	Beneficiary+PIU Environmental Expert+Authorised Environmental Firm by analysis reports
<b>Noise, acoustic pollution</b>	Assuring that the new buildings is compliant with the norms and does not bring any disturbances to the local community during operation	<ul style="list-style-type: none"> <li>• identification of sources generating noise,</li> <li>• monitoring and measurement of noise levels,</li> <li>• monitor the health state of staff and inmates,</li> <li>• applying technical measures to reduce the noise level,</li> <li>• appropriate signaling of high-noise locations,</li> <li>• training employees about the risks they are exposed to, etc.</li> </ul>	Contractor	Beneficiary+PIU Environmental Expert+Authorised Environmental Firm by analysis reports
<b>Human Health and Safety</b>	Avoiding any work-related accidents with training, protective equipment and regular check-ups	<ul style="list-style-type: none"> <li>• Regular training on safety and health</li> <li>• Informing the local staff about the exceptional situations</li> <li>• Displaying in an open place the Action Plan in exceptional circumstances</li> <li>• Training on individual and collective protection procedures and measures applied in exceptional situations</li> <li>• Provide protection equipment according to the requirements and the rules in force</li> </ul>	Contractor	Beneficiary+PIU Environmental Expert+PIU Social expert



<b>Risk/Impact/Issue</b>	<b>Description</b>	<b>Suggested mitigation measures</b>	<b>Responsible</b>	<b>Supervision</b>
		<ul style="list-style-type: none"> <li>Annual medical examination of the ZFD personnel, etc.</li> </ul>		
<b>Public disclosure and citizen engagement</b>	Inform the public on the outcomes of the project, impact at the level of ZFD and community	<ul style="list-style-type: none"> <li>Press release and press conference</li> </ul>	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.

<b>Stage</b>	<b>Risk to be monitored</b>	<b>Place of monitoring</b>	<b>How is the risk to be monitored?</b>	<b>When is the risk to be monitored? (frequency)?</b>	<b>Reason for monitoring</b>	<b>Responsibility</b>
Demolition	Air quality: dust, smog etc.	On-site	Visual monitoring	Daily during demolition works	Prevention of air pollution and health risks	Demolition company/ PIU Environmental Expert
Demolition	Construction wastes	On-site	Regular visual inspection	Weekly during works	Prevention of onsite soil and water pollution, minimizing waste generation	Demolition company/ PIU Environmental Expert
Demolition	Level of noise	On-site	Regular inspection	Daily during works	Prevention of risks for human health	Demolition company/ PIU Environmental Expert
Demolition	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. Minutes of Meeting with Road Police and Local Police to assure	Continuous basis	Safety and health protection of workers, accident prevention,	Demolition 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
			community safety measures are enforced and support is provided whenever needed			
Demolition	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	Demolition company, PIU Environmental Expert
Demolition	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
Construction	Loss of soils	Construction site	Visual	During excavation works and transportation	In compliance with Detail Design and official authorizations	Construction company, PIU Environmental Expert
Construction	Air quality: dust, smog etc.	On-site	Visual monitoring	Daily during works	Prevention of air pollution and health risks	Construction company, PIU Environmental Expert)
Construction	Construction wastes	On-site	Regular visual inspection	Weekly during works	Prevention of onsite soil and water pollution, minimizing waste generation	Construction company/ PIU Environmental Expert
Construction	Level of noise	On-site	Regular inspection	Daily during works	Prevention of risks for human health	Construction company/ PIU Environmental Expert
Construction	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 Environmental Expert/PIU Social expert

<b>Stage</b>	<b>Risk to be monitored</b>	<b>Place of monitoring</b>	<b>How is the risk to be monitored?</b>	<b>When is the risk to be monitored? (frequency)?</b>	<b>Reason for monitoring</b>	<b>Responsibility</b>
Construction	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 pollutants etc.	On-site	Visual monitoring	Daily during operation	Prevention of air pollution	Construction company, beneficiary, Inspection for Environmental 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 Zimnicea Fire-Fighting Detachment**

**Brief description of the project - Demolition and rebuilding the headquarter of Zimnicea Fire-Fighting Detachment.**

**Electronic version of ESMP for the subproject, Demolition and construction the headquarter of Zimnicea Firefighting Detachment is available on the following web page:**

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

<b>Name and surname of the person who provides comment*</b>	
<b>Contact information*</b>	<b>E-mail:</b> _____ <b>Phone:</b> _____
<b>Comment on the ESMP:</b>	
<b>Signature</b>	<b>Date</b>
_____	_____
<p><b>If you have any comments/suggestions or amendments to the proposed measures of Environmental and Social Management Plan ESMP for the project “P166302”, Zimnicea Fire-Fighting Detachment please submit it to the responsible persons from the following institution:</b></p> <p><b>Contact person:</b>  <b>Calin Grigoras, PIU, GIES – social expert</b>  <b>e-mail: <a href="mailto:petitii.uip@igsu.ro">petitii.uip@igsu.ro</a></b>  <b>Adress: 10A Dimitrie Pompeiu Blvd. Bucharest 2<sup>nd</sup> District</b>  <b>Within the 14 days period after the announcement/disclosure of ESMP for the above-mentioned project</b>  <b>(date of announcement: .....</b></p>	
<b>Referent number:</b> _____ (fulfilled by the responsible persons for the project implementation)	

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

## ANNEX 11. PUBLIC CONSULTATION AND FINALIZATION OF THE PLAN

As foreseen in the draft ESMP, the activities of disclosing and disseminating information related to the expected impacts and mitigation measures under the plan, stakeholders' engagement and public consultation were carried out as follows:

- ESMP was published on the GIES and Teleorman ESI websites.
- An information campaign was carried out, including a press release, posters at neighboring houses, distribution of information leaflets and face-to-face discussions with neighbors and representatives of neighboring institutions, e-mails with the invitation to participate in the public consultation and the necessary information and references to potentially interested institutions.

The public consultation meeting took place on 14 June 2024, at the Zimnicea Fire-Fighting Detachment, Republicii Boulevard no 44, in a hybrid system, offering the possibility for 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 ESI Teleorman inspectorate and Zimnicea Fire-Fighting Detachment, representatives of the Municipality of Zimnicea, representatives of the Municipality of Frumoasa, people residing in the vicinity of the construction and from the commune of Contesti.

Representatives of the Project Implementation Unit presented information about the Project, technical details of the subproject, works to be carried out, anticipated social and environmental impacts, as well as mitigation measures included in the ESMP.

The presentation was followed by the intervention of the representative of the Zimnicea City Hall Institution, Mrs. Vice Mayor of Zimnicea City, who assured that the local authority will provide support during the works of this subproject.

Also, it was discussed the issue of relocating Zimnicea FD to a location that offers optimal conditions for ZFD employees in order to ensure the continuity of services that the Fire-Fighting Detachment offers in Zimnicea and its surroundings.

The subjects raised by the participants and the answers provided were as follow:

Q: What is the estimated date for the beginning of the works?

A: The demolition of the current building will start most probably in September

Q: Is the project aiming the purchase of fire-fighting vehicles and intervention equipment?

A: The project only cover the necessary equipment for the proper functioning of the building (e.g. purchase of furniture) and does not include equipment such as fire trucks and intervention techniques

Q: Will the future building include civil protection spaces?

A: The project does not include the creation of civil protection spaces within the planned buildings.

Participants:

PIU GIES: Architect:

Environmental expert GIES

Social expert GIES

OHS expert GIES

Representatives of Teleorman ESI and Zimnicea Fire-Fighting Detachment - 5 persons

Representatives of Zimnicea Municipality - 3 persons

Representatives of Frumoasa Municipality - 2 Persons  
Residents - 4 persons plus Person from the commune of Contesti