GOVERNMENT OF THE REPUBLIC OF MOLDOVA

Ministry of Internal Affairs
Ministry of Environment
Ministry of Infrastructure and Regional Development
Ministry of Finance

PROJECT:
Strengthening Disaster Risk Management and Climate Resilience in Moldova
(P175199)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

Draft

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Contents

Abbreviations and acronyms:

DRF	Disaster Risk Financing
WB	World Bank
ESMF	Environmental and Social Framework
CERC	Emergency response component
EIA	Environmental Impact Assessment
SEA	Strategic Environmental Assessment
SIA	Social impact assessment
ESIA	Environmental and Social Impact Assessment
EA	Environmental Assessment
GD	Government Decision
MIA	Ministry of Interior Affairs
SEP	Stakeholder Engagement Plan
EU CPM	European Union Civil Protection Mechanism
ESMP	Environmental and Social Management Plan
SHS	State Hydrometeorological Service
MRDRC	Disaster Risk and Climate Resilience Management
PIU	Project Implementation Unit
EWS	Early Warning System

Executive Summary

The World Bank will support the Ministry of Finance (MoF) in implementing Disaster Risk and Climate Resilience Management (MRDRC) in Moldova (Republic of Moldova). The objective of the project is to increase the disaster preparedness and response capacities of the Government of Moldova and to strengthen the country's resilience to natural hazards and climate change.

The project activities will take place throughout the country, predominantly in areas with increased risk of dangerous hydrometeorological phenomena, in some cases in predefined locations (for example: weather and hydro stations of the State Hydrometeorological Service (SHS), urban and rural localities, industrial areas and agricultural land, national and local public roads, rivers, lakes and hydro monitoring stations).

This Environmental and Social Management Framework (ESMF) has been prepared to identify potential environmental and social risks and impacts of Project activities and propose appropriate mitigation measures to manage these risks and impacts. The ESMF derives from the legal and regulatory framework of the Republic of Moldova and World Bank policies applicable to the Project and describes the principles, approaches, implementation modalities and environmental and social mitigation measures to be followed.

ESMF is structured in 5 sections and aims to support environmental and social provisions and activities financed by the World Bank within the Project "Strengthening Disaster Risk Management and Climate Resilience in Moldova" (hereinafter Project).

In Chapter 1. Description of the project, a review of related activities is made, detailing the objectives, sub-objectives and planned actions. Hence

The project will be implemented over a period of five years (2024 - 2028) and will support the following activities:

- Investment and institutional strengthening for emergency preparedness and response.
- Support policies, regulations and investments in reducing critical infrastructure risk.
- Financial protection to mitigate the impact of natural disasters.
- Emergency response component.
- Project management.

The project concept includes systemic interventions in the fields of quality, financing and management of disaster risk and climate resilience in Moldova and will be financed by the World Bank in the amount of USD 40 million. The project would mainly finance the purchase of necessary equipment and information systems. The project will also finance minor construction works, renovation of existing infrastructure to meet applicable standards and become energy efficient. The urban infrastructure targeted by the project is reflected in Component 1. Investment and institutional strengthening for emergency preparedness and response, Subcomponent 1.2 - Improving hydrometeorological services

Chapter 2, reflects national environmental and social policies, regulations and laws, including national environmental and social assessment and authorization, World Bank standards and key gaps with the national framework, in particular compliance with World Bank environmental and social standards, as well as World Bank Group environmental, health and safety guidelines.

Chapter 3 reviews the main categories of social and environmental risks related to the project, as well as their potential impacts and standard mitigation measures. For each type of activity, potential environmental and social risks and impacts, as well as their standard mitigation measures and processes, are listed.

Chapter 4, sets out procedures and modalities for implementation, according to the stages of the project cycle and E&S management procedures, in particular evaluation and analysis, formulation and planning, implementation and monitoring, review and final evaluation.

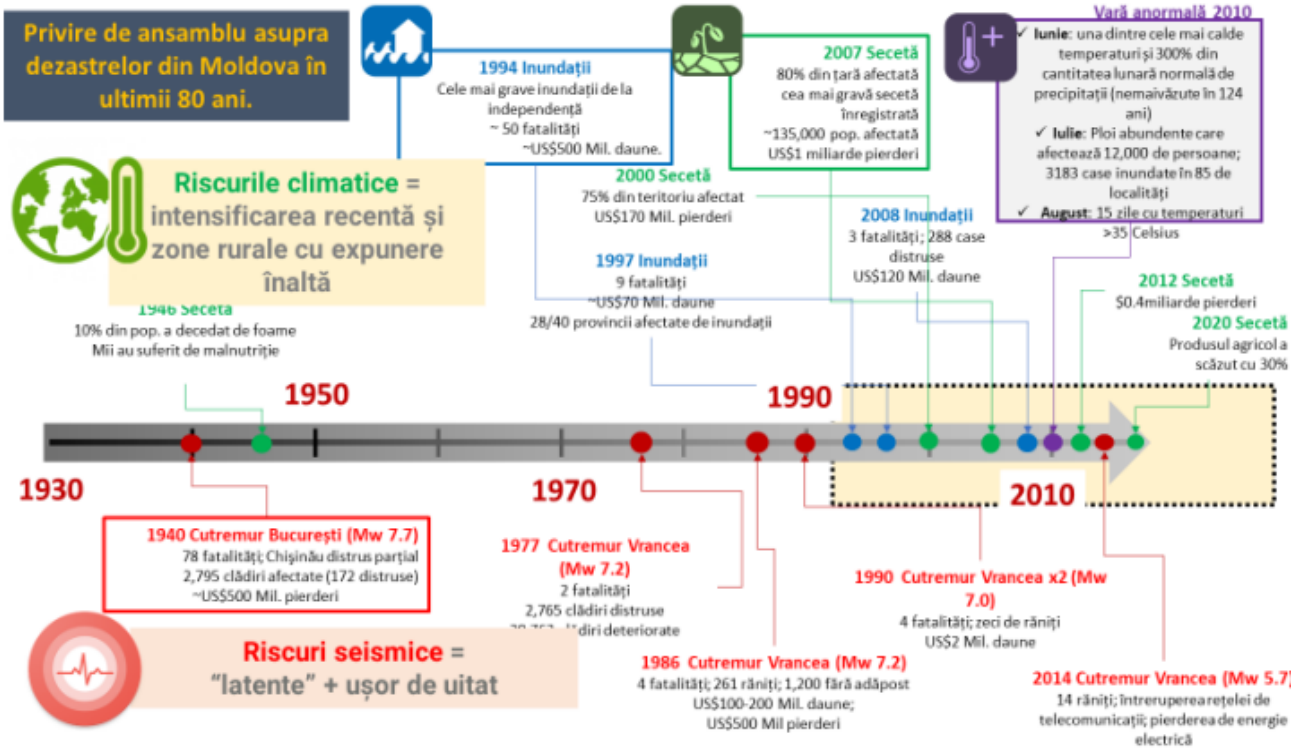
Introduction

Climate change has also had a significant impact on Moldova, especially affecting multiple socio-economic sectors, population welfare, safety and public health, causing an increase in the occurrence and frequency of disasters such as droughts and fires, major floods and unequal distribution of precipitation throughout the year.

Moldova is frequently exposed to a number of natural hazards, the impact of which disproportionately affects the poor and could mean a step backwards for the country's development progress. According to the World Bank, Moldova's economy has grown rapidly over the past decade and this growth has been accompanied by significant progress in reducing poverty and amplifying the well-being of the population. However, poverty is unlikely to decline further due to the ongoing coronavirus crisis, as economic activity in remittances countries is declining and public finances are also affected. More recently, the war in Ukraine and the location of our country in close proximity to the border with the neighboring country and in the path of migration of refugees from conflict zones, will also condition an even deeper crisis in the near future.

Disaster-induced economic losses are mainly caused by severe weather events with high impact and frequency, as well as could cause losses. Over the past decade, floods, droughts and open fires have caused damage worth about 1.2 billion dollars. Another statistic made by the General Inspectorate for Emergency Situations (IGSU) shows that in the last 10 years, all disasters reported were those related to climate and weather conditions. The drought of 2007 caused estimated losses of about 1 billion US dollars, while the floods of 2008 and 2010 cost the country about 120 million US dollars and 42 million US dollars, respectively.

The severity and frequency of extreme phenomena are increasing in Moldova and are estimated to continue to increase in the coming years, implying an increased risk for the agricultural sector in particular. By the middle of the century, the air temperature in Moldova is expected to be 1.7–2.0°C higher than in 1961–1990, and by the end of the century 4–5°C higher, if greenhouse gas emissions are not significantly reduced. Climate change will therefore further intensify the severity and impact of hydrometeorological hazards in Moldova.1



"Schedule" of the main disasters and climate events in Moldova

The projected increase in temperatures, rainfall volatility (Annex no. 1), incidence and severity of droughts could undermine in the long run the country's position as one of the main agricultural producers in the region.

In this scenario, Moldova will likely face a significant reduction in the productivity of most crops and will be affected more frequently by extreme weather events such as hailstorms, late frosts, major floods and natural fires.

[1] *The Wolrd Bank. Special Note: Moldova's vulnerability to natural disasters and climate risks 2020.*
https://thedocs.worldbank.org/en/doc/7bf12b95f10a3daf7b570718b2100e15-0080012021/related/MEU-DRM-Special-Topic-May-2021-FINAL-rom-Copy.pdf

By 2050, agronomic yields are expected to fall by 25% in the central and southern regions of Moldova. Overall, climate variability, which could be responsible for repeated severe weather events, floods and forest fires, is expected to have a dramatic impact on Moldova's economy and environment.

The risk can never be completely eliminated or reduced. Preparedness through early warning systems saves lives is one of the most effective ways to reduce the impact of disasters. To be effective, early warning must produce proactive action. For these reasons, preparedness activities include strengthening local capacities to plan for and respond to the effects of disasters.

The project will support the improvement of the Moldovan government's disaster preparedness and response capacities and strengthen the country's resilience to natural hazards and climate change in the country.

The Project Implementation Unit (PIU) will implement the Project activities.

This ESMF complies with the World Bank's Social and Environmental Framework, as well as the national regulatory framework, institutional framework and state policy in the field.

The objective of the ESMF is to assess and mitigate potential environmental and social risks and negative impacts of the Project in accordance with the World Bank's Environmental and Social Standards and national requirements.

More specifically, ESMF aims to:

a) assess the potential social and environmental risks and impacts of the proposed Project and propose mitigation measures;
b) establish procedures for the examination, review, approval and implementation of environmental and social activities;
c) specify appropriate roles and responsibilities and outline reporting procedures necessary to manage and monitor environmental and social issues related to activities;
d) identify personnel requirements as well as training and capacity building necessary for the successful implementation of ESMF provisions;
e) address mechanisms for public consultation and disclosure of project documents, as well as addressing any grievances; and
f) sets out the budgetary requirements for the implementation of the ESMF .

This ESMF should be implemented together with other project-ready plans, including:

- Stakeholder Engagement Plan (SEP) ;
- Report on strengthening disaster risk management and climate resilience in Moldova, World Bank Group, GFDRR, 2020;
- Report on the functional analysis of the Administrative Apparatus of the State Hydrometeorological Service, consultancy and evaluation project to ensure the efficiency of organizational and functional management, provided by UNDP Moldova (2020-2021);
- Final Report on improving the meteorological observation network and institutional operational capacities for the provision of user-oriented climate services, consultancy project provided by UNDP Moldova through the Program on Advancing in the National Climate Change Adaptation Planning Process (NAP II), 2021, funded by the Green Climate Fund;
- Final Report on improving the hydrological observation network and institutional operational capacities for the provision of user-oriented climate services, consultancy project provided by UNDP Moldova through the Program on Advancing in the National Climate Change Adaptation Planning Process (NAP II), 2022, funded by the Green Climate Fund
- Roadmap "A Consolidated and Developed State Hydrometeorological Service in Moldova", World Bank Group, GFDRR, The World Bank, 2023.

1. Project description

1.1. General framework

The proposed project is perceived as part of a long-term strategic engagement on disaster risk management and climate resilience in Moldova. This project will focus on investment and institutional strengthening for emergency preparedness and response, laying the foundation for future support for risk reduction investments at scale.

Improved operational preparedness of institutions and emergency personnel, combined with an updated EWS that provides more timely and accurate warnings, will save lives and reduce physical, social and economic impacts, as well as improve hydrometeorological and financial protection services.

Feasibility studies for risk reduction in critical infrastructure play the first important step to proactively mitigate damage caused by natural hazards. The project connects to the WB's broader country engagement through prior action in DPR Moldova for emergency response, resilience and competitiveness (P179086) approved in May 2023 and potential resilience actions in a planned DPO and will inform the development of the country's climate in Moldova.

Development reports (currently in concept stage). In addition, the project is aligned with potential IMF support through the Resilience and Sustainability Facility . The project activities are intended to be complementary to the DRM activity that the Government, other development partners and EU-CPM are working on.

The ESMF will ensure the sustainability of environmental and social activities throughout their implementation cycle and provide design and technical staff and consultants from the authorities involved with an appropriate institutional, regulatory and technical framework for future processes and procedures to be followed when:

(ii) Identifying mechanisms for implementing the Environmental and Social Assessment, including for assessing the potential impact of activities implemented under the Project;

(iii) Elaboration of distinct, site-specific Environmental and Social Management Plans (ESMPs) for each subproject, integrating the complex consisting of measures to mitigate social and environmental impact, environmental monitoring and institutional responsibility, into the project implementation master plan, by including ESMPs in the tender documentation and by ensuring financing and surveillance activities together with the other components of the subproject;

(iv) Identify requirements for environmental monitoring, social due diligence obligations and institution-building activities on the basis of which to generate a beneficial impact for the project.

1.2. Project concept

The proposed project lays the foundation for a long-term strategic engagement in support of Moldova's greater disaster risk management ambitions, initially supporting the immediate emergency response needs of the Government of the Republic of Moldova, while building the basic capacity for future disaster risk reduction investments that can be financed at scale by other development partners or the government's own financing.

1.2.1. Development objectives of the project

The objective of the project is to increase the resilience of critical disaster and emergency response infrastructure and to strengthen public administration capacities for disaster risk reduction and adaptation to climate change, in response to Moldova’s need to increase the country’s physical, social, and financial resilience to climate risks and disasters.

1.2.2. Project components

The project comprises the following components:

Component 1: Investments and Institutional Strengthening for Emergency Preparedness and Response This component will finance the installation and implementation of a national cell-phone-based PWS, with its respective instrumentation and data servers, and integration with existing meteorological, hydrological, and geological information systems. The component will also finance the acquisition of emergency response vehicles and equipment, and essential emergency response equipment and instrumentation for improved local-level emergency services. All activities would support the GIES to increase its emergency response operations capacity in line with requirements of the EU-CPM, reach compatibility with EU member states,

and help the GIES meet its EU Acquis and legislative requirements. The following subcomponents are envisaged:

(a) **Subcomponent 1.1: Public Warning System.** This subcomponent will finance the installation and implementation of a multi-hazard cell phone PWS with national coverage, which will enable immediate dissemination of emergency and disaster warnings to residents, saving lives, reducing injuries, and considerably reducing material losses. No personal data will be stored in the system, the recipients will remain anonymous since the PWS does not require registration of phone numbers or maintenance of a phone number database, and messages are broadcasted to all users within a geographic area.

(b) **Subcomponent 1.2: Emergency Response Vehicles.** This subcomponent will finance the acquisition of emergency response vehicles and equipment required to modernize and increase the emergency response service capacity for extreme weather conditions, such as temperature, precipitation (rain, snow, hail, and so on), floods, storms, wildfires, and earthquakes. The new equipment and vehicles are crucial, as emergency response personnel in Moldova perform the double duty of emergency management and response. These vehicles will contribute to increasing the response capacity for floods, storms, urban fires and wildfires, and earthquakes; ensuring that municipalities are better adapted and prepared to respond to climate change-imposed challenges and the expected growing impact of extreme weather and natural hazards. The replacement of outdated and inefficient emergency response vehicles will reduce critical response times to emergencies, improve the safety and efficiency of interventions, and reduce greenhouse gas (GHG) emissions.[2]

(c) **Subcomponent 1.3: Community Emergency Preparedness.** This subcomponent will finance the acquisition of essential emergency equipment for GIES prevention officers at the local community level and enhancement of disaster prevention (risk assessment and risk reduction) system—including trainings to increase public awareness about disaster preparedness, especially for populations in rural and remote areas. The proposed equipment will facilitate mobility (through acquisition of vehicles) and risk assessment, risk reduction, and public disaster preparedness awareness raising trainings aligned with the PWS and emergency response activities advanced by the Project. It will further allow the GIES prevention officers to be deployed to areas potentially affected by wildfires, fires, floods, landslides, or other nature-induced or man-made disasters. Finally, the subcomponent will advance the development of a DRM assessment, which will be piloted in the north, central, and south regions to inform disaster risk reduction efforts and risk planning at the national level, as well as trainings on disaster preparedness at the local level with a specific focus on women. Trainings for all stages of response will be included to raise awareness and appropriately prepare response teams to address the specific needs of women and girls in a post-disaster setting.

Component 2: Improving Hydrometeorological Services. This component will support the strengthening of the SHS's meteorological monitoring network, forecasting capacity, hydrological observations, EWS, and delivery of weather and climate services.[3] This will include selective essential investments in the modernization of the country's EWS—which is a key input to the GIES planned PWS financed under Component 1—through improved weather observation, information and communication technology (ICT), and forecasting infrastructure and institutional strengthening and capacity building. The improved weather forecasting and climate services will provide a critical value-add in decision-making for a variety of public and private users, particularly farmers in the context of increasing drought frequency and severity. A well-functioning SHS will also contribute to compliance with the EU legislation, including the EU Flood Directive,

[2] It is envisaged that replacing existing dated emergency response vehicle stock (between 35 and 55 years) with vehicles with newer specifications and emission standards will result in an overall reduction of CO_2 emissions—from 871.07 kg in 2023 to 485.66 kg by the project closing date in 2029

[3] It will support the SHS to implement the National Framework for Climate Services and associated action plan, previously developed with support from the World Bank and Global Facility for Disaster Reduction and Recovery (GFDRR). The World Bank also supported the SHS with the development of a Modernization Roadmap, which highlights key actions and investments that need to be undertaken in the short to medium term. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/598981562951011789/concept-and-action-plan-for-climate-services-in-the-republic-of-moldova.

EU Directive related to Air Quality, and the INSPIRE Directive related to the free availability of environmental data including weather data. The component includes the following subcomponents:

(a) **Subcomponent 2.1: Modernization of Hydrometeorological Observation Systems and ICT Capabilities.** The subcomponent will support (i) a modest expansion of observing stations; (ii) rehabilitation of existing stations with new sensors and telemetry (where lacking); (iii) replacement of selected accommodations at traditional observing stations with modular buildings; (iv) establishment of an upper air observation system; (v) upgrading and renovation of existing weather radar and installation of a lightning detection system; (vi) improvement of hydrological monitoring systems; (vii) enhancement of ICT capabilities (including automation of data handling) and essential elements like Integrated File and Message Switching System; (viii) establishment of a data archive and setting up of a Climate Data Management System capable of handling both meteorological and hydrological data and allowing the creation of standard climatological products and services; and (ix) associated training packages where needed.

(b) **Subcomponent 2.2: Improving SHS Service Delivery by Enhancing SHS Forecasting Capabilities, Institutional Strengthening, and Regional Collaboration.** The subcomponent will finance installation of forecast visualization and meteorological workstation systems and development of probabilistic forecasting and impact-based forecasting capabilities at the SHS, including (i) introduction of a proper nowcasting system, (ii) introduction of sectoral based forecasting, (iii) development of hydrological forecasting, and (v) enhancement of the use and application of other regional and global hydrometeorological models. This subcomponent will also provide institutional capacity support to the SHS for technical design and business documentation related to different aspects of the meteorological and hydrological observation network, assessment and design of forecasting needs, development of standard operating procedures and internet-based communication including a mobile application for delivery of products, redevelopment of the SHS website, trainings, and facilitation of twinning exchanges with neighboring National Meteorological and Hydrological Services and regional collaborations.

Component 3: Policy and Regulatory Support for Risk Reduction of Critical Infrastructure and Fiscal Resilience. This component will provide support for policy and regulatory measures and technical studies to better assess and manage natural hazards and climate-related risks. This would include financing of the structural vulnerability assessments; geotechnical and other site investigations; and feasibility and design studies for rehabilitating, rebuilding, or reinforcing vulnerable critical infrastructure assets whose failure may cause loss of lives and livelihoods and significant economic damages and losses to the Moldovan economy. Activities financed under this component are intended to be used as pilots of good practices and later used as models for scale-up investments (by the World Bank, other development partners, and/or the Government as part of Moldova's EU accession process) with a focus on seismic risk reduction. Finally, the component will also support DRF reforms in Moldova to reduce the post-disaster funding gap and improve management of disaster-related contingent liabilities. The component will support three subcomponents as follows:

(a) **Subcomponent 3.1: Policy and Regulatory Support to Reduce Seismic Risk.** The subcomponent will advance the development of (i) technical requirements for seismic design and retrofitting to comply with normative requirements of the EU building codes, especially Eurocode 7 (Geotechnical Design) and Eurocode 8 (Design of Structures for Earthquake Resistance); (ii) a national methodology for seismic and disaster risk maps of both the residential housing stock and public buildings thereby advancing a unified approach for seismic risk assessment of buildings; (iii) a methodology for rapid visual screening of buildings based on basic characteristics related to seismic vulnerability, seismic hazard, and exposure, including a pilot screening in targeted areas through a mobile application; and (iv) a set of recommendations to incentivize integrated interventions for seismic retrofitting and energy efficiency retrofits to maximize the net benefits on CO_2 footprint reduction and inform future infrastructure planning.

(b) **Subcomponent 3.2: Feasibility Studies for Selected Risk Reduction Investments of Critical Infrastructure.** It will finance the development of specific requirements for seismic retrofitting of public buildings for different sectors (for example, schools and hospitals) and develop feasibility studies on seismic retrofitting of buildings and related environment and social instruments (for example, Environmental and Social Impact Assessment or Environmental and Social

Management Plan) incorporating multi-hazard resilience measures as appropriate to site-specific exposures.

(c) **Subcomponent 3.3: Financial Protection to Mitigate Disaster Impacts.** This subcomponent will support (i) activities to design a new or improve the existing disaster reserve fund (intervention fund) as a source of transparent, rule-based, and targeted funding following disasters and (ii) preparation of a methodology for assessment of fiscal risks of disasters to disclose as part of the government fiscal risk statement. This subcomponent will be supported by a technical working group established by the Government under leadership of the Ministry of Finance (MoF).

Component 4: Contingency Emergency Response Component (CERC).[4] This component will enable the reallocation of credit proceeds from other components to provide immediate recovery and reconstruction support following an eligible crisis, as needed. Due to the vulnerability to natural disasters and the precarious regional security situation with potential repercussions on Moldova's stability, the GoM has opted to include a CERC that can be activated in case of an eligible emergency event. Following such an event, the GoM may request the World Bank to reallocate uncommitted project funds to emergency response. The CERC design will be contingent on the impact and type of emergency and will not be a-priori limited to any sectors, regions, or specific activities. CERC-financed activities will be demand- and event-driven and will be detailed in a GoM Action Plan of Activities. An eligible emergency, conditions for triggering the CERC, and a positive list of financed activities will be defined in the project's legal documents, and mechanics of the decision-making process and implementation will be reflected in the CERC Operations Manual, as part of the overall Project Operations Manual (POM).

Component 5: Project Management. This component will finance operational costs (except salaries of the Project Implementation Unit [PIU] staff), consulting services, non-consulting services, goods, and training to finance the overall project management cost, including consultants hired by the PIU to carry out project management functions to ensure efficient project implementation and close cooperation between the line ministries and implementing agencies, as well as other project stakeholders. It will finance capacity-building activities for the PIU staff and other implementing agencies. These functions will cover procurement, financial, environmental, social management, monitoring/evaluation, and communication and outreach activities.

1.3. City infrastructure and locations targeted by the project

The project activities will take place throughout the country, predominantly in areas with increased risk of dangerous hydrometeorological phenomena, in some cases in predefined locations.

1.3.1. Location of activities under Component 1: Investment and institutional strengthening for emergency preparedness and response

Activities under sub-component 1.1. of the Project are planned to be implemented during the design phase, in Chisinau municipality, where the beneficiary institutions (MIA and SHS of MM) are located and in the territorial-administrative units of the country, in the residence locations of the territorial structures targeted in the project, which could be invited during the technical assistance activities.

Activity 1, has as implementation area covering the entire country and will support the design, purchase and launch of a public warning system with national coverage. The system has to be designed to reach all mobile phone subscribers and to cover their information needs. It has to operate with no discrimination criteria, and therefore has to consider the interest of people with special needs when providing warning messages (e.g. sound, written information, device vibration etc.).

The environmental impacts related to the development, installation and operation of this system are expected to be minimal as these do not involve extensive civil works.

The social benefits of the system are significant, as effective early warning and public broadcasting systems reduce the impacts of natural hazards by providing critical information to populations and help save lives, infrastructure, land and jobs. The main social risks stem from the fact that the system may fail to reach some of the most vulnerable societal groups who ay lack the means (mobile phone or TV set) through which the emergency messages are delivered. The feasibility studies financed by International Telecommunications

[4] This component will be updated to reflect the World Bank's evolving guidance on how to integrate the new Crisis Response Toolkit into the Project design.

Union as well as the detailed technical requirements to be developed by the EU will assess these risks and propose technical mitigation measures. Additionally, the MoI will conduct a nation-wide awareness campaign as well as engage with rural communities where the poorest are located in Moldova, including through Activity 3, to inform these communities about operation of the public warning system

Activities 2 and 3, are located in the territorial fire and rescue structures of and will support the purchase of modern emergency response vehicles and equipment necessary for prevention officers at local level to modernize and increase the response capacity of firefighting and emergency flood services, storms, temperature extremes, fires and earthquakes. The emergency response vehicles to be purchased under the project will replace the obsolete vehicle fleet. These vehicles are significantly more fuel-efficient than the existing fleet and will conform to the requirements, including environmental specifications, applicable in the framework of the EU Civil Protection mechanism which Moldova became party to in 2023.

All described activities under Component 1.1 have minimal impact on the environment.

The purchased equipment will be placed into existing buildings (fire brigades) and it doesn't require any construction/repair works for the infrastructure. The fire engines and specialized vehicles purchased under the project will meet the existing environmental requirements and will replace the old environmentally much less friendly vehicles.

All described activities under Component 1.1 have minimal social impact.

The purchased equipment as well as fire engines and specialized equipment will be new and therefore will require less labor for maintenance compared to old replaced equipment. The IGSU personnel will be trained on correct and safe use of purchased equipment prior to operational use. The purchased fire engines and equipment may be also included into the national teams designated to participate in international relief operations (e.g. large earthquakes or open fires) under the cross border and EU commitments (cross border mutual assistance agreements, EU Civil Protection Mechanism). This will definitely contribute to regional efforts aimed to prevention of disaster risks or rapid response to ongoing disasters.

The activities under sub-component 1.2 of the Project are planned both for the headquarters of SHS, located in Chisinau municipality, but also entail physical works for the hydrometeorological infrastructure in the territory and will include selective investments in the modernization of the country's early warning system, through improved weather observation, ICT and forecasting infrastructure, as well as institutional strengthening and capacity building.

These buildings include headquarters of meteorological and hydrological observation stations. The inability of some of these buildings to be fully operational is conditioned by several factors, including:

- the location, contrary to WMO recommendations, of weather/hydro observation stations, results in poor quality and erroneous observed data in manual and automatic mode;
- vulnerability to disasters generated by earthquakes, storms or floods, causes a significant deficiency in the response capacity of government institutions;
- working conditions, contrary to the national framework on safety and health at work;
- costly and unjustified maintenance of premises due to excess space and lack of energy efficiency.

The works envisaged to be carried out within the project can be systematized as follows:

1. demolition and dismantling work;
2. new construction;
3. repair and fitting out work.

Demolition work includes:

Dismantling activities of existing constructions which are not of functional interest and excluded from the observation network include:

- dismantling of foundations;
- disposal of construction waste;
- rehabilitation and planning of the liberated territory.

New constructions will be carried out for meteorological stations and hydrometric stations as follows:

- design work and obtaining permissible documents from competent bodies;

- installation work on prefabricated buildings;
- connection to infrastructure engineering networks;
- installation of security systems (fire, guard, video);
- energy efficiency works (photovoltaic panels, generators, etc.);
- Planning connection works to water supply and sewerage systems;
- Installation of security system access control and video surveillance;
- additionally works will be carried out at the headquarters of SHS in Chisinau:
    - multi-story construction (2 existing terraces will be transformed into workspaces – offices, offices, closet).
    - drainage of existing buildings for the discharge of groundwater (groundwater).

All construction activities are completed with the commissioning of buildings.

In addition, at hydrometric stations, works will be carried out:

- arrangement of the riverbed with equipment for measuring constructions (footbridges, groom, level pillars, access stairs to the water mirror);
- arrangement of the geodetic landmark of the post;

Repair and fit-out work includes specific activities at headquarters and stations and posts in the territory:

- Repair and commissioning of the existing ventilation system at the headquarters of the SHS (cooling and heating), which has not been used so far for technical reasons.
- Repair and commissioning of the "fire-fighting" system at the headquarters of the SHS, which is currently inoperative.
- At meteorological stations in the territory will be carried out:
    - Thermal insulation of existing buildings;
    - Installation of photovoltaic panels;
    - Internal repair (workspace);
- At hydrometric stations will be carried out:
- Repair of access stairs to the water mirror, level pillars, groom and footbridges;
- Arrangement of the riverbed and adjacent land.

All described activities under Component 1.2, have minimal impact on the environment.

The demolition works will be carried out pointwise, with the immediate evacuation of construction waste and will be finished by landscaping.

The construction works will be carried out on small areas and in a short period of time, which will be finished by arranging / rehabilitating the land. It should be mentioned that the landscaping will include works of "greening" the space by planting trees and shrubs. New constructions are prefabricated, which will be installed on pillars or temporary foundation, which will not affect the soil.

The repair works will be carried out point-by-point or in enclosed spaces, with immediate waste disposal and landscaping.

The activities described will affect neither the soil, the landscape nor the biodiversity in the area where the works are carried out, both by its content and by the duration of the works.

All described activities under Component 1.2 have minimal social impact.

Demolition works – the land, after completion of the works, after restoring to its original condition, conditional that was before start activities, will be transmitted to the manager for use as intended.

Construction works – working conditions will improve, which will favor social attitude, especially by improving the image of SHS as a public institution.

Repair work cannot have a negative social effect because it ends with workplace improvement and increases the promotion of the SHS image.

All constructions will be carried out on public lands, based on requests (according to the Law on meteorological and hydrological activity no. 368/2023) to the Local Public Administration and / or the Public Property Agency. Works on private land will NOT be planned and carried out, except for the dismantling of the tower (the anemometric station in Cârpesti) which is located on private land. It should

be mentioned that the proposed listed activities comply exactly with WMO recommendations regarding the arrangement and operation of the hydrometric station network (*Guide to hydrological practices: Volume I - Hydrology: from measurements to hydrological information (OMM-No. 168*), which, unlike meteorological ones, is located directly next to the measured and arranged water body on public lands. Thus, the social impact, focused on landowners, is minimal.

A list with a detailed description of the works and a map of the location of the municipal infrastructure to be created or rehabilitated is attached in **Annex no. 1.3 to this ESMF.**

Components 2, 3 and 4. will not target urban or critical infrastructure construction, but will only provide support to regulatory policies and measures and technical studies, as well as assistance in the gradual implementation of disaster risk financing reforms, which will allow for the reallocation of loan revenues from other components to provide immediate support for recovery and reconstruction following a crisis eligible for mitigating natural hazards and climate risks.

Component 5 will finance the Project management activities to be provided by UCMP, jointly with the central and local public administration authorities involved.

However, this Project aims to develop systems, frameworks and data to facilitate the realization of a risk reduction program, possibly on a larger scale.

The Project will also present the advantage of this approach in terms of short-term gain – through improvements in utilities and energy efficiency, as well as in terms of long-term risk reduction and adaptation to climate change, drawing a very visible signal on government involvement in risk reduction actions and progress made in this regard.

This aspect is particularly important if we consider the limited progress that Moldova has made over the past decades in terms of risk reduction.

Structural refurbishment and functional modernization or demolition and reconstruction, together with investments to increase energy efficiency, would entail financing for:

(i) preparation, review and analysis of Technical Studies,
(ii) Energy Efficiency Audits, Feasibility Studies and Technical Projects, until obtaining the Building Permit,
(iii) civil works for the rehabilitation/modernization or demolition/reconstruction of priority facilities,
(iv) supervision of construction work.

This strand will also fund non-structural activities, e.g. those focused on promoting good practices on seismic rehabilitation and low-energy techniques, implementing guidelines and codes for infrastructure development, planning emergency responses, developing response capacity and informing the public.

All buildings are publicly owned and work is expected to be carried out within existing premises. However, the type of intervention has not yet been precisely established, as this needs to be substantiated by a technical analysis.

For all these proposed buildings, a decision on the final constructive solutions for rehabilitation / modernization / new structures will be made only after the completion of the Feasibility Studies that will be carried out for each location.

The construction works will involve a range of interventions, from new construction, in a limited number of cases, to the refurbishment of existing buildings. The refurbishment will involve modifying certain interior spaces and layout plans and adapting existing spaces to new functions.

These operations will include interior repartitioning and new finishes. The exterior of the buildings will be modernized to ensure better protection against weather and to ensure much higher energy efficiency (windows and doors, as well as thermal installations will be replaced). Technical infrastructure will be largely improved in all cases, including electrical and mechanical installations and communication, security and public safety systems. The restoration of existing details will be carried out when this operation is architecturally appropriate.

2. Environmental and social policies, regulations and laws

2.1. World Bank environmental and social standards

The environmental policies applied by the World Bank allow avoiding adverse impacts on the environment and people's lives by minimizing and mitigating the potential environmental and social impact generated by the project.

Policy objectives aim to:

- Avoiding negative effects, if possible; if not, minimize, reduce, mitigate, identify viable alternatives;
- Correlating the level of analysis, mitigation and surveillance with the level of risk and impact;
- Informing the public and ensuring its participation in decision-making affecting them;
- Integration of environmental and social aspects in the process of project identification, structuring and implementation

In the context of the above, projects supported by the Bank must comply with the ESS. Table 4 below provides an overview of ESSs and their applicability to this project.

Table 1: World Bank Environmental and Social Standards

E&S Standard		Applicable Project
ESS1	Assessment and management of environmental and social risks and impacts	**+**
ESS2	Labor and working conditions	**+**
ESS3	Resource efficiency and pollution prevention and management	**+**
ESS4	Community Health & Safety	**+**
ESS5	Land acquisition, restriction of land use and involuntary resettlement	**-**
ESS6	Biodiversity conservation and sustainable management of living natural resources	**-**
ESS7	Indigenous peoples	**-**
ESS8	Cultural heritage	**-**
ESS9	Financial intermediaries	**-**
ESS10	Stakeholder involvement and Information disclosure	**+**

2.2. Legal framework of the Republic of Moldova

The legal framework for environmental protection and related activities is regulated by Law nr. 1515/1993 on environmental protection, other organic and main laws in various fields, international conventions signed and ratified by Moldova, Government Decisions (GD) or internal ministerial administrative acts, Environmental Strategy (MS) for 2014-2023, approved by GD no. 301/2014 and the National Development Plan (NDP).

National environmental legislation includes all EU standards and establishes general principles of environmental policy. This legislation also adopts the general modalities of application of the following principles: harmonization of environmental policies and development programs, correlation between specific and environmental development, obligation to use the procedure for obtaining the Environmental Permit for certain socio-economic activities that generate significant effects on the environment, use of economic incentives.

Agencies (entities) proposing new investment projects likely to generate significant environmental impacts must apply for an environmental agreement. It is possible for this agreement to be issued only after a serious environmental impact assessment carried out by accredited experts and accompanied by a process of public debate. The potential impact, its mitigation measures and the monitoring system required must be highlighted in this process. After awarding the project, it is also necessary to obtain the Environmental Permit. In the absence of authorization, it is forbidden to continue the proposed activity.

The legislation of the Republic of Moldova does not require a social assessment for investment projects, the realization of this assessment not being a requirement for issuing any authorization. However, the Environmental Impact Assessment prepared for the national permit procedure will include a chapter on social issues, which is consistent with the purpose of this project.

The main pieces of legislation, regulations and government policies relevant to the Social Impact Assessment are listed in the table below:

Table no. 2. Legal framework of the Republic of Moldova related to the social and environmental management process

Law	Purpose. Relevance to project activities
Labor Code nr. 154/2003	It regulates all individual and collective employment relationships, the application of regulations on employment relationships and labor jurisdiction.
Law on Environmental Protection No. 1515-XII of June 16, 1993;	establishes the basic legal framework for the development of special normative acts and instructions on environmental protection issues. Basic rules on air quality conditions, rights and obligations of each actor with activities with potential impact on the environment;
Occupational Safety and Health Law nr. 186/2008	General framework for health and safety at work, roles and responsibilities, monitoring bodies.
Equality Act Chances between women and men no. 5/2006	Regulates measures aimed at promoting equal opportunities and treatment between men and women, with the aim of eliminating all forms of discrimination based on sex from all spheres of public life in Moldova
Law on Access to Information of public interest nr. 148/2023	Free and unrestricted access of any person to any information of public interest is one of the fundamental principles of relations between persons and public authorities, in accordance with the Constitution of the Republic of Moldova and international documents ratified by the Parliament of the Republic of Moldova relevant for ensuring an active and passive way of disseminating information on the implementation of the project and civil works executed within the project;
Law on Civil Protection nr. 271/1994	Complex of specific activities, organizational, technical, operational, humanitarian and public information measures and tasks, which is planned, organized and implemented with the aim of preventing and reducing disaster risks and protecting population, property and the environment against the negative effects generated by emergency situations.
Law on meteorological and hydrological activity nr. 368/2023	Legal framework for meteorological and hydrological activity, necessary for sustainable socio-economic development of the country, as well as for preventing and minimizing the impact of dangerous meteorological and hydrological phenomena on human life, property and state security.
Administrative Code of the Republic of Moldova nr. 116/2018	Rights of citizens to petition public authorities, as well as procedures and responsibilities for registering / responding / solving citizens' complaints, questions or proposals.
Civil Code of the Republic of Moldova nr. 1107/2002	It provides guidance and regulations on access to neighboring properties, compensation rights and neighborhood principles good faith.
Trade Union Law nr. 1129/2000	It regulates the social relations arising in connection with the realization by citizens of the constitutional right to found and join trade unions, establishes the legal framework of their foundation, guarantees of activity, regulates their relations with public authorities, employers and employers' associations.
Employers' Law nr. 976/2000	Regulates the way of establishment, functioning and cessation of employers' activity in the Republic of Moldova in accordance with the Concept for the development of the social dialogue system
Social Assistance Law nr. 547/2003	Establishes the main benefits of social security and social services that apply to vulnerable groups in Moldova
Law on Strategic Environmental Assessment nr. 11/2017	Legal framework for carrying out strategic environmental assessment in order to ensure a high level of environmental

Law	Purpose. Relevance to project activities
	protection, prevent or diminish the negative effects of plans and programs on the environment, including on human health.
Law on Environmental Impact Assessment nr. 86/2014	The functioning of the mechanism for assessing the environmental impact of public and private projects or planned types of activities, in order to ensure the prevention or minimization, at the initial stages, of the negative impact on the environment and human health, having as object the procedures and modalities applied in the environmental impact assessment process.
Law on ratification of the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in Transboundary Context nr. 156/2018	The objective of this Protocol is to ensure a high level of protection of the environment, including health, the signatory Parties being obliged to ensure the performance of the Strategic Environmental Assessment for national and international plans and programs, including transboundary plans and programs, likely to have significant effects on the environment, including health in the Republic of Moldova.
Law on the authorization of the execution of construction works no. 163/2010	The law defines the permitting process for construction, rehabilitation, extension, demolition works and includes provisions for the assessment of neighboring properties, consultation and consent of neighbors, where the project is expected to impact nearby properties as defined by technical norms
Law on Quality in Construction no. 721/1196	The law shall define the roles and responsibilities that apply in ensuring building norms and standards applied to buildings, including access for persons with disabilities, use of environmentally friendly materials, gender dimension
Waste Law nr. 209/2016	Legal bases, state policy and measures necessary to protect the environment and human health by preventing or reducing the adverse effects caused by waste generation and management and by reducing the general effects of resource use and increasing the efficiency of their use, relevant for ensuring waste management at the level of each institution for toxic waste, electrical and electronic equipment for solid waste;
Law on principles of urbanism and spatial planning nr. 835/1996	Complex of activities for coordinating economic, social, cultural and ecological policy in accordance with the fundamental values of society as a whole, in order to achieve a natural and harmoniously built environment that favors the social and cultural life of the population.
MM Order on the approval of the Regulation and structure of SHS No. 46/2011	The normative framework regulating the areas of activity of SHS, functional limits, institutional priorities, organization and functioning.
GD approving the Regulation on the use of information hydrometeorological in the economic activity of economic agents nr. 935/1999	Establishes norms and rules for the use of hydrometeorological information by public administration authorities central and local plants and economic agents, whose economic activity depends on the influence of hydrometeorological conditions/factors.
GD for the approval of the Methodology for calculating tariffs for services provided, of the Nomenclature and tariffs of services provided against payment and of the Regulation on how to form and use revenues collected by SHS nr. 494/2023	Establishes the rules for calculating tariffs for services provided against payment by SHS and regulates the cost structure used to calculate tariffs and how they are calculated.

Law	Purpose. Relevance to project activities
Agreement between the Government of the Republic of Moldova and the Government of Romania on cooperation for the protection and sustainable use of the waters of the Prut and Danube, signed in Chisinau on June 28, 2010 (GD 734/2010)	It develops bilateral collaboration focused, on the one hand, on the protection and rational use of water resources and, on the other hand, on the defense and response, at country level, against floods, ice and pollution.
GD 624/2023 on the approval of the National Program adapting to climate change by 2030	Strengthen capacities to adapt to imminent climate change and recognize the impact of climate change on target sectors.

2.3. National environmental and social assessment and authorization

Instrument introduced in national legislation, in order to ensure the prevention or minimization, at the initial stages, of possible significant effects on the environment that may occur as a result of *the construction of new objects, extension, reconstruction, modernization, reprofiling, demolition and liquidation of objects, acquisition or use of natural resources*.

Environmental impact assessment applies to *all public and private projects or certain types of planned activity*, for the subsequent establishment of direct or indirect changes in the environment caused by the performance of economic activities that affect or may affect both human health and biological diversity, soil, subsoil, water, air, climate, landscape, material assets and cultural heritage.

The environmental impact assessment procedure is carried out *at national level* and *in a transboundary context.* If on the territory of the Republic of Moldova it is planned to carry out planned activities with transboundary impact or if a planned activity of other states may have significant impact on the environment, the *environmental impact assessment* is carried out *in a transboundary context in* accordance with the requirements of the Convention on Environmental Impact Assessment in a Transboundary Context *(Espoo Convention, 1991).*

The environmental impact assessment procedure is regulated by the provisions *of Law no. 86/2014 on environmental impact assessment, in force since 04.01.2015*, which partially transposes 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. For the implementation of Law nr. 86/2014, by Order of the Ministry of Agriculture, Regional Development and Environment no. 1 of 04.01.2019 was approved *the Guide on the execution of environmental impact assessment procedures.*

The purpose of Law nr. 86/2014 on EIA is the establishment of a legal framework for the functioning of the EIA mechanism of public and private planned types of activities and of the biodiversity assessment mechanism to ensure the prevention or minimization, at the initial stages, of the significant impact on the environment and population health, as well as to implement the obligations assumed by the Republic of Moldova internationally.

The stages of the environmental impact assessment are as follows:

- prior assessment of the planned activity;

- Elaboration of the Environmental Impact Assessment (EIA) and EIA Report Program;

- Conducting Public Debates and Assessing the Quality of the EIA Report;

- Issuance of the ENVIRONMENTAL AGREEMENT;

- Post-project analysis of planned activity.

I. PRIOR ASSESSMENT OF PLANNED ACTIVITY

The initiator for the activities in Annex no.1 and 2 to Law no. 86/2014 on EIA, submits to the Environment Agency (MA) a written or electronic request for the issuance of the Environmental Agreement. For 5 days the MA checks the content of the application and requests its completion, as appropriate. Subsequently, place the Application on the official website and send a copy, through the one-stop shop, to interested parties for consideration and submission of comments and proposals on the planned activity.

I have. For the activities in Annex 1, based on the content of the Environmental Agreement Application and the proposals and comments received, the MA develops the EIA Implementation Program. And for the activities in Annex 2, based on the content of the Application for the issuance of the environmental agreement and the proposals and comments received, the MA applying the criteria in Annex no. Article 4 determines the need to carry out EIA or issue the Environmental Agreement. After that, the MA issues the Decision on the prior assessment within 20 working days from the date of expiry of the deadline provided for in Art. 7 para. (4) and (6) of Law no. 86/2014.For the activities in Annex 1, develop the EIA Implementation Program. For the activities in Annex 2, determine the need to carry out the EIA or issue the Environmental Agreement.

II.ELABORATION OF EIA IMPLEMENTATION PROGRAMME AND EIA REPORT

Based on the EIA Implementation Program and in accordance with the information quality requirements, the EIA Report is developed.

MA Receives from the Initiator the EIA Report in paper and electronic format. Within 5 working days from the date of receipt, check the content of the Report and, where appropriate, request from the Initiator its completion. If the EIA Report is complete, the MA shall, within 5 working days from the date of receipt of it, place it on the website and send a copy to the Technical Committee. And the author of the project Within 5 working days places the copy of the Report on the official website and notifies the Interested Public about the availability of the report, by publishing an announcement in a national newspaper and at least in a local newspaper, with the mandatory indication of the following information: places and means by which the interested public can access information; deadlines and the opportunity to submit comments and proposals to the MA. time and location of public debates to be organized in accordance with the requirements of the Law.

Interested public It will send comments and proposals to the AM within 30 working days.

III.CONDUCT PUBLIC DEBATES AND QUALITY ASSESSMENT OF THE EIA REPORT;

Both the initiator of the project and the Environment Agency inform the interested public about the conduct of public debates. The announcement shall be placed at least 15 working days before the start of public debate. The public debate sessions are moderated by the representative of the Environment Agency The results of the public debates shall be recorded in a Minutes according to Annex no. 7. The minutes shall be drawn up by the initiator within 10 working days from the date of the public debates and shall be signed by the chairman and secretary of the public debate meeting. Subsequently, the MA publishes on the official website www.am.gov.md, the Minutes of the public debate meeting, and sends its copy to the Technical Committee. The Technical Committee, for its part, shall, within 20 working days of receipt of the copy of the Minutes of Public Debates, submit in writing to the MA a detailed and reasoned opinion on the quality of the EIA Report. Subsequently, MA Within 10 working days of receiving the CT opinion, the MA assesses and issues a OPINION on the quality of the EIA Report and informs the LPA about it.

IV ISSUANCE OF THE ENVIRONMENTAL AGREEMENT - AM Within 30 working days from the date of issuance of the OPINION on the quality of the EIA Report, the MA shall take one of the following Decisions:

A) Issues the environmental agreement if the EIA Report complies with the requirements established by Law no. 86/2014 through EIA and the negative impact on the environment is prevented, and the interested party within 5 working days of receiving the Decision and justification from the MA, informs the interested public about them by announcement in the media, information placed on the official website.

B) Refuses to issue environmental consent if: a) environmental legislation prohibits carrying out the type of activity in the proposed area; (b) The EIA report or public comments determine a potential significant adverse impact on the environment and the risk of such impact cannot be prevented or minimized; c) the results of carrying out the biodiversity assessment within the environmental impact assessment procedure determine a potential significant negative impact on the Emerald sites and the conditions set out in Law nr. 94/2007 on the ecological network are not met.

V. POST-PROJECT ANALYSIS OF THE PLANNED ACTIVITY - IF THE ENVIRONMENTAL Agreement provides for measures to carry out the Post-project Analysis, the INITIATOR monitors the significant impact of the planned activity on the environment and the Environment Agency within 5 working days of receiving the Post-Project Analysis Report from the initiator, places it on its official website and informs the Environmental Protection Inspectorate for carrying out the environmental control at site to establish compliance.

2.4. World Bank Environmental and Social Standards for Project Activities

Table no. 3. Relevance of World Bank standards and key gaps in the national framework

Standard E&S	Relevance
ESS 1: Assessment and management of environmental and social risks and impacts	National legislation requires environmental assessment or ecological expertise to obtain the environmental permit or the authorization/opinion of the state ecological expertise. There are no requirements for social impact and risk assessment. ESS1 is relevant to the project as project activities are expected to pose moderate social and environmental risks. National legislation requires environmental assessment or ecological expertise to obtain the environmental permit or the state ecological expert opinion. There are no requirements for social impact and risk assessment. The proposed actions are: - Conduct an EIA of the proposed components, including stakeholder involvement. - Based on ESIA, preparation of location-specific PGES for each UCMP-funded subproject. - Engage stakeholders and disclose appropriate information in accordance with ESS 10. - Develop a Social and Environmental Engagement Plan and implement all measures and actions provided for in the legal agreement, including the ESCP. - Performs monitoring and reporting on the environmental and social performance of the project against the relevant ESSs.
ESS 2: Work and working conditions	Overall, Moldova's OSH legislation is extensive and generally in line with the provisions set out in ESS2. ESS2 is relevant to the project because there are certain work risks for project workers. Work-related risks include: (i) safety risks for project workers, (ii) traffic and road safety problems, (iii) inadequate terms and conditions of employment, and (iv) occupational health and safety risks.
ESS 3: Resource efficiency and pollution prevention and management	The risk and impact assessment and proposed mitigation measures related to the relevant requirements of ESS 3, including raw materials, water use, air pollution, hazardous materials and hazardous waste, are included in the scope of this ESMF and will continue to be included in the Environmental and Social Assessment (ESIA) as appropriate.
ESS 4: Community health and safety	National legislation does not include provisions related to pedestrian protection, public consultations, compensation procedures, etc. The proposed actions are: - Anticipate and avoid adverse impacts on the health and safety of communities affected by the project throughout the project lifecycle, from both routine and non-routine circumstances. - Promote quality and safety, as well as climate change considerations, in infrastructure design and construction. - To avoid or minimize community exposure to traffic and road safety risks, diseases and hazardous materials related to the project. - Have effective measures in place to address emergency events. - Ensure that the protection of personnel and property is carried out in a manner that avoids or minimizes risks to communities affected by the project.

ESRS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	The Standard is not currently relevant for the project. Further actions could be taken following environmental and social assessment on site described in ESS 1. The proposed actions are: - Verification of risks and negative impacts on biodiversity associated with Project activities as described in ESMF and application of relevant measures in ESMP consistent with ESS6. - Any activities of beneficiaries of construction, repair or rehabilitation Works that may be located in protected areas, critical habitats or internationally recognized areas of high biodiversity value, including Ramsar sites, will be considered ineligible for project funding.
ESS 10: Stakeholder involvement and disclosure	The national legal framework includes requirements for consultation during the environmental impact assessment, citizen participation in decision-making and the possibility to access public information. ESS10 is relevant for all projects, given the need to engage with beneficiaries and stakeholders in development activities affecting their lives. The proposed actions are: - Development and implementation of a Stakeholder Engagement Plan (SEP) as part of this ESMF, disclosed and consulted for the project, in accordance with ESS10. SEP may be updated (and redisclosed) as needed during Project implementation. - Establish, advertise, maintain and operate an accessible complaints mechanism, receive and facilitate resolution of concerns and grievances in relation to the Project, including SEA/SH complaints.

3. Potential impacts of environmental and social risks and mitigation measures

3.1. Investment and institutional strengthening for emergency preparedness and response.

Environmental and Social Risk Classification of the Project. During the preparation stage this project has been classified as a project with moderate level of potential environmental and social risk. The environmental moderate Project risk classification was considered because the project activities do not involve physical construction, are expected to have positive effects, such as acquiring and replacing fire and rescue vehicles with more efficient ones, reducing response times, and improving safety and efficiency. The project will also help increase emergency response standards to meet EU Civil Protection Mechanism requirements. Equipment choices will focus on low energy consumption and high efficiency. Measures for traffic and road safety risks from vehicle usage will be implemented as part of the project design, following international industry practices.

The social Project risk rating is also moderate. The project will not involve infrastructure investments that could lead to land acquisition or significant impacts on communities. However, feasibility studies for selected risk reduction investments may be funded, with the scope to be determined. Overall, the project is expected to have positive social impacts, particularly for communities in disaster-prone areas, by enhancing preparedness and adaptation to climate change-induced events. Active involvement of stakeholders, communities, and vulnerable groups will be crucial for delivering these benefits, including raising awareness and capacity building for emergency preparedness and response. Provisions for emergency communication and early warning systems may have social implications if information is inaccurate or not timely, but these risks are expected to be addressed through the project's design and stakeholder engagement efforts, including the implementation of a Stakeholder Engagement Plan (SEP).

The detailed description of risks and impacts is provided below:

Subcomponent 1.1. Strengthening crisis response and preparedness. Project activities. The project will support the purchase and installation of a public warning system, purchase of motor vehicles and emergency equipment for prevention officers at local level.

Location of project objects. Technical assistance and capacity-building activities will be implemented at national and local level.

Potential environmental and social impact. The Subcomponent 1.1. will not generate any significant and large-scale environmental and social impacts. The possible negative effects on the environment are related to the stages of purchasing the equipment and implementing the system or making available, in territorial subdivisions, the special vehicles or other technique related to the project.

Dust, noise and vibration: These effects may occur for a very short period, when equipment will be transported or special vehicles will be deployed in territorial subdivisions. In order to avoid these effects, it is necessary to comply with the general rules and practices existing in the country;

Risk of inadequate coverage of vulnerable groups: Exclusion of certain groups from the early warning notification process can result in adverse consequences, particularly for marginalized communities, which may already be at heightened risk during disasters or emergencies. For example, persons with disabilities require notifications in accessible formats, such as through audio or visual alerts or assistive technologies. For Public Warning System, individuals' characteristics and abilities can, among other factors, enable people to receive and understand a warning or hinder them from doing so (e.g., if they have visual or hearing impairments or do not have the appropriate means or technology to receive a warning, such as access to the Internet, a cell phone, or a radio). Even if they receive a warning, they might be unable to respond given limited mobility, lack of resources, or other factors. Tailored approaches are essential to ensure that those receiving the warnings are contributing to the design and development of the EWS so that their needs are met.

In addition, planned by the Project the public broadcasting system, depending on the design and transmission mechanisms, may not adequately reach the vulnerable groups who may not be in possession of the receiver tools, such as mobile phones or TV sets. Also, the most vulnerable and poorest may not be aware of the existence of the public broadcasting system and how it can specifically benefit them in case of natural disasters.

Limited knowledge and low capacity of government and other institutions involved into the Project related to understanding of communication needs of vulnerable populations.

All these potential environmental and social impacts are moderate and could be easily managed during the implementation phase of the project.

The mitigation measures to be applied are as follows:

***Noise reduction*.** The local public administration authorities, located on the routes of redeployment of the purchased equipment, will be informed. Normal working hours shall be observed.

***Minimizing dust*.** In order to minimize dust during the transportation of equipment or other work related to this objective, occasional technical solutions and measures must be used, miss for the period of carrying out certain actions in the project and in certain locations. Alternatively, a reduction in vehicle speed may be applied.

Waste management. Minimal waste will be generated from the activities under this subcomponent. The waste, which will mainly come from packaging, will be handled in accordance with environmental legislation. Separate chapter related to this subject will be included in all contracts signed under this project. Replacement of existing equipment could lead to a stream of e-waste, which will be further examined in each ESMP related to subcomponents.

***Working hours*.** In order to avoid noise and disturbance of neighbors, work should be carried out during normal working hours, that is, from 7:00 to 18:00.

Inclusion of the vulnerable and disadvantaged groups into the Project implementation. The detailed feasibility study, funded by the EU, will assess and propose measures to ensure the public broadcasting system uses the technological means available to the most vulnerable and marginalized groups of the society. Furthermore, the GIES will conduct nation-wide awareness campaigns about the operation of the public broadcasting system. It will complement it with additional awareness programs in rural areas targeted at improving disaster preparedness in rural communities where the most of the poor are located. In addition, the Stakeholder Engagement Plan (SEP) prepared for the Project will be implemented. SEP was prepared with identification of vulnerable groups and outlining special means of communication with them during Project life cycle. The Project level feedback mechanism (Please refer to section 6) will be established and will be accessible for all project stakeholders including vulnerable and disadvantaged groups.

Strengthening knowledge and capacity of government and other institutions involved into the Project related to understanding of communication needs of vulnerable populations. To increase knowledge in understanding vulnerable and disadvantaged groups the detailed study will be conducted for the acquisition of the public broadcasting system which will assess the capability of the proposed solutions to effectively reach vulnerable groups. In addition, The Project will engage with NGOs, CSOs, and social service organizations focusing on various issues related to vulnerable and disadvantaged groups during the project's preparation and implementation stages, ensuring their participation in project design and consultation processes. The detailed approach to this is outlined in the SEP.

***Subcomponent 1.2 - Improvement of hydrometeorological services*.** Project activities. As the project will support most technical assistance and capacity-building activities, some civil works related to the renovation of construction of meteorological stations and hydro monitoring stations, as well as the construction of new premises, will be financed under Subcomponent 1.2.

Location of project objects. Technical assistance and capacity building activities will be implemented at national level, while construction works of new objects will be carried out at hydro and weather stations. The selected plots of land are located outside residential areas or on the outskirts of cities and villages. Near the locations there are no important natural habitats and physical cultural objects. In addition, the construction and repair of objects will be done on available land, which is owned by the state or local government in these areas and is not used legally or illegally by the local population and therefore will not involve risks of involuntary reassignment. The locations were selected to ensure the accuracy of the observations and to provide representative data.

Potential environmental and social impact. It is expected that the project will not generate any significant and large-scale environmental and social impacts. The possible negative effects on the environment are related to the construction and operational stages and are as follows:

- *Dust, noise and vibration*: These effects occur during construction work on all objects and are characteristic of the respective locations. To avoid these effects, it is necessary to follow existing best practices in construction, which are well known and applied in the country;
- *Land contamination*: Construction activities can cause some contamination of the soil with hydrocarbons or when it is moved during construction work, and this can also lead to contamination of surface and groundwater. Entrepreneurs will need to take steps to avoid this;
- *Waste handling and leakage disposal*: routine construction activities will generate solid and liquid waste, including drywall, machine oil, paints and solvents. During construction work, minor leaks of fuel and other materials may occur. Incorrect handling of waste on site and mismanagement of discharges could lead to adverse effects on the local environment, including groundwater, surface water, terrestrial ecosystems and the local population;
- *Wastewater discharge management*: Construction activities may require sanitary wastewater discharge management. Thus, permanent plumbing should be provided on the construction site. The same installations will be used during the operational phase. They must comply with environmental regulations;
- *Potential impact associated with indoor construction activities* when harmful/toxic solvents and adhesives and lead-based paints are used.

All of these potential environmental impacts are minor and could easily be managed during the construction and implementation phase of the project.

The mitigation measures to be applied are as follows.

Design stage. During the design phase, best construction practices must be applied in relation to the proposed activities, spaces must be designed to be accessible, energy efficient, taking into account the adaptation of the building to the existing surrounding landscape and surroundings/architecture.

Construction stage. At this stage, emphasis should be placed on the possible environmental impact during construction work. Possible problems addressed: proper management of the access road, construction waste management, minimization of dust and noise, site restoration, traffic management plan, work schedule, invasion of neighboring territory.

Access roads: In some cases, access roads must cross open drains which, if not constructed in an adequate manner, could lead to disruption of drainage structures. The construction of the road will also include an appropriate drainage channel to ensure the free movement of water.

Noise reduction. Before starting anything, it is recommended to inform neighbors, either directly or through information boards or local newspapers about construction activities. Noise should be limited by using good management practices and limiting work to normal working hours. The machines used must be calibrated according to the Building Rules of the Republic of Moldova of February 4, 2007 "Protection against noise".

Minimizing dust. To minimize dust during construction work, temporary technical solutions and measures should be used. For the transportation of soil or other dust-producing materials, watering or covering the load should be applied. Reducing dust levels on the site during the dry season of the year can be achieved by watering the soil surface. At the same time, water should not be wasted in vain. Alternatively, a reduction in vehicle speed may be applied.

Construction waste and leakage. It is recommended that the contractor, before starting work, ask the institution to remove all equipment and materials that will no longer be used and properly dispose of or recycle them. Waste, where possible, must be minimized, separated and handled in accordance with the Household Production and Waste Act No. 1347/1997.

Organization and restoration of the land. The territory of the construction must be fenced to prevent public entry, as required by general safety measures. Planning should be done so that no major temporary traffic or other inconvenience occurs as a result of construction work, and those that may occur are minimized through planning and coordination with contractors, neighbors and authorities. Traffic in project localities will be somewhat burdened by trucks transporting construction materials and removing waste, but not to the extent that they have to stop or reroute. Therefore, during the works, traffic will remain uninterrupted and it is the

contractor's responsibility to ensure this throughout the construction phase. After completion of the works, the land will have to be restored according to the provisions of the project. All waste and machinery will have to be removed from the construction site.

Temporary storage of materials (including hazardous materials). Storage of building materials should be avoided if possible. If not, building materials should be stored on the site and protected from the elements. Hazardous materials such as paints, oils, enamels and others should be stored on impermeable surfaces, and absorbents such as sand or sawdust should be readily available to cope with small spills.

Violation of neighboring territory. It is not necessary to violate the neighboring territory.

Working hours. To avoid noise, work should be carried out during normal working hours, from 7:00 to 18:00. No special permits will be required for other working hours.

3.2. Support for policies, regulations and investments to reduce critical infrastructure risk

This component will provide support to regulatory measures to manage climate-related natural hazards and will include funding for structural vulnerability assessments, geotechnical and other site investigations, as well as feasibility and design studies for the rehabilitation, reconstruction or enhancement of vulnerable assets of critical infrastructure. The funded activities are intended to be used as best practice pilots and subsequently used as models for extensive investments in the areas of flood protection and/or seismic risk reduction.

Environmental and Social considerations will be incorporated into feasibility studies. The studies should identify environmental vulnerabilities and vulnerability of populations, including marginalized and most at risk populations. The Terms of Reference for these studies should be consistent with the ESF and will be cleared by the Bank.

The component will not bear potential impacts of environmental risks as it will fund primarily technical assistance activities. The direct social risks associated with the TA activities are also minimal and include gender-based violence and harassment which are mitigated both via existing Moldovan legislation.

3.3. Financial protection to mitigate the impact of natural disasters.

This component will support the gradual implementation of disaster risk financing reforms, including by developing a plan focusing on a better understanding of contingent liabilities arising from disasters; designing transparent, well-monitored and rapidly targeted sources in the aftermath of disasters and addressing farmers' financial resilience to climate shocks.
The component will not bear potential impacts of environmental and social risks.

3.4. Emergency response

This window will allow for the reallocation of loan income from other windows to provide immediate support for recovery and reconstruction following an eligible crisis. The activities funded by the project will be determined by demand and events and will be detailed in an Activity Plan.

3.5. Project management

This component will finance operational costs, consultancy services, non-consultancy services, assets and training activities to finance the total cost of project management, including costs related to the project team at the Project Implementation Unit in order to ensure an efficient project implementation process and close cooperation between line ministries and implementing agencies, as well as other project stakeholders.
The component will not bear potential impacts of environmental and social risks.

A more detailed description of environmental and social risks and mitigation measures is reflected **in Annex 2** to the ESMF.

4. Implementation Procedures and Arrangements

The project will be implemented by the Office for External Assistance Programs Management (OEAPM) that will function as the Project Implementation Unit (PIU) and perform all project management functions.

OEAPM has long experience in managing implementation of external assistance projects and demonstrated its capacity to act as a PIU for projects with international financial institution financing, including through a series of World Bank-financed operations between 1996 and 2021, the most recent being the Competitiveness Enhancement Project, Phase II (CEP 2).[5] Hence, the OEAPM PIU has a strong track record and experience with the World Bank's policies and procedures.

All key ministries and agencies engaged under the Project, including the MoIA, MoF, and MoE together with the SHS, and the Ministry of Infrastructure and Regional Development (MoIRD) will serve as implementation agencies, each leading the technical work for their respective components. To ensure cohesive overall coordination, strategic guidance, and accountability across the implementation agencies, the PIU will sign Implementation Agreements with each of the implementation agencies defining their respective roles and responsibilities in implementation of the project. In addition, the already existing Steering Committee, which oversees OEAPM, will be enlarged to also include all key ministries and agencies engaged under SMORE, including the MoIA, MoE together with the SHS, and the MoIRD. This Steering Committee will provide strategic project oversight and ensure overall coordination between various implementing line ministries for effective project implementation, monitoring, and evaluation.

The PIU will be led by a project director and composed of dedicated staff and consultants for the project with adequate qualifications (including experience in World Bank policies and procedures).[6] It will be directly responsible for (a) carrying out the procurement of works, goods, and services required under the project; (b) administering funds and maintaining separate accounting records in accordance with its own financial regulations, rules, policies, and procedures; (c) performing monitoring and evaluation functions to prepare periodic progress reports; (d) ensuring compliance with the World Bank's ESF processes; and (e) conducting adequate stakeholder and citizen engagement.

The PIU will hire dedicated Environmental and Social Specialist that will be responsible for implementing the ESMF including preparation of sub-project ESMPs and incorporating requirements into tender an procurement documents. Each implementing agency will appoint an E&S Focal Point within their respective PIU.

Additional needs for complementary technical assistance for institutional strengthening will be supported, including on issues related to effective supervision, planning and implementation of investments in preparedness, response and early warning systems. The PIU shall incorporate the provisions of this ESMF into the following documents:

- Project operations manual;
- Tender and procurement documents;
- Construction and supervision contracts for individual sub-projects, both in terms of reference and specifications; Contractors will be required to include the cost of implementing environmental and social activities in their financial proposals;
- Project ESMP ensure that the requirements of this ESMF and are included in the Contractors' environmental and social management plans C-ESMP.

Focusing in particular on sub-Component 1.2.

[5] Other projects include the Moldova First Private Sector Development Project (PSD1, P008561), Rural Investment and Services Project 1 (RISP 1, P060434), Rural Investment and Services Project 2 (RISP 2, P090673), and Competitiveness Enhancement Project (CEP 1, P089124).
[6] Core staff will comprise the PIU Director, Deputy PIU Director/Project Coordinator, Financial Management Specialist, Environmental Specialist and two Procurement Specialists.

The plans for each of the SHS buildings to be built/rehabilitated will include measures to ensure that the social and natural environment is not adversely affected during the project in accordance with the ESMF and good international industry practice (GIIP). The initiators of the building rehabilitation works (SHS or subcontracted company) will be responsible for preparing the application file, following the following steps:

- clarification of the legal status of land established as a location for the future sub-project;
- preparation of technical documentation, which will describe the sub-project (this documentation should also contain a description of the internal monitoring system);
- submission of an application for the issuance of an Urbanism Certificate, to the Local Council, to the District or Municipal Council, as appropriate; and
- obtaining all approvals required by the above-mentioned Urbanism Certificate.

PIU will establish mechanisms for monitoring environmental and social aspects of approved projects throughout the duration of the project. During the implementation of the project, PIU will have overall responsibility for surveillance operations in order to ensure that the measures indicated in ESMF /ESMPs are properly implemented.

PIU, in collaboration with the local authorities responsible for the selected buildings, will carry out environmental and social monitoring both at the construction and operational stages, according to the requirements included in the monitoring plan of the PMMS. The project will be regulated by the laws of the Republic of Moldova, which establish the process of obtaining and reviewing the Environmental Permit.

The major issues addressing the challenges related to the implementation of the project, including those related to the environmental performance of the project portfolio, will be solved through the current coordination systems within the sector, with the support of PIU.

Each ESMP will be monitored by a specialist supervision and project management consultant as part of global supervision services at each site level during the construction phase. Thus, each periodic monitoring report will include a specific chapter dedicated to Environmental and Social Surveillance and Performance, which will include:

- the results of the framing and review procedures obtained by field supervisors;
- a description of any operations currently not complying with environmental requirements, in accordance with corrective action measures and actions taken by PIU through the firm providing surveillance advisory services, or measures directly implemented or intended to apply to remedy the situation.

PIU technical experts will be responsible for ensuring full coordination and oversight of environmental and social management plans and risk mitigation measures within the project, then work in collaboration with project supervision coordination and technical staff and will:

a) coordinate training activities for environmental and social themes / guiding ESMF activities to be implemented by its own staff, designers and local entrepreneurs; b) disseminate existing environmental management guidelines and develop guidelines on issues not covered by existing regulations, in line with WB and EU standards for the implementation, monitoring and evaluation of mitigation measures;

c) ensure that contracting processes for construction works and equipment supply include references to appropriate guidelines and standards;

d) make periodic site visits to inspect and approve plans and monitor compliance with them.

4.1 Environmental and social risk management procedures

Environmental and social risk management procedures will be implemented through the Project subproject selection process. In summary, the procedures aim at the following:

Table 4. Project cycle and E&S management procedures

Stage Project	E&S Stage	Management procedures E&S
a. Evaluation and analysis: Identification of the subproject	Projection	The project will include 4 demolitions / dismantling, 37 constructions and 28 repairs and arrangements outside the areas protected by the state, according to Law no. 1538/1998, with insignificant environmental and social risks and impacts.

Stage Project	E&S Stage	Management procedures E&S
		For each site it will be followed the legal requirements as related: Authorization for dismantling, dismantling, Urbanism certificate for design and Building permit as needed. National legislation in the field of construction and town planning: • Law nr. 721-XIII of 2 February 1996 on quality in construction; • Law nr. 835-XIII of 17 May 1996 on the principles of town and country planning; • Law nr. 163 of 09 July 2010 regarding the authorization of the execution of construction works; • Law nr. 128 of 11.07.2014 on the energy performance of buildings; • GD 285/1996 regarding the approval of the Regulation for the reception of constructions and related installations • GD 936/2006 for the approval of the Regulation on technical expertise in constructions • GD 582/2022 for the approval of the Regulation on how to demolish unauthorized constructions and deforestation of trees and shrubs • GD 361/1996 regarding the quality assurance of constructions • Order no. Law no. 120 of 17.06.2022 on the approval of the Method of calculating the coefficients in the formula for updating the prices of the cost price components when adjusting the value of the public works contract concluded for a term of more than one year • Guide on the identification of producer price indices for construction materials and consumer price indices for fuels (fuels) • Classifier of activities in the economy of Moldova (CAEM-2)
b. Formulation and planning: Planning of subproject activities, including human and budgetary resources and monitoring measures	Planning	For activities requiring ESMPs, PIU will develop and coordinate with the World Bank 5 ESMPs for prior review and clearance of the World Bank prior to initiating bidding processes (p/u projects involving tendering processes) and/or launching activities (p/u subproject activities not tendered). A model of the ESMP is described in **Annex 3** to the ESMF Therefore, ESMPs will be developed and approved for massive/complex construction works, as follows: 1) SHS headquarters (Air Station, Laboratories, Energy Efficiency, etc.); 2) SM Comrat; 3) SM Bălțata (rehabilitation of the old station); 4) SM Bravicea; 5) ESMP on hydrotechnical infrastructure (only one ESMP will be developed, which will target only hydrotechnical posts that have an increased impact on habitats, river relief and other major environmental risks). The content of the ESMPs will be shared with relevant stakeholders in an accessible manner through consultations with affected communities in accordance with the established procedure. PIU will ensure the following related activities: - completing and applying for all documents, permits and authorizations required under national law; - training of responsible personnel, with procedures and rules for implementing and monitoring plans;

Stage Project	E&S Stage	Management procedures E&S
		- incorporation of relevant social and environmental procedures and plans into the contractor's tender documents; - training contractors on relevant procedures and plans. PIU will ensure that all selected contractors, subcontractors and vendors understand and incorporate relevant environmental and social mitigation measures and provide selected contractors to ensure they understand and incorporate environmental and social mitigation measures. It will also ensure that entities or communities responsible for the continued operation and maintenance of the investment have received training on environmental and social management measures during the operation phase, as appropriate.
c. Implementation and Monitoring: Support for implementation and continuous monitoring for projects Implementation	Implement	PIU will ensure that monitoring practices include environmental and social risks identified by PMMS and monitor the implementation of E&S risk management mitigation plans as part of project monitoring. Reporting will include: a) global implementation of E&S risk management tools and measures, b) any environmental or social problems arising from project activities and how these problems will be remedied or mitigated, including timelines; c) occupational health and safety performance (including incidents and accidents), community health and safety, stakeholder engagement updates in accordance with SEP, notification and public communications; d) progress on the implementation and completion of project work; e) summary of complaints/feedback of the beneficiary received, actions taken and complaints concluded. Local reports will be submitted to the national level, where they will be aggregated and presented to the WB quarterly. Throughout the Project implementation phase, PIU will continue to provide training and awareness to relevant stakeholders, such as staff, selected contractors and communities, to support the implementation of environmental and social risk management mitigation measures, according to the List of examples in Table no.6 to this ESMF. PIU will also track beneficiary grievances/feedback during project implementation, to use them as a monitoring tool for implementing project activities and environmental and social mitigation measures. Finally, if PIU becomes aware of any project related incident, which have effects on the environment, affected communities, the public or workers, it will inform the WB within 48 hours of becoming aware of such incident by using ESIRT.
d. Review and evaluation: Collection of qualitative, quantitative and/or participatory data on a sample basis	Completion	Once the Project activities are completed, PIU will analyze and evaluate the progress of implementation, along with all necessary environmental and social mitigation measures. For civil works in particular, PIU will monitor site restoration and landscaping activities in affected areas to ensure that activities are carried out to an appropriate and acceptable standard prior to the conclusion of contracts, in accordance with established measures. The seats are to be restored to at least the same condition and standard that existed before the start of works. Any pending issues must be resolved before a subproject is considered fully completed. The PIU will prepare the completion report describing the final stage of

Stage Project	E&S Stage	Management procedures E&S
		compliance with E&S risk management measures and submit it to the World Bank.

4.2 Technical assistance activities

Project will also includes Technical activities such as case studies, pre-feasibility studies and technical and, in accordance with national legislation, but in accordance with WB rules. Any such TA activity related to feasibility studies, technical design or other form of design prepared for future investments will include clear indications to ESF requirements.

Capacity development, training and any other technical assistance activities under the Project will be carried out in accordance with the Terms of Reference acceptable to the WB. They will also ensure that the results of these activities comply with the Terms of Reference.

The sub-strand would also support more generic technical assistance activities aimed at raising awareness of the proposed project's funding opportunities and the wider EU pre-accession agenda, strengthening the capacity of staff involved in disaster prevention and mitigation measures, and playing a proactive role in fostering technological and climate innovation to support the development of links between applied research and activities practical operation.

4.3 Emergency response component (CERC)

CERC can be activated in case of an eligible emergency event. Following such an event, the Government of Moldova may request the WB to reallocate uncommitted funds for projects to support an emergency response. Eligible emergency and/or crisis is any natural or man-made event that has caused or is likely to cause imminent major negative economic and/or social impact on the country. The activities funded by CERC will be demand-driven and event-driven and will be detailed in Action Plan of PIU activities which, together with a specific formal declaration of emergency issued by PIU, are the two mandatory conditions for triggering the component.

The emergency response component manual to be prepared for the project will include a description of the environmental and social risk assessment and management arrangements should the CERC component become activated. It will include an annex to the ESMF based on the activities of the sub-project that will be funded by the CERC component. PIU will prepare, consult and implement the necessary measures and actions in accordance with the CERC Manual.

4.

4.4.2. Beneficiaries and contractors

The planned investments and activities will be carried out by Contractors/Consultants selected through the tender process. They should operate in full compliance with national environmental and social legislation and the requirements of the ESMF and ESMPs. In addition, contractors are required to comply with the regulatory requirements of national and WB legislation and requirements related to traffic safety, occupational health and safety, fire safety, environmental protection, community health and safety, and stakeholder involvement.

All activities associated with ESMPs will be funded by contractors. Contractors will also be required to designate a person responsible for environmental, social, health and safety issues and for the implementation of ESMP. The strengthened roles and responsibilities of the main project stakeholders are presented in **Table no. 6** below).

Prior declaration regarding the start of work on the site and Specific Management Plans.

According to national regulations on civil works, for all construction activities, the contractor will make a *prior declaration* about the start of work on the site and inform the employer about the start of work on the site. The prior declaration regarding the start of works on the site shall also be submitted to the territorial labor inspectorate at the place where the works are carried out, at least 30 days before their start. The content of the prior declaration regarding the start of works on the site will be made available on site before the start of works and will be updated whenever changes occur.

For the construction period, the Contractor will develop *the Operational Management Plans* necessary for the construction works on sites. The contractor will design an *Execution Plan*, which will include the phases of

execution, commissioning, operation and reconstruction and subsequent use in accordance with the provisions applicable in the Republic of Moldova.

In addition, the Works Contractor will prepare the following *specific plans*:

- Social and environmental management plan of the Contractor for the construction works to be carried out - according to the requirements and specifications of this ESMF developed at Project level;
- The traffic management plan is to be agreed with the local Traffic Police;
- Emergency and Response Capacity Plan (includes accidental pollution situations, emergency and first aid equipment, list of useful emergency phone numbers, etc.);
- Solid waste management plan, including hazardous waste; and
- Site reconstruction plan.

Requirements for raw materials, energy and fuels applied for project activities.

The raw materials used to carry out the planned activity must comply with the quality requirements for construction, according to Law no. 721/1996 on quality in construction.

Table no. 5: Roles and responsibilities specific to the Social and Environmental Management in the process of implementing Environmental and Social Management Plans (ESMPs)

Responsible level/entities	Responsibilities
Strategic level World Bank	a) reviewing, clearing and disclosure of this ESMF and related ESF documents, related plans and policies on the official website of the WB; b) review and clearance of site -specific ESMP for all sub-projects; c) review of labor management procedures; d) organizing and coordinating the mission to support and supervise the implementation process to ensure that the Project complies with WB requirements.
Operational level PIU in coordination with MAI, MM, MIDR and MF	a) preparing and submitting for review, clearance, disclosure and implementation of the WB, the activities of this ESMF , including related plans and procedures; b) preparing and promoting ESMPs in accordance with this ESMF , ensuring quality control and reviewing it; c) dissemination of related ESMPs and their incorporation into bidding documents; d) contracting field specialists for environmental and social monitoring; e) conducting inspections for the implementation of ESMP by the construction contractor, with recommendations as needed; f) organizing consultation meetings and preparing/distributing informative documents to inform communities about the Project, its impact and construction schedule; g) managing the grievance resolution mechanism, including complaints received from project workers; h) providing guidance to the construction contractor and engineering supervision firm; i) summarizing environmental and social issues related to project implementation to the WB in regular progress reports; j) consultation of affected groups and local environmental authorities on the environmental aspects of project implementation; k) coordinating and liaising with WB oversight missions on social and environmental remediation aspects of project implementation.
Locally AAPL, territorial structures of SHS of MM and IGSU of MIA and other beneficiaries	a) communication of ESMP and related documents on their official pages or information boards; b) providing technical data to PIU for the preparation of the tender document; c) provision of technical data for detailed design by the Contractor; d) conducting inspection with the Contractor and environmental, sanitary and firefighting representatives on construction sites; e) participation in public consultations, ensures the provision of information to all interested parties; f) managing the petitions and complaints mechanism at local level; g) communication with affected groups and local environmental authorities on the environmental aspects of project implementation;

Responsible level/entities	Responsibilities
	h) collaboration and coordination of all processes with PIU in the process of monitoring and reporting on project performance and progress.
Control authorities, including environmental, sanitary and fire agencies	a) elaboration and issuance of the Urbanism Certificate for Design; b) elaboration and issuance of the Urban Planning Information Certificate; c) environmental, sanitary and firefighting approvals for the design phase; d) verification of the detailed design, based on the Urbanism Certificate for Design issued by the authorized institution; e) monitoring the implementation of issued Opinions; f) control the correct implementation of ESPMs
Construction Supervision Engineer	a) supervising and monitoring all contractual provisions to be ensured and observed; b) providing oral or written instructions to the Works Contractor c) control and verification of compliance with the instructions given on any matter related to the Contract; d) issuing documents, instructions and other documents relevant to the execution of works and remedying any defects, in accordance with the Contract; e) conducting regular site visits to construction sites and preparing compliance reports, etc.

4.5 Proposed training and capacity building

Table 6. Proposed training and capacity-building approach – examples

National	World Bank	National staff responsible for the overall implementation of CGES	ESMF and approach: - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures/tools - E&S monitoring and reporting - Reporting incidents and accidents - Enforcement of the Code of Conduct, incident reporting - Implementation of the Stakeholder Engagement Plan (PIP) and the complaints/beneficiary feedback mechanism - Training on how to enhance the efficacy of warnings and targeting of audiences especially vulnerable and disadvantaged groups receiving, understanding, and acting on warning messages.
Regional level	Regional staff	Regional staff Entrepreneurs	ESMF and approach: - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Reporting incidents and accidents - Enforcement of the Code of Conduct, incident reporting - Application of PIP and complaint/beneficiary feedback mechanism - Training on how to enhance the efficacy of warnings and targeting of audiences especially vulnerable and disadvantaged groups receiving, understanding, and acting on warning messages.
Local/Community level	Regional and local staff	Local staff Local Entrepreneurs Community members	- Application of PIP and complaint/beneficiary feedback mechanism - Enforcement of the Code of Conduct, incident reporting - Basic measures and personal protective equipment

		Community workers, where appropriate	- Community health and safety issues - Remediation of workers' complaints

4.6 Budget

The following table lists the estimated cost items for implementing ESMF that have been included in the overall project budget:

Table 7. Example ESMF implementation budget

Object of activity/cost	Cost (USD)
Training for staff and entrepreneurs (location, travel, refreshments, etc.)	
Printing of awareness-raising materials/complaint handling materials	
Cost of obtaining the urbanism certificate	**0.3 (USD)**
Cost of obtaining a building permit	**0.6 (USD)**
Implementation of site-specific ESMPs and other site-specific plans	
Environmental and social staff (for different levels)	
Travel and accommodation budget for environmental and social staff visits on site	
External monitoring or surveillance consultant	
TOTAL	

5. Stakeholder engagement

5.1. Stakeholder Engagement and Consultation Processes

Stakeholder engagement is an integral part of project development and implementation and should begin as early in project development as possible and continue through the project's full life cycle. The purpose of stakeholder consultation during the ESMF process is to ensure that the views, interests and concerns of project stakeholders are considered in the following decisions:

- Decisions taken during the planning, design and implementation of the project;
- ESMF decisions regarding planning of the ESMF scope, assessment of the potential impacts and identification of appropriate management measures;
- Decisions by development financiers on the funding of the project and corresponding loan conditions.

An overview of the ESMF stakeholder consultation process for the Strengthening Moldova's Disaster Risk Management and Climate Resilience Project is presented in the table below:

Steps	***Objectives***	***Stakeholders involved***	***Activities***	***Main documentsto be produced***
Scoping Corresponds with the scoping phase of the ESMF	Identify regulatory authorities and other stakeholders who should be involved in the ESMF process. Notify stakeholders of the ESMF process and provide them with the necessary procedural and substantive information to facilitate their input to the process. Engage stakeholders by listening to them and recording issues raised (concerns, comments, and questions).	All	Stakeholder identification and analysis (desktop social scan); Planning stakeholder consultation and disclosure; Notification of stakeholders about the ESMF process and the proposed project; Engaging with stakeholders.	List of potential stakeholders; Stakeholder Engagement Plan; Background information document for stakeholders; Records of meetings; Updated stakeholder database and issues record.
Disclosure and Consultations ESMF stakeholders	Disclose ESMF	Government authorities, Ministries, LPAs, public authorities, NGOs, and other stakeholders as required.	Meetings with stakeholders, as per the procedure described in Stakeholder Engagement Plan	Records of meetings. Specific information sharing documents.
Feedback response on the results of the ESMF	Provide relevant stakeholders with an update on progress in project planning, expected impacts, and proposed mitigation. Acknowledge issues raised by stakeholders and inform them of how the project proponent plans to address those issues. Engage stakeholders by listening to them and recording any	All stakeholders that have shown an interest in theproject	Notification of stakeholders; Engagement of stakeholders; Delivering public meeting information;	Advertisements; A record of thehearing(s) and meetings;

	additional issues raised.			

5.2. Stakeholder Engagement Plan

Stakeholder Engagement Plan (SEP) has been prepared as a standalone document and will be disclosed for public review as part of the Project's environmental and social risk management process and can be found at www.mai.gov.md. SEP outlines how stakeholders will be engaged throughout the course of the project and which methods will be used as part of the process. It outlines the responsibilities of the Project and contractors in the implementation of stakeholder engagement activities. Details on ESMF stakeholder consultation are also presented in the SEP. The SEP is considered a live document that will be updated throughout the ESMF process and will continue to evolve as the project proceeds through the construction, operation implementation phases.

Stakeholder engagement activities will be targeted at project affected persons, disadvantaged and vulnerable groups as well as at other interested parties (MIA, SHS, and government agencies, NGOs, business and media, general public, among others). The SEP outlines special considerations that will be given to ensure outreach to and engagement of all Project stakeholders including disadvantaged and vulnerable groups. SEP activities include establishment and management of a project- wide grievance redress mechanism, public meetings, trainings and workshops, media and social media communication, disclosure of written materials, involvement of project liaison officers, as well as a survey among affected persons to gauge satisfaction with the quality of citizen engagement and share additional concerns.

The chapters of this ESMF discusses GRM, public consultations and disclosure further and refers to SEP for more details on methodologies to apply.

6. Grievance Redress Mechanism

Transparency and accountability are core elements of the Strengthening Moldova's Disaster Risk Management Project and Climate Resilience Project. For this purpose, the project will include a Grievance Redress Mechanism (GRM) that is already used in a different project funded by the World Bank. The goal of the GRM is to strengthen accountability to beneficiaries and to provide channels for project stakeholders to provide feedback and/or express grievances related to project supported activities. The GRM is a mechanism that allows for the identification and resolution of issues affecting the project. By increasing transparency and accountability, the GRM aims to reduce the risk of the project inadvertently affecting citizens/beneficiaries and serves as important feedback and learning mechanism that can help improve project impact.

The mechanism focuses not only on receiving and recording complaints but also on resolving them. While feedback should be handled at the level closest to the complaint, all complaints should be registered and follow the basic procedures set out in this chapter. SEP applicable to the Project contains more detailed information about GRM.

Definition of GRM

For the purposes of SEP, a Grievance Redress Mechanism is a process for receiving, evaluating, and addressing project-related complaints from citizens and affected communities at the level of the project.

The terms 'grievance 'and 'complaint' are used interchangeably.

GRM scope and use

SCOPE: Project Grievance Redress Mechanism will be available for project stakeholders and other interested parties to submit questions, comments, suggestions and/or complaints, or provide any form of feedback on all project-funded activities.

GRM's users: Project beneficiaries, project workers, project affected people (i.e. those who will be and/orare likely to be directly or indirectly affected, positively or negatively, by the project), as well as the broader interested citizens can use the GRM for the above purposes (see Scope).

GRM's management: The GRM for the Strengthening Moldova's Disaster Risk Management Project is managed by the OEAPM.

Submission of complaints: Complaints can be expressed at any time throughout project implementation.

Procedures

Channels to make complaints

Project establishes the following channels through which citizens/beneficiaries/Project Affected Persons (PAPs) can make complaints regarding project-funded activities:

a. By Email: ogpae@ogpae.gov.md
b. Internet: https://ogpae.gov.md/en/contacte/
c. In writing: str. Mitropolitul Banulescu Bodoni 57/1, oficiul 304-307, Chisinau, Moldova
d. By phone: +373 22 232 963
e. By fax: +373 22 238 248

The project shall ensure flexibility in the channels available for complaints, as well as ensure accessibilityto the contact information for individuals who make complaints.

Confidentiality and conflict of interest

Complaints may be made anonymously, and confidentiality will be ensured in all instances, including when the person making the complaint is known. For this reason, multiple channels to submit complaints will be stablished and conflicts of interest will be avoided. Thus, at the Ministries premises will be established boxes for submitting anonymous complainants; at each LPAs involved to the Project will be established informational board with project information as well as channels for submitting complainants including anonymous ones.

Receipt and recording of complaints

Any comments or concerns can be brought to the attention of the PIU verbally or in writing or by filling in a grievance form (the grievance form is attached to the Annex 1 of the document). The grievance form and information on the procedure (including contact persons) will be made available on the PIU website, during consultations and other engagement activities. Information banners will also be placed on designated noticeboards at each construction site. All grievances, including anonymous submissions, will be recorded in the grievance log. The grievance is first registered by the PIU in the grievance log, allocated a reference number and appropriately tracked with recorded actions. The documentation on grievances will include:

- Name and contact details of the complainant;
- Date and nature of the complaint;
- Name of the PIU specialist / staff charged with addressing the complaint;
- Follow up actions taken;
- Proposed resolution of the complaint; and
- How and when relevant Project decisions were communicated to the complainants. Complaints can be submitted in written and verbal form, by email (PIU email) or by phone call (PIU PHONE)

Grievance Resolution

The assigned PIU specialist will reply within 5 days for complaints from external stakeholders, and within 1 day if from a governmental department, stating their acknowledgment of the grievance and proposed resolution. If grievances are submitted anonymously, the PIU will develop an Informative Note stating that the response cannot be returned directly to the complainant. Two stages of grievance resolution will then be carried out:

- Stage I: The grievances will be recorded, examined by the PIU specialist, referred to the appropriate implementing agency for a proposed response and solved no later than 3 weeks (15 working days) from their receipt.
- Stage II: If the response is not satisfactory, then complainants and feedback providers have the option to contact the PIU directly to follow up on the issue. In these cases, a Project Grievance Committee, to be established by the PIU, will meet and seek to resolve complaints. The specific composition of the Project Grievance Committee may vary depending on the nature and details of a grievance, and will include the contact person from the associated implementing agency and other technical specialists as needed to provide a qualified response.

A grievance will be "closed" when a resolution satisfactory to all parties has been reached. In certain situations, however, it is possible to "close" a grievance even if the complainant is not satisfied with the outcome. This could be the case, for example, if the complainant is unable to substantiate a grievance. In such situations, the efforts to investigate the complaint and to arrive at a conclusion will be well documented and the complainant will be advised of the situation. If the complainant is not satisfied by the response or the proposed solution, he/she may appeal to court. Information about the Grievance Mechanism, including its functions, procedures, contact persons and rules of making complaints, will be shared with stakeholders during the different engagement methods shown in this document.

Roles and Responsibilities

The PIU has overall responsibility for project implementation and safeguard compliance. For ensuring all project related activities are carried out in accordance with Moldovan legislation as well as International Financial Institution's policy. Contact details can be found at: https://ogpae.gov.md/en/contacte/

World Bank Grievance Redress System

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. 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/en/projects-operations/products-and-services/grievance-redress- service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Reporting in half-yearly and annual progress reports submitted to the World Bank

In the semi-annual project implementation reports submitted to the World Bank, OEAPM shall include a GRM section, which provides updated information on the following:

- Status of establishment of the GRM (procedures, staffing, awareness building, etc.);
- Quantitative data on the number of complaints received, the number that were relevant, and the number resolved;
- Qualitative data on the type of complaints and answers provided, issues that are unresolved;

- Time taken to resolve complaints;
- Number of grievances resolved at the lowest level, raised to higher levels;
- Any particular issues faced with the procedures/staffing or use;
- Factors that may be affecting the use of the GRM/beneficiary feedback system;
- Any corrective measures adopted.

In the semi-annual project implementation reports submitted to the World Bank, OEAPM shall include a stakeholder engagement section, which provides updated information on the following:

- Report on issues and topics identified during consultations and responses provided: provide a bulleted summary of substantive issues raised by proponents and stakeholders at each event. This should be understandable to laypersons and demonstrate that a meaningful two-way feedback response process has occurred describing the results of the engagement (ie. what issues, ideas, concerns were raised by whom and how the project responds). Describe any communications resulting from use of social and conventional media and at consultation events.

- Describe engagement with the range of stakeholders identified in the SEP including beneficiaries, vulnerable groups: demonstrating that stakeholders who are benefiting or will be affected are included in discussions, their concerns identified and addressed.

  The report should address the contents of the engagement strategy and action plans described in the SEP to demonstrate progress on SEP implementation indicating deadlines, delays and revised timeframes

7. Public Consultations and disclosure

Disclosure of relevant project information helps stakeholders including those who may be negatively affected by the project to understand the Project environmental and social risks, impacts, opportunities, and mitigation measures. Target of the information disclosure and communication is:

- to provide a schedule and information on activities together with the mechanisms for gathering the feedback.

- to inform key stakeholders of environmental and social risks and impacts associated with project activities.

- to improve the knowledge about the project activities as well as associated risks and risk mitigation measures.

- to ensure the best practices in terms of environmental protection, health, and safety for project workers; and

- to make available to the public a grievance procedure, in order, to collect the feedback and to undertake corrective actions in cases that may lead to unnecessary risks or a negative opinion about project implementation.

The environmental legislation of Moldova and international agreements regulating public consultationand coordination, as well as information availability to public are listed below:

- The Law on the transparency on decision making process (2007) ensures citizen's right to obtain information concerning the activities that may cause environmental and social impacts;

- UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus, 1998; the Republic of Moldova has joined tothe Convention in 1998).

The present draft ESMF will be publicly disclosed and the consultation meeting with stakeholders will be carried out on March 22-23, 2025. Participants from the beneficiary state agencies, local authorities, organizations involved in environmental sector and other stakeholders will be invited to attend the public consultation meeting. The comments and suggestions made during the consultation meeting will be taken into account in the final version of the ESMF. Minutes of stakeholder consultation meeting will be developed (including questions raised and responses provided as well as protocols, photo evidence, and feedback) and included in the final version of ESMF. In further stages of the Project implementation, the site-specific ESMPs will be publicly disclosed, and beneficiary will be consulted on the environmental and social implications of the individual project activities prior to tendering of works.

7.1 Summary of Stakeholder Engagement During Project Preparation

During the preparatory phase of the project, a series of technical and official meetings were conducted, fostering collaboration between key stakeholders involved in the Strengthening Moldova's Disaster Risk Management and Climate Resilience Project. These engagements took place at both the Ministry of Internal Affairs and the World Bank Office in Chisinau. The focus of these meetings was on enhancing national capacities to respond and manage the effects of emergency and exceptional situations, aligning with the Republic of Moldova's status as a candidate country for EU membership. Refer to Annex Table 1 for details.

Key Project Activities Discussed:

1) Purchase of Special Vehicles and Intervention Equipment: Technical discussions and instructions regarding the acquisition of specialized vehicles and intervention equipment essential for effective emergency response and effective movement;
2) Implementation of the Public Early Warning System: Detailed deliberations on the design, implementation, and functionality of the system for timely public alerts and warnings;
3) Improving Disaster/Emergency Prevention and Preparedness Capabilities: Strategic planning and discussions on initiatives aimed at enhancing disaster and emergency prevention and preparedness capabilities at the national level.
4) Elaboration of the National Methodology for Seismic Risk Assessment for Buildings: In-depth discussions on the development of a comprehensive national methodology for assessing seismic risks in buildings.
5) Investments to Reduce Seismic Risk in Chisinau Municipality: Detailed project discussions and assessments focused on investments aimed at reducing seismic risks, particularly in the urban area of Chisinau.

A dedicated World Bank team conducted a preparatory mission from November 13 to 17, 2023, with specific objectives:

- Reviewing technical details of key project components.
- Assessing the state of readiness for implementation.
- Finalizing implementation arrangements.
- Agreeing on next steps, including additional preparatory work.

The meetings provided a platform for robust discussions, ensuring alignment on project components, technical details, and implementation arrangements. Stakeholder input was actively sought and considered, contributing to the refinement of the project's technical aspects and readiness for implementation.

The environmental and social reports and plans were disclosed through a comprehensive strategy to ensure broad stakeholder engagement and transparency. The disclosure methods included public forums and consultation meetings, online platforms, and distribution of hard copies at government offices and community centers. These approaches aimed to make the information widely accessible to various stakeholders.

Feedback received during consultations was centered around the following key points:

- Stakeholders emphasized the importance of clear communication and accessibility of project information, particularly for vulnerable groups such as the elderly and persons with disabilities;
- Concerns were raised regarding the potential environmental impacts of the project, prompting a detailed discussion on measures to mitigate and manage these impacts effectively;
- Stakeholders expressed a strong interest in the project's long-term strategic implications for disaster risk management and climate resilience in Moldova, emphasizing the need for sustained support beyond immediate interventions;
- The alignment of the project with Moldova's EU pre-accession process was highlighted, with stakeholders emphasizing the significance of preparing activities that could be financed through potential EU pre-accession funds or other development partner support;
- Stakeholders provided insights into the specific needs and challenges faced by vulnerable groups, including refugees and foreigners, urging the project team to incorporate inclusive measures;
- This feedback was actively considered and taken into account by the project implementation team during the development and refinement of the Strengthening Moldova's Disaster Risk Management and Climate Resilience Project.

Feedback received during consultations was taken into account by the key counterparts during the development and refinement of the Strengthening Moldova's Disaster Risk Management and Climate Resilience Project.

Annex 1. List of municipal infrastructure targeted in the project

1.1. Demolition/dismantling

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
1.	Tower of the Cârpesti anemometric station	s. Cracks Cantemir district	Metal tower on concrete foundation in a damaged condition.	Dismantling three groups of bolts. Dismantling the pillar by sections. Dismantling 10 concrete foundations. Loading and transportation of metal constructions.
2.	Water tower	s. Bălţata, Criuleni district	Water metal tower on the foundation in a damaged condition	Dismantling the water tower. Dismantling the concrete foundation. Loading and transportation of metal constructions.
3.	Leuseni hydrometric station	s Leuseni Hancesti District	Metal and concrete constructions on small areas (staircase, pillars, mira)	Dismantling the post, waste disposal and landscaping.
4.	Cantemir hydrometric station	or. Cantemir	Metal and concrete constructions on small areas (staircase, pillars)	Dismantling the post, waste disposal and landscaping.

Construction

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
1.	Equipment Calibration Center Building and Aquatic and	Mun. Chişinău, Str. Grenoble 134	Land, foundation, building, communications and access road	- Story of the existing building; - Installation of photovoltaic equipment on the roof; - Connection to existing engineering networks;

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
	Gamma Radiation Monitoring Laboratory			- Endowment with equipment; - Security systems (fireproof, security, video); - Construction and installation of a semi-closed water and sewerage system; - Drainage of existing buildings; -Planning.
2.	Areological station on the territory of SHS	Mun. Chişinău, Str. Grenoble 134	Terrain, communications and access road	- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Landscaping and security elements. - Photovoltaic panels; - Special equipment; - Security systems (fire, guard, video).
3.	Building and infrastructure of Comrat Regional Center headquarters	mun. Comrat	Land, partly access road	- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Engineering networks, access road; - Security systems (fireproof, security, video); - Photovoltaic panels; - Landscaping and security elements.
4.	Building and infrastructure of Bravicea Meteorological Station	s. Bravicea	Land, partly access road	- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Engineering networks, access road; - Security systems (fireproof, security, video); - Photovoltaic panels; - Landscaping and security elements.
5.	Building and infrastructure of Prut hydrological station (Ungheni)	Mun. Hungarians		- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars);

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
				- Engineering networks, access road; - Photovoltaic panels; - Security systems (fireproof, security, video); -Planning.
6.	Building and infrastructure of the Dniester hydrological station (Ustia)	s. Ustia		- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Engineering networks, access road; - Photovoltaic panels; - Security systems (fireproof, security, video); -Planning.
7.	Station building and infrastructure Hancesti Meteorological, located on the territory of the regional unit of the Antihail Service	Mun. Hancesti, Hancesti Special Unit	Land, communications, access road	- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Connection to existing engineering networks. - Photovoltaic panels; - Security systems (fireproof, security, video); -Planning.
8.	Building and infrastructure of Cainari meteorological station			- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Engineering networks, access road; - Photovoltaic panels; - Security systems (fireproof, security, video); -Planning.
9.	Building and infrastructure of Edineti Meteorological Station (Cupcini)			- Prefabricated modular constructions; - Corrugated sheet warehouse; - Foundation (pillars); - Engineering networks, access road; - Photovoltaic panels;

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
				- Security systems (fireproof, security, video); -Planning.
10.	PH Ungheni, Prut River	48°13'36.64" 26°50'3.93"	There is access road, staircase, level pillars.	- Site arrangement (clearing the land of vegetation, shrubs), installation of stairs, pillars / installation of shelter. Security systems. - Mounting the prefabricated module (shelter). - Cadastral works. - Site arrangement (clearing the land of vegetation, shrubs). - Construction and installation of stairs, pillars / level, footbridge, installation of shelter. - Arrangement of the riverbed on the hydrometric section (concreting/tiling). - Cadastral works. - Security systems
11.	PH Leuseni, Prut River	46°47'33.49" 28° 9'18.04"		
12.	Ph Naslavcea 2, r. Naslavcea	48°27'48.93" 27°34'56.65"	Infrastructure for new posts does not exist	
13.	PH Cușmirca, r. Cușmirca	47,923669 28,753446		
14.	PH Dubăsari (Baraj)	47°16'35.30" 29° 7'1.64"	Infrastructure for new posts does not exist	- Site arrangement (clearing the land of vegetation, shrubs). - Construction and installation of stairs, pillars, footbridge, installation of shelter. - Arrangement of the riverbed on the hydrometric section (concreting/tiling). - Cadastral works. - Security systems
15.	PH Tătărăşti r. Bâc	47° 10' 24" 28° 31' 43"		
16.	PH Costești, R. Botna	46,693110 29,047810		
17.	PH Soloneț r. Soloneț	47,813500 28,402190		
18.	PH Ciulucul Mare r. Ciulucul Mare	47,526230 28,504650		
19.	PH Cişmea r. Cogâlnic (afl. r.Raut)	47°27'5.97" 28°43'34.55"		
20.	PH Cula r. Cula	47,397370 28,639490		
21.	PH Pociumbăuţi, r. Ciuhur	47,953810		

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
		27,268670		
22.	PH Camenca, r. Camenca	47°45'24.63" 27°19'34.10"		
23.	PH Căldărușa, r. Căldărușa	47,735160 27,445010		
24.	PH Șovățul Mic, r. Șovățul Mic	47,565845 27,560079		
25.	PH Șovățul Mare, rayon Șovățul Mare	47,522780 27,567280		
26.	PH Gârla Mare, dir. Gârla Mare	47,417037 27,719764		
27.	P.S., r.	47,303495 27,755929		
28.	PH Nârnova, r. Nârnova	46°55'11.80" 28°11'26.81"		
29.	PH Hancesti r Cocîlnic	46° 49' 56" 28° 35' 47"		
30.	PH Sarata, r. Salty	46°26'54.99" 28°20'24.60"		
31.	PH Tigheci, r. Tigheci	46,282525 28,236994		
32.	PH Ceadâr-Lunga, r. Lunga	46° 3'21.91" 28°49'46.82"		
33.	PH Brando, r. Cahul,	45°49'26.92" 28°19'26.31"		
34.	PH Congaz, r. Ialpug	46° 6'18.17" 28°36'27.28"		
35.	PH Taraclia, r. Lunga	45,888951 28,632193		

N/o	Location name	Address. Coordinates Phytic-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
36.	PH Taraclia, r. House of Taracliei	45° 53' 22" 28° 38' 20"		
37.	PH Ciumai, r. Salcia Mare	45°47'32.05" 28°34'9.77"		

1.2. Refurbishment/fitting out (energy efficiency)

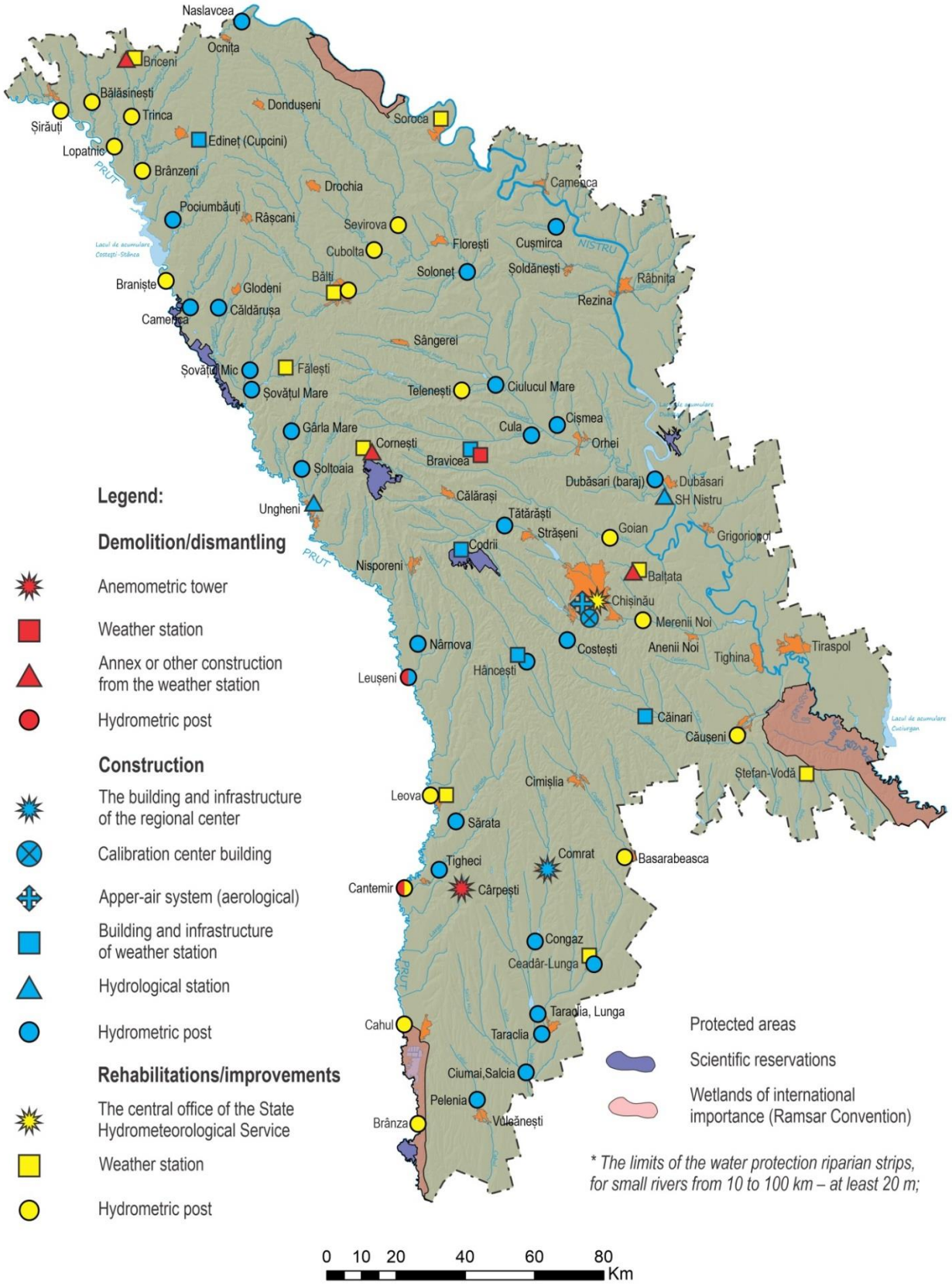
N/o	Location name	Address. Coordinates Phytico-geography	Existing infrastructure (communications, access routes, constructions or other facilities) and the area of the building / objective and the area of land subject to construction / arrangement works, rehabilitation	List of planned works (a general description)
1.	Residence of the State Hydrometeorological Service	Mun. Chisinau. Str. Grenoble, 134	Land, construction, communications, access road	- Thermal insulation of buildings; - Rehabilitation of the ventilation system (heating, cooling); - Security and access control systems (fire, video, etc.); - Photovoltaic panels; -Planning.
2.	Briceni meteorological station	or. Briceni, Str. Olympic 9th	Land, construction, communications, access road	- Thermal insulation of the building; - Photovoltaic panels; - Repair of service offices with the use of environmentally friendly materials; - Security and access control systems.
3.	Soroca meteorological station	r-l. Soroca. S. Cosăuţi mischief	Land, construction, communications, access road	- Photovoltaic panels; - Providing the station with water / well; - Security and access control systems.
4.	Balti meteorological station	Mun. Balti s. Corlateni	Land, construction, communications, access road	- Photovoltaic panels; - Security and access control systems.
5.	Falesti meteorological station	gold. Fălești Str. Victoria 8	Land, construction, communications, access road	- Thermal insulation of the building; - Installation of photovoltaic panels; - Heating system; - Repair of service offices with the use of environmentally friendly materials; - Security and access control systems.
6.	Cornești meteorological station	gold. Cornești Str. Hajdeu, 3	Land, construction, communications, access road	- Thermal insulation of the building; - Installation of photovoltaic panels; - Repair of service offices with the use of environmentally friendly materials; - Security and access control systems.

7.	Stefan Vodă meteorological station	Or. Stefan Voda Str. Industrial 5/1	Land, construction, communications, access road	- Thermal insulation of the building; - Installation of photovoltaic panels; - Repair of service offices with the use of environmentally friendly materials; - Providing water station / fountain; - Security and access control systems.
8.	Leova meteorological station ,	Or. Lyova mischief	Land, construction, access road	- Installation of photovoltaic panels; - Providing water station / fountain; - Security and access control systems.
9.	Ceadâr-Lunga Meteorological Station	Will. Ceadâr-lunga Str. Molodiojnaea	Land, construction, communications, access road	- Installation of photovoltaic panels; - Security and access control systems.
10.	Cahul meteorological station ...	Mun. Cahul str. A. Lupan 68	Land, construction, communications, access road	- Thermal insulation of the building; - Installation of photovoltaic panels; - Repair of service offices with the use of environmentally friendly materials; - Security and access control systems.
11.	PH Şirăuţi, r. Prut	48°13'36.64" 26°50'3.93"	Existing partially functional post, access road The existing access road, concrete shelter and access staircase.	Rehabilitation of stairs, pillars / level mira. Removal of sediment from the fasting area Landscaping / post.
12.	PH Branişte, r. Prut	47°47'51.63" 27°14'29.62"		
13.	PH Leova r. Prut	46°29'35.68" 28°13'51.44"		
14.	PH Cantemir, r. Prut	46°15'37.08" 28° 7'43.38"	Existing partially functional post, access road Access staircase to the river and hydrometric mira	Dismantling the ladder and mounting it downstream. Installation of level mira. Landscaping / post.
15.	PH Cahul, r. Prut	45°55'1.55" 28° 7'19.57"	Existing partially functional post, access road Access road	Staircase construction, pillar rehabilitation/level mira. Landscaping / post.
16.	PH Cheese, r. Prut	45°39'55.08" 28° 9'59.70"	Existing partially functional post, access road The existence of access road, concrete shelter and access staircase.	Rehabilitation of stairs, pillars / level mira. Rehabilitation of the cottage. Landscaping / post.
17.	PH Lopatnic, r. Lopatnic	48° 8'11.25" 27° 2'36.05"	Existing partially functional post, access road	Construction of stairs and footbridge. Rehabilitation of pillars/level mira. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
18.	PH Balasineşti, r. Drilling	48°14'54.82"	Existing partially functional post, access road	

		26°57'20.30"	There is concrete shelter, staircase, level piers, hydrometric suspension bridge.	Rehabilitation of stairs, pillars / level mira, house, footbridge, shelter rehabilitation. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
19.	PH Trinca, r. Draghişte	48°12'43.53" 27° 6'36.83"		
20.	PH Brânzeni, r. Rac	48° 4'32.12" 27° 9'7.99"	Existing partially functional post, access road	Construction of stairs, pillars / level mira, footbridge. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping.
21.	PH Basarabeasca, r. Cogâlnic	46°19'55.18" 28°58'38.03"		
22.	PH Balti, Raut River	47°46'11.60" 27°56'39.00"	Existing partially functional post, access road	Construction of stairs, pillars / level mira, footbridge. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping.
23.	PH Sevirova, r. Căinari	47°55'58.72" 28° 8'25.41"	Existing partially functional post, access road There is prefabricated shelter, staircase, level pillars, suspension bridge.	Rehabilitation of stairs, pillars / level mira. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
24.	PH Cubolta, r. Cubolta	47°52'4.49" 28° 2'28.98"		Construction/rehabilitation of stairs, footbridge, level mira. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
25.	PH Teleneşti, rayon Ciulucul Mic	47°30'47.85" 28°22'28.58"	Existing partially functional post, access road There is concrete shelter, staircase, level pillars, suspension bridge.	Rehabilitation of stairs, pillars / level mira. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
26.	PH Goian, r. Ichel	47° 8'7.84" 28°54'44.35"	Existing partially functional post, access road There is staircase, level pillars, suspension bridge.	
27.	P.H. Merenii Noi, R. Bâc	46°55'23.65" 29° 2'48.18"	Existing partially functional post, access road	Construction of the footbridge and staircase to the river. Installation of mira. Arrangement of the riverbed on the hydrometric section (concreting/tiling). Landscaping / post.
28.	PH Căușeni, r. Botna	46°38'50.67"		Landscaping (clearing the land of vegetation, shrubs),

		29°24'20.19"		Rehabilitation of stairs, pillars / level mira, footbridge. Landscaping / post.

Map of the building infrastructure targeted in the project



Annex 2. Environmental and social risks and mitigation measures

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
Component 1. Investment and institutional strengthening for emergency preparedness and response ($30m)			
Subcomponent 1.1 Strengthening crisis response and preparedness *(USD 25 million)*	*Activity 1* The Public Warning System, which will support the design, purchase and implementation of a mobile public warning system with national coverage, which will enable immediate dissemination of emergency and disaster warnings to residents, saving lives, reducing injuries and considerably reducing material losses	***Environmental risks:*** Dust, noise and vibration Waste ***Social Risks*:** 1) Health and safety risks at work due to language and cultural barriers for workers not from Moldova 2) Risk of behaviors 3) Worsening of working conditions for various reasons **Social risks related to inadequate coverage by the Project of vulnerable and disadvantaged groups:**	a) Compliance with the general rules and practices existing in the country. b) Normal working hours shall be observed. c) Occasional measures will be applied for the period of certain actions. d) Compliance with the legislation, general rules and practices existing in the country; e) Monitoring from the beneficiary will be carried out. a) Providing translation of occupational health and safety requirements for entrepreneurs employing foreign workers. b) Use of personal protective equipment and compliance with national standards and World Bank health and safety standards. c) Provide a grievance mechanism for workers to express their workplace concerns freely. a) All workers will sign and be informed of the Code of Conduct. b) A functioning petitions mechanism will be established to collect complaints related to social tensions. a) In case of overcrowded or inappropriate locations, relocation to a different, alternative location will be ensured; b) Work shifts may be organised so as to ensure adequate working conditions for all employees.

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
		4) Lack of access of a significant share of vulnerable populations to disaster information and Public Warning System necessary to make risk-informed decisions and take appropriate protective actions.	a) The detailed study for the acquisition of the public broadcasting system will assess the capability of the proposed solutions to effectively reach vulnerable groups; b) The GIES will carry out a nation-wide awareness campaign about the system functionalities ensure that warning messages are communicated through various platforms (digital and non-digital), including formal and informal networks, and through a variety of media to ensure consistency and inclusivity; c) The GIES will conduct awareness activities and drills targetted to the rural communities where the most vulnerable and poorest reside; d) Implement Stakeholder Engagement Plan (SEP) prepared for the Project. SEP was prepared with identification of vulnerable groups and outlining special means of communication with them during Project life cycle.
		5) Limited knowledge related to understanding of communication needs of vulnerable populations.	a) The detailed study for the acquisition of the public broadcasting system will assess the capability of the proposed solutions to effectively reach vulnerable groups; b) The Project will engage with NGOs, CSOs, and social service organizations focusing on various issues related to vulnerable and disadvantaged groups during the project's preparation and implementation stages, ensuring their participation in project design and consultation processes. The detailed approach to this is outlined in the SEP.
		6) Lack of ownership of mobile devices and limited access to the Internet of elderly, rural population and other disadvantaged groups, preventing them from using mobile phone applications	a) Eliminate access barriers to mobile phone applications designed for early warning dissemination. b) Establish training, advocacy, and awareness-raising campaigns targeting vulnerable groups with limited literacy and digital skills.

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
		designed for early warning dissemination. 7) Low capacity of government officials, local prevention officers on inclusive, accessible communication policies, practices, and techniques.	a) Train government officials and local prevention officers on how to enhance the efficacy of warnings and targeting of audiences receiving, understanding, and acting on warning messages.
	Activity 2 The purchase of emergency response vehicles and equipment necessary to modernize and increase response capacity in case of fires, floods, storms, extreme temperatures and earthquakes, which will reduce critical response time, improve the efficiency of interventions.	***Environmental risks:*** 1) Dust, noise and vibration ***Social Risk*:** 1) Health and safety risks at work due to language and cultural barriers for workers from abroad. 2) Risk of behaviors	a) Compliance with the general rules and practices existing in the country. b) The local public administration authorities, located on the routes of redeployment of the purchased equipment, will be informed. c) Normal working hours shall be observed. d) Occasional technical solutions and measures will be applied, only for the period of certain actions in the project and in certain locations. e) Alternatively, vehicle speed reduction may be applied a) Providing translation of national regulations for foreign workers. b) Use of personal protective equipment. c) Compliance with national and World Bank health and safety standards. c) Provide a grievance mechanism for workers to express their workplace concerns freely. a) All workers will sign and be informed of the Code of Conduct.

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
			b) Collection of behavioral risk complaints
		3)Worsening of working conditions for various reasons	a) In case of overcrowded or inappropriate locations, relocation to a different, alternative location will be ensured. b) Work shifts may be organised so as to ensure adequate working conditions for all employees.
		4) Emergency response vehicles and equipment may not comply with internationally recognized accessibility standards and WB universal access standards.	c) Universal access requirements to the emergency response vehicles and equipment will be included to the bidden documents' specification.
	Activity 3 Community emergency preparedness by purchasing emergency equipment for local prevention officers that will improve IT, logistics, communications and safety.	***Environmental risks:*** 1) Dust, noise and vibration	a) Compliance with national law. b) Informing local authorities about the transportation of purchased equipment. c) Normal working hours shall be observed. d) Occasional technical solutions and measures will be applied, only for the period of certain actions in the project and in certain locations. e) Reducing vehicle speed

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
		***Social Risk*:** 1) Health and safety risks at work	a) Use of protective equipment and compliance with national standards. b) Provide a grievance mechanism for workers to express their workplace concerns freely.
		2) Risk of behaviors	a) All workers will sign and be informed of the Code of Conduct. b) A functioning petitions mechanism will be established to collect complaints related to social tensions and conflict situation between workers.
		3) Worsening of working conditions for various reasons	a) In case of overpopulated or not suitable locations, relocation to a different, alternative location will be ensured. b) Work shifts or a change in the working program (e.g. switch/change of working hours) may be organized so as to ensure adequate working conditions for all employees according to national legislation.
		4) Emergency equipment may not comply with internationally recognized accessibility standards and WB universal access standards.	a) Universal access requirements to the emergency response vehicles and equipment will be included to the bidden documents' specification.
		5) local prevention officers on inclusive, accessible communication policies, practices, and techniques.	a) Train local prevention officers on how to enhance the efficacy of warnings and targeting of audiences receiving, understanding, and acting on warning messages.

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
Subcomponent 1.2 Improvement of hydrometeorological services (USD 6 million) It will support SHS to implement the National Climate Services Framework and associated action plan, previously developed with the support of the WB and the Global Facility for Disaster Reduction and Recovery.	*Activity 1. Partial improvement of the observation infrastructure*, by installing the areological system at Chisinau Station (0.6), wind direction and speed observation systems (0.2) and lightning detection (0.2), with sensors in the cardinal areas of the country. Manufacture and installation of prefabricated modular buildings and hydrotechnical constructions, including seismic upgrading and realization of the energy efficiency concept of existing stations (1,5). *(USD 2.5 million).*	***Environmental risks:*** 1) Air quality, reduction of greenhouse gas emissions.	a) Debris from demolition should be kept in a controlled area and sprayed with water to reduce dust from residue; b) During drilling/destruction of pneumatic walls, dust must be suppressed by continuous spraying with water and/or by installing a dust screen on site; c) The environment (sidewalks, roads) will be kept free of debris to minimize dust; d) Outdoor burning of waste materials will not be allowed on site; e) It will not allow excessive idle movement of construction vehicles on the construction site; f) Safe use and management of hazardous substances and materials.
		2) Noise generated by construction machinery.	a) Technical rules on noise threshold and noise level limitation; b) Special measures and facilities for sound insulation and protection against sources of noise and vibration; c) Construction noise will be limited during the restricted time agreed in the building permit; (b) The location of generators, air compressors and other electromechanical equipment shall be located as far away from residential areas as possible.
		3) Water quality	a) Appropriate erosion and sediment control measures must be taken on site to prevent the spread of sediment off-site and excessive disturbance of nearby watercourses and rivers; b) In order to prevent organic waste from leaking into groundwater, sanitary facilities will be built on septic tanks for use during and after construction works; c) Before discharge into receiving waters, effluents from sanitary facilities must be treated to meet minimum quality criteria laid down in national regulations on effluent quality and waste water treatment; d) Monitoring of new sanitary systems for wastewater will be carried out (before/after); e) Construction vehicles and machinery shall only be washed in specially designated areas so that the runoff does not pollute natural surface water bodies. a) Waste collection and disposal platforms and sites shall be identified for all types of major waste expected from construction and demolition activities;

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
		4) Waste management	(b) Construction and demolition waste shall be separated from organic, liquid and chemical waste through on-site sorting and storage in appropriate containers; (c) Construction waste shall be properly collected and disposed of by authorized collectors; (d) Records of waste disposal, according to the construction project; (e) Whenever possible, the contractor shall reuse and recycle suitable and viable materials (except asbestos).
		5) Soil erosion and slope stability	(a) Adequate planning to avoid periods of heavy rainfall, as far as possible; (b) Contouring and minimizing length and slope; (c) Mulching (grassy substrate) to stabilize exposed areas; (d) Prompt restoration of vegetation in the area; (e) Design of drains and trenches for post-construction water flows
		Social Risk: 1) Disrupting pedestrian traffic and providing access to areas where modernization, construction or infrastructure works are carried out.	a) Organize consultations with landowners, based on the provisions set out in the stakeholder engagement plan. b) Location specific information/complaint-handling system, based on leaflets/information boards, etc. c) Planning traffic on sidewalks and placing appropriate traffic signs. (Only for buildings located next to public land).
		2) Traffic regulation, due to the need to evacuate waste or to ensure access to the site with heavy transport and construction equipment.	a) Implementation of an appropriate signaling system to avoid traffic flow. b) Informing local and police authorities so that they can ensure that the problem is remedied quickly, should such a problem occur.
		3) Increased level of discomfort of neighbors due to noise pollution and dust.	a) Covering the building with protective nets for construction. b) Drawing up a special schedule of works, which they agree that respects the rules regarding "quiet hours".

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
		4) Temporary interruptions in the supply of heat, electricity or water, due to the executed works.	a) Conducting public consultations/providing information to all potentially affected persons/groups. b) Prior communication of the schedule of interruptions. c) Compensation of economic damage due to these works, by the contractor.
		5) Accommodation on site in improvised dwellings of certain categories of workers (e.g. security).	a) Insurance, for persons temporarily living on the premises, appropriate conditions - sanitary, rest areas, food preparation and dining area. b) Premises must meet minimum occupational safety and health standards.
		6) Health and safety risks at work due to language and cultural barriers for workers from abroad.	a) Ensuring the translation of occupational health and safety requirements on site for foreign workers. b) Use of personal protective equipment and compliance with national standards and World Bank health and safety standards. c) Provide a grievance mechanism for workers to express their workplace concerns freely.
		7) Social tensions, supported by risk of behaviors.	a) Awareness of the construction contractor on issues related to avoiding social tensions and risk of behavior will be ensured; b) Awareness-raising meetings will be organized with affected communities. c) All workers will sign and be informed of the Code of Conduct. d) A functioning petitions mechanism will be put in place to collect complaints;
		8) Water-related works can damage buildings located near the construction site, which can cause economic losses.	Where the owner suffers economic damage, he should be adequately compensated for all damage and losses for which the restoration/repair work is the responsibility of the contractor.
		9) Worsening working conditions due to relocation to a smaller building	a) In case of overcrowded or inappropriate locations, relocation to a different, alternative location will be ensured; b) Work shifts may also be organized, where possible, so as to ensure adequate working conditions for all employees.

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
	Activity 2. Sector investments (SHS) in modernizing the country's early warning system by improving modeling and forecasting capabilities, forecast visualization and weather workstation systems. Development of probabilistic forecasting tools, impact-based forecasting capabilities, as well as sectoral forecasting at SHS (0.5), along with visualization systems and built-in production tools (0.3), including hardware and software maintenance, including staff training (0.1). *(USD 1.5 million)*	***Environmental risks:*** 1) Dust, noise and vibration ***Social Risk*:** 1) Health and safety risks at work due to language and cultural barriers for workers from abroad. 2) Risk of behaviors 3) Worsening of working conditions for various reasons **Social risks related to inadequate coverage by the Project of vulnerable and disadvantaged groups:**	a) Compliance with the general rules and practices existing in the country. b) Normal working hours shall be observed. c) Occasional measures will be applied for the period of certain actions. a) Providing translation of occupational health and safety requirements for entrepreneurs employing foreign workers. b) Use of personal protective equipment and compliance with national standards and World Bank health and safety standards. c) Provide a grievance mechanism for workers to express their workplace concerns freely. d) There are no land related impacts because all works are on public lands a) All workers will sign and be informed of the Code of Conduct. b) A functioning petitions mechanism will be established to collect complaints related to social tensions.
	Activity 3. Improve ICT capabilities, including automation of data processing, by creating and operationalizing an integrated file and message switching system, training staff (0.3) and providing sufficient workstations and PCs for SHS (0.2) (USD 0.5 *million)*	1) Modernizing services, upgrading and installation of a new equipment may not comply with internationally recognized accessibility standards and WB universal access standards.	a) Universal access requirements and internationally recognized accessibility standards to the Modernizing services, upgrading and installation of a new equipment will be included to the bidden documents' specification.
	*Activity no. 4. Equipping an equipment calibration and maintenance center (*0.3) with		

Subcomponent activity	Type of activities (estimated costs mn USD)	Risks and impacts	Mitigation measures
	the associated technical service and operational system for remote network monitoring and maintenance (0.2), according to IEC/ISO17025 int. standard. Staff training. Strengthening institutional sustainability/sustainability capacity (0.5) *($1.0m)*	2)Limited knowledge related to understanding of communication needs of vulnerable populations.	a) The detailed study for the acquisition of the public broadcasting system will assess the capability of the proposed solutions to effectively reach vulnerable groups; b) The Project will engage with NGOs, CSOs, and social service organizations focusing on various issues related to vulnerable and disadvantaged groups during the project's preparation and implementation stages, ensuring their participation in project design and consultation processes. The detailed approach to this is outlined in the SEP.
	Activity 5. Improving service delivery, through development/consolidation of standard operating procedures, media profiling and recognition of SHS's "meteo.md" brand, development of the website and a high-quality smartphone P/U application, staff training. ($0.5m)		
Component 2. Support for policies, regulations and investments to reduce critical infrastructure risk (USD 6 million)			
Subcomponent 2.1 Policy support and regulation for risk reduction (- USD), develop and propose a national methodology for	*Activity 1. Introduction and implementation of European Union building codes*: - Eurocode 7 (Geotechnical design); - Eurocode 8 (Design of earthquake-resistant p/u structures)	*Environmental risks:* No risks identified *Social Risk*: potential gender-based violence and harassment	a) Clear guidelines on what GBV and harassment represent as well as clear reporting mechanisms will be developed and displayed to consultants employed under the component

Subcomponent activity	**Type of activities** (estimated costs mn USD)	**Risks and impacts**	**Mitigation measures**
seismic and disaster risk assessment for residential housing stock and public buildings.		(To complete MIDR)	
	Activity 2. Addressing seismic modernization and energy efficiency links in the construction sector, in order to apply the building code	*Environmental risks:* No risks identified *Social Risk*: potential gender-based violence and harassment	a) Clear guidelines on what GBV and harassment represent as well as clear reporting mechanisms will be developed and displayed to consultants employed under the component
Subcomponent 2.2. Feasibility studies for selected risk reduction investments in critical infrastructure (- USD),	*Activity:* Consultancy services for detailed structural vulnerability assessments, geotechnical investigations and other sites, feasibility and design studies, detailed engineering projects, as well as related environmental and social tools and design analyses of critical infrastructure addressing flood, drought and/or earthquake risks	*Environmental risks:* No risks identified *Social Risk*: 1)potential gender-based violence and harassment 2)Inadequate consideration of the needs of persons with disabilities and vulnerable groups in the feasibility studies for selected risk reduction investments in critical infrastructure could lead to exclusion and increased vulnerability	Clear guidelines on what GBV and harassment represent as well as clear reporting mechanisms will be developed and displayed to consultants employed under the component a) The TORs for developing feasibility studies will include requirements to adopt an inclusive approach and consider the needs and requirements of persons with disabilities and vulnerable groups. Feasibility studies will adhere to internationally recognized accessibility standards, such as universal design principles, to make the infrastructure accessible to all. b) Consultations with relevant stakeholders, including organizations representing persons with disabilities and vulnerable groups, will be conducted to gather input and feedback on the feasibility studies. A more detailed engagement program is described in the Stakeholder Engagement Plan (SEP).
Components 3, 4 and 5 do not entail major environmental and social risks			

Annex 3. Models of E&S assessment tools

3.1. Environmental and social impact assessment

Terms of reference for carrying out an Environmental and Social Impact Assessment Study

A report assessing the environmental and social impact of substantial/moderate risk sub-projects (category B) focuses on the significant environmental and social issues raised. Its main purpose is to identify social and environmental impacts and those measures that, if incorporated into the design and implementation of a project, can ensure that negative environmental and social effects will be minimized. The scope and level of detail required for the analysis depend on the magnitude and severity of potential impacts.

The environmental and social impact assessment report should include the following elements:

a) *Summary*.

It summarizes significant findings and recommended actions.

b) *Political, legal and administrative framework*.

This section summarizes the legal and regulatory framework that applies to environmental and social management in the jurisdiction where the study is conducted.

c) *Description of the project*.

It describes the nature and scope of the project and the geographical, ecological, temporal and socio-economic context in which the project will be carried out. The description should identify the social groups that will be affected, include a map of the project site and identify any external or support facilities that will be needed for the project.

d) *Reference data*.

Describe the relevant physical, biological and social condition, including any anticipated significant changes before the start of the project. The data should be relevant to the design, location, operation or mitigation measures of the project.

e) *Environmental impact*.

Describe likely or expected positive and negative impacts in quantitative terms, to the extent possible. Identify mitigation measures and estimate residual impacts after mitigation. Describe the limits of available data and uncertainties related to the estimation of impacts and the results of the proposed mitigation.

f) *Social impacts*

Assess the potential positive and negative social impacts associated with the Project to which the community might be exposed. Identify land occupation requirements resulting in temporary or permanent economic and/or physical movements or access restrictions, identify sites of cultural heritage importance, note the presence of minors/minor workers. Look for signs of fatigue in workers, visible distress, including signs of physical/body injuries, etc. Review site records, including those related to types of training, accidents and injuries on site, what types of medications are most commonly used.

g) Cumulative impacts

Cumulative impacts on assessed environmental and social components (VEC) on which other existing or future developments may also have harmful effects can be identified and the project should avoid and/or minimize these impacts to the greatest extent possible.

h) *Analysis of alternatives*.

Systematically compare feasible alternatives to the location, design and operation of the proposed project, including the "no project" alternative in terms of their relative impact, costs and compliance with local conditions. For each alternative, quantify and compare impacts and costs against the proposed plan.

i) *Methods of evaluation and involvement.*

The assessment should be carried out using both qualitative and quantitative methods and involving both field studies and secondary data to assess the effects of the project on a targeted baseline. Analysis and stakeholder involvement should also be integrated into the design of the assessment and participatory methods applied for a constructive basis for dialogue with end-users.

j) *Environmental and Social Management Plan (ESMP).*

If significant impacts requiring mitigation are identified, ESMPs define the mitigation to be performed, identify key monitoring indicators and any institutional strengthening needs for effective mitigation and monitoring to be performed.

3.2. Content of the environmental and social management plan

CONTENT OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN - ESMP

The content of the ESMP subproject will include the following:

Athens

ESMPs identify measures and actions in line with the mitigation hierarchy that reduce potentially negative environmental and social impacts to acceptable levels. The plan will include compensatory measures, where appropriate. More specifically, ESMP:

a) identify and summarize all anticipated negative environmental and social effects (including those involving indigenous people or involuntary resettlement);

b) describe — in technical detail — each mitigation measure, including the type of impacts it relates to and the conditions under which it is required (e.g. continuously or in case of unforeseen circumstances), together with designs, equipment descriptions and operating procedures;

c) estimate any potential environmental and social impact of such measures; and considers and is consistent with other mitigation plans required for the project (e.g. for involuntary resettlement, indigenous peoples or cultural heritage).

Monitoring

The PGES identifies monitoring objectives and specifies the type of monitoring, with links to impacts assessed in the environmental and social assessment and mitigation measures described in the ESMPs.

Specifically, the monitoring section of the ESMP provides:

(a) specific description and technical details of the monitoring measures, including parameters to be measured, methods to be used, sampling sites, frequency of measurements, detection limits (if any) and definition of thresholds to signal the need for corrective action;

(b) monitoring and reporting procedures to ensure early detection of conditions requiring special mitigation measures and to provide information on mitigation progress and outcomes.

Capacity building and training

In order to support the timely and effective implementation of environmental and social project components and mitigation measures, PGES is based on environmental and social assessment of the existence, role and capacity of responsible parties on site or at agency and ministry level.

Specifically, PGES provides a specific description of institutional arrangements, identifying which party is responsible for carrying out mitigation and monitoring measures (e.g. for operation, oversight, implementation, implementation monitoring, remedial actions, financing, reporting and staff training).

In order to strengthen environmental and social management capacity in the agencies responsible for implementation, the PMMS recommends the establishment or expansion of responsible parties, staff training and any additional measures that may be needed to support the implementation of mitigation measures and any other recommendations of environmental and social assessment.

Implementation schedule and cost estimation

For all three aspects (mitigation, monitoring and capacity development), ESMPs provide:

a. an implementation program for the measures to be carried out as part of the project, showing the stages and coordination with the project implementation master plans; and

b. capital estimates and recurring costs and sources of funds for the implementation of PGES.

These figures are also integrated into the total project cost tables.

ESMP integration with Project

The Borrower's decision to proceed with a project and the WB's decision to support it are based in part on the expectation that ESMPs (either independently or incorporated into PMMS) will be executed efficiently. Accordingly, each of the measures and actions to be implemented will be clearly specified, including individual mitigation and monitoring measures and actions and their respective institutional responsibilities, and related costs will be integrated into overall planning, design, budget and implementation.

FORMAT OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

	Impact	Mitigation measures	Cost		Institutional responsibility		Remarks
			Installation	operation	Installation	operation	
CONSTRUCTION PHASE							
Environmental Component							
Soils							
Water resources							
Air quality							
Fauna and flora							
Social component							
Aesthetics and landscape							
Human communities							
Traffic							
Relocation							
Health & Safety							
Safety and health of staff and the general public							
Inclusion of vulnerable and disadvantaged groups							
Project level GRM							
OPERATION PHASE							
Environmental component							
Soils							
Water resources							
Air quality							
Fauna and flora							
Social component							
Aesthetics and landscape							
Human communities							
Safety and health of staff and the general public							
Inclusion of vulnerable and disadvantaged groups							

	Impact	Mitigation measures	Cost		Institutional responsibility		Remarks
			Installation	operation	Installation	operation	
DEACTIVATION PHASE							
Environmental component							
Social component							

FORMAT OF THE ENVIRONMENTAL AND SOCIAL MONITORING PLAN

Phase	**What** parameter should be monitored?	**Where** will the parameter be monitored?	**How** will the parameter be monitored?	**When** will the parameter be monitored?	**Why** is the parameter monitored?	Cost		Institutional responsibility	
						Installation	*operation*	*Installation*	*operation*
Basic									
Construction									
Operation									
Decommissioning									

3.3. ESMP checklist

Environmental and social management plan checklist
(for small-scale construction/rehabilitation sub-projects)

PART 1:
GENERAL INFORMATION ABOUT THE PROJECT AND LOCATION

INSTITUTIONAL & ADMINISTRATIVE				
Country				
Project title				
Project and activity scope				
Institutional arrangements *(Name and contacts)*	WB (Project Team Leader)	Project Management	Local counterpart and/or Beneficiary	
How to implement it (*Name and contacts)*	Safeguard surveillance	Supervision of the local counterpart	Supervision of the Local Inspectorate	Contactor
SITE DESCRIPTION				
Site Name				
Describe your site location			Annex 1: Site map [ ]Y [ ] N	
Who owns the land?				
Description of geographical, physical, biological, geological, hydrographic and socio-economic context				
Locations and distance for the supply of materials, especially aggregates, water, other materials, including raw materials?				
LEGISLATION				
Identify national and local legislation and permits that apply to the project activity				
PUBLIC CONSULTATION /Access to information				
Awareness of the benefits of the project among marginalized groups and remote localities Access to mechanisms for providing feedback related to the project				

ENVIRONMENTAL/SOCIAL SCREENING			
Site activity will include/involve any of the following activities:	**Activity**	**state**	**Further reading**
	Rehabilitation of the building	[ ] Yes no	See Section **B** below
	New construction	[ ] Yes no	See Section **B** below
	Individual wastewater treatment system	[ ] Yes no	See Section **C** below
	Historic buildings and districts	[ ] Yes no	See Section **D** below
	Land acquisition[7]	[ ] Yes no	See section **E** below
	Hazardous or toxic materials[8]	[ ] Yes no	See section **F** below
	Impact on forests and/or protected areas	[ ] Yes no	See Section **G** below
	Handling/management of medical waste	[ ] Yes no	See section **H** below
	Traffic and pedestrian safety	[ ] Yes no	See Section **I** below

PART 2.
MITIGATION MEASURES

ACTIVITY	PARAMETER	AMINUATION MEASURES CHECKLIST
A. General conditions	Notification and worker safety	Inspectorates and local communities in construction and environment were informed about future activities The public was informed about the works through a notification in the media and/or on accessible websites (including on the site of the works) All legally required permits have been obtained for construction and/or rehabilitation All work will be carried out in a safe and disciplined manner aimed at minimizing the impact of neighboring residents and the environment. Workers shall be provided with protective equipment and shall comply with international best practices (always helmets, where appropriate masks and goggles, harnesses and safety boots) Proper site signage will inform workers of key rules and regulations to follow.
B. General rehabilitation and/or construction activities	Air quality	During interior demolition, use garbage chutes above the first floor Keep demolition debris in the controlled area and spray with water mist to reduce dust residue Suppress dust during pneumatic drilling/wall destruction by continuously spraying water and/or installing dust protection equipment on site Keep the environment residue-free to minimize dust There will be no outdoor burning of construction materials/waste on site

[7]The project will support the construction of new buildings only if the purchase of land is not necessary and there are no relocation problems; in such cases, the investor must hold the title and prove that the land at the time of application of the subprojects is not occupied or used even illegally.
[8]Toxic/hazardous materials include and are not limited to asbestos, toxic paints, lead paint removal, etc. =127621&lang=en)

ACTIVITY	PARAMETER	AMINUATION MEASURES CHECKLIST
		There will be no excessive idling of construction vehicles on construction sites
	Noise	Construction noise will be limited to the limited hours agreed in the permit During operations, the engine covers of generators, air compressors and other powered mechanical equipment must be closed, and equipment must be placed as far away from residential areas as possible.
	Water quality	The site shall establish appropriate erosion and sediment control measures, such as hay bales and/or sludge fences, to prevent sediment from moving off-site and causing excessive turbidity in nearby streams and rivers.
	Waste management	Waste collection and disposal routes and sites will be identified for all major types of waste expected from demolition and construction activities. Mineral construction and demolition waste will be separated from general, organic, liquid and chemical waste by sorting on site and stored in appropriate containers. Construction waste will be properly collected and disposed of by authorized collectors Waste disposal records will be kept as evidence of proper management as designed. Whenever feasible, the contractor will reuse and recycle suitable and viable materials (except asbestos)
C . Individual wastewater treatment system	Water quality	The approach to managing sanitary waste and waste water on construction sites (installation or reconstruction) must be approved by local authorities Before discharge into receiving waters, effluents from individual waste water systems must be treated to meet the minimum quality criteria set out in the national guidelines for effluent quality and waste water treatment. Monitoring of new wastewater systems (before/after) will be carried out.
Is. Land acquisition	Land acquisition plan/framework	If the expropriation of land was not expected and necessary, or if it was not expected, but loss of access to income or damage to the assets of legal or illegal users of the land may occur, the head of the bank's work team is consulted. The land acquisition plan approved by the Bank Plan (if the project is required) will be implemented before the start of project work.
F . Toxic materials	Asbestos Management	If asbestos is located on the project site, clearly mark it as hazardous material Where possible, asbestos should be properly contained and sealed to minimize exposure Asbestos before removal will be treated with a wetting agent to minimize asbestos dust Asbestos will be handled and disposed of by qualified and experienced professionals If asbestos material is temporarily stored, waste should be securely confined in appropriately enclosed spaces. Removed asbestos will not be reused
	Toxic/hazardous waste management	Temporary on-site storage of all hazardous or toxic substances will be in secure containers labeled with details of composition, properties and handling information. Containers of hazardous substances must be placed in an airtight container to prevent leakage and leakage. The waste shall be transported by specially authorized transporters and stored in an approved establishment. Do not use paints with toxic ingredients or solvents or lead-based paints
G. Affects	Protection	All recognized natural habitats and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all

ACTIVITY	PARAMETER	AMINUATION MEASURES CHECKLIST
forests and/or protected areas		personnel will be strictly prohibited hunting, feeding, logging or other harmful activities. For large trees in the vicinity of the activity, mark and insulate with a fence large trees and protect the root system and avoid any damage to the trees. Wetlands and adjacent streams shall be protected from construction site runoff with an appropriate erosion and sediment control function including, but not limited to, hay bales, sludge fencing. There will be no unlicensed quarries or landfills in adjacent areas, especially in protected areas.
I. Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians through construction activities	In accordance with national regulations, the contractor will ensure that the construction site is properly secured and that traffic related to the construction is regulated. This includes, but is not limited to: Signage, warning signs, barriers and traffic diversion: the site will be clearly visible and the public will be warned of all potential dangers Traffic management system and staff training, especially for site access and heavy traffic nearby. Ensure safe passages and crossings for pedestrians in case construction traffic interferes. Adapting working hours to local traffic patterns, e.g. avoiding major transport activities during peak hours or during animal movement Active traffic management by trained and visible personnel on site, if necessary for safe and convenient passage for the public. Ensure safe and continuous access to offices, shops and homes during renovation activities, if buildings remain open to the public.

PART 3: MONITORING PLAN

Phase	**What** (Does the parameter need to be monitored?)	**Where** (Does the parameter need to be monitored?)	**How** (Does the parameter need to be monitored?)	**When** (Do you define frequency / or continuous?)	**Why** (Is the parameter monitored?)	**Cost** (if not included in the project budget)	**WHO** (Is he responsible for monitoring?)
preparation of the activity							
Activity implementation							
activity supervision							

Annex 4. Grievance/inquiry record

GRIEVANCE/INQUIRY RECORD (Form A)

Instructions: This form is to be completed by staff receiving the inquiry or grievance and kept in the Project's file. Attachany supporting documentation/letters as relevant.

Date Grievance Received:	Name of Staff Completing Form:

Grievance Received (check √):
□ National □ Oblast □ Rayon □ Village

Mode of Filing Inquiry or Grievance (check √):

□ In person □ Telephone □ E-mail □ Phone Text Message □ Website

□ Grievance/Suggestion box □ Community meeting □ Public consultation □ Other _____

Name of Person Raising Grievance: *(information is optional and always treated as confidential)*

Gender: □ *Male* □ *Female*

Address or contact information for Person Raising Grievance: *(information is optional and confidential)*

Location where grievance/problem occurred [write in]

National:	Oblast:	Rayon:	Village:	

Brief Description of Grievance or Inquiry: *(Provide as much detail and facts as possible)*

	Category 1	Social Safeguards
	Category 2	Environmental Safeguards
	Category 3	Grievances regarding violations of policies, guidelines and procedures
	Category 4	Grievances regarding contract violations
	Category 5	Grievances regarding the misuse of funds/lack of transparency, or other financial management concerns
	Category 6	Grievances regarding abuse of power/intervention by project or government officials
	Category 7	Grievances regarding PIU staff performance

	Category 8	Reports of force majeure
	Category 9	Grievance about project interventions
	Category 10	Other
Who should handle and follow up on the grievance:		
Progress in resolving the grievance (e.g. answered, being resolved, settled):		