

Environmental and Social Due Diligence, Impact Assessment and Road Safety Audit for the Moldova TENT-T Road Network Rehabilitation Project, DTM 55768

Environmental and Social Impact Management Plan, Tranche 2, M3 (4 Lots)

Date: 27.04.2026

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Project sheet

Project number	P12002-107		
Project title	Environmental and Social Due Diligence, Impact Assessment and Road Safety Audit for the Moldova TENT-T Road Network Rehabilitation Project		
Allocation/budget line			
Awarded on	25.06.2025		
	Revision:	Editor:	Date:
	V0.1 – Outline of Report prepared		01.09.2025
	V1.0 - Draft delivered to Client	MC Mobility	25.02.2026
	V1.1 – Amended based on EBRD comments	MC Mobility	02.03.2026
	V1.2 - Amended based on noise modelling report	MC Mobility	07.04.2026
Quality Check:			
	Client	Contractor	Implementing partner
Name:	European Bank for Reconstruction and Development	MC Mobility Consultants GmbH	
Address:	Five Bank Street London, E14 4BG United Kingdom	Zwölfergasse 8/3/28, VIENNA, 1150, Austria	
Tel. number:		+4318923600	
Contact person:	Dadabaev, Jamol	Holger Eiletz	
Email address:	DadabaeJ@ebrd.com	holger.eiletz@vienna-mc.com	
Signatures:			
Name of the Experts:	Egidijus Skrodenis, Project Manager Sabine Stumpf-Langer, Project Manager Tatiana Illescu, Environmental Specialist Marina Grosu, Health and Safety Specialist Ala Rotaru. Biodiversity Specialist		

Abbreviations

Abbreviation	Description
C-ESMP	Construction Environmental and Social Management Plan
DD	Detailed Design
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EA	Environmental Agency
EPI	Environmental Protection Inspectorate
ESDD	Environmental and Social Due Diligence
ESA	Environmental and Social Assessment
ESAP	Environmental and Social Action Plan
ESP	Environmental and Social Policy
ESIA	Environmental and Social Impact Assessment
EU	European Union
EUR	Euro
GD	Government Decision
GDP	Gross Domestic Product
IUCN	International Union for Conservation of Nature
INSP	National Inspectorate for Public Security
LPA	Local Public Authority
NCM	Normative in Constructions from Moldova
NGO	Non-Governmental Organization
NPA	Natural Protected Areas
NRA	National Road Administration J.S.C.
NTS	Non-technical Summary
OHS	Occupational Health and Safety
RAP	Resettlement Action Plan
RDA	Regional Development Agency
RM	Republic of Moldova
RoW	Right of Way
RPF	Resettlement Policy Framework
RSA	Road Safety Audit
PR	Performance Requirement
PAP	Project-Affected People
SE	Supervision Engineer
SEP	Stakeholder Engagement Plan
TEN-T	Trans-European Transport Network
TOR	Terms of Reference
C-ESMP	Construction Environmental and Social Management Plan
DD	Detailed Design

Important Notice/Disclaimer

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1. Executive Summary

The rehabilitation and upgrading of the 70.9 km M3 Road Corridor (Tranche 2) represent a strategic infrastructure investment for the Republic of Moldova. The Project forms part of the Trans-European Transport Network (TEN-T) and supports national priorities under the “European Moldova 2030” Strategy and the National Mobility Strategy 2025–2030. The corridor is the country’s principal north–south axis, connecting Chișinău with southern agricultural and industrial regions and the Giurgiulești International Free Port, strengthening regional integration with Romania and Ukraine.

The Project is divided into four Lots:

- **Lot 1:** Airport Interchange – Porumbrei (34.4 km)
- **Lot 2:** Porumbrei – Cimișlia (19 km, widening to four lanes)
- **Lot 3:** Cimișlia – Comrat (12 km)
- **Lot 4:** Giurgiulești Ring Road and Bypass (approx. 5.5 km)

Due to its scale and potential impacts, the Project is classified as Category A under EBRD requirements and is subject to a comprehensive Environmental and Social Impact Assessment (ESIA). The ESMP outlines mitigation, monitoring, and management measures to prevent, minimize, or compensate adverse environmental and social impacts during construction and operation.

Environmental and Social Context

Lots 1–3 are located within the Southern Moldavian Plain (Bugeac Plain), characterized by undulating relief, chernozem soils, and agricultural land use. Lot 4 is situated in the steppe zone of the Danube Plain near Giurgiulești. The corridor crosses areas with moderate seismic activity (7–8 degree intensity) and includes zones prone to erosion and localized slope instability.

The Project alignment passes near four Emerald Network sites, requiring careful biodiversity protection measures. Agricultural land quality varies across the project area, with some localities experiencing significant soil erosion.

The M3 Project is located in the central and southern development regions - areas where poor transport infrastructure limits mobility, trade, and investment. By improving road conditions and regional connectivity, the Project will directly support Moldova’s regional-development objectives, stimulate local economies, and enhance household income opportunities along the corridor.

Lot	Key Administrative Units / Settlements within Aol
1	Chișinău municipality – Băcioi commune (with Băcioi, Straisteni, Frumușica and Brăila villages), Ialoveni district – Răzeni commune (with Mileștii Noi village), Horești commune and Țipala commune (with Budăi and Bălțați villages), Cimișlia district – Porumbrei commune (with Sagaidacul Nou village)
2	Cimișlia district – Porumbrei village, Grădiște commune (with Iurievca village), Ecaterinovca commune (with Coștangalia village) and Sagaidac villages, Cimișlia city
3	Cimișlia district – Cimișlia city, Ciucur-Mingir village
4	Cahul district – Cîșlița-Prut village and Giurgiulești village

Table 1-1: Administrative Districts and settlement within the Project area

The **Environmental and Social Management Plan (ESMP)** consolidates all mitigation, monitoring, and management requirements necessary to ensure that construction and early operation of the M3 corridor are implemented in a safe, compliant, and environmentally responsible manner. The ESMP integrates Moldovan legislation, sector standards (CP D.02.18:2017; CP D.02.30:2023; NCM D.02.01:2024), and relevant EBRD Performance Requirements.

In addition to the core measures listed below, the ESMP incorporates broader social, community health and safety,

land access, and stakeholder communication obligations that are essential for minimizing project impacts on Aol communities.

1. Air Quality and Dust/Emission Control

The ESMP establishes:

- Dust suppression measures, including routine water spraying of construction areas, haul routes, and access roads.
- Covering of trucks transporting loose materials and enforcement of reduced speed limits near settlements.
- Regular maintenance of machinery to limit exhaust emissions and use of low-emission equipment where feasible.
- Siting of asphalt plants, crushers, and batching facilities away from sensitive receptors and in compliance with environmental permits.

2. Noise and Vibration Management

The ESMP establishes:

- Restricted working hours near residential zones, schools, and vulnerable receptors to limit disturbance.
- Use of low-noise machinery, temporary acoustic screens, and proper equipment muffling.
- Vibration monitoring at sensitive structures, with stop-work triggers if thresholds are exceeded.
- Community notification regarding any activities likely to generate elevated noise.

3. Soil Protection, Stabilization, and Erosion Control

The ESMP establishes:

- Stabilization of exposed soils through mulching, compaction, temporary cover, or vegetation.
- Installation of erosion control measures (silt fences, diversion channels, geotextiles, sediment traps).
- Proper storage and reuse of stripped topsoil following good agricultural practice.
- Prevention of soil contamination through designated refueling zones, spill kits, and hazardous material storage protocols.

4. Biodiversity Protection and Monitoring

The ESMP establishes:

- Measures to safeguard flora and fauna, especially in and around Emerald Network sites, including access restrictions, reduced footprint, and phased clearing.
- Pre-construction species surveys and monitoring during construction in critical periods (breeding, migration).
- Avoidance of unnecessary vegetation removal and mandatory revegetation/rehabilitation of disturbed areas.
- Implementation of wildlife crossings and fencing in locations where fauna collision risk is elevated.

5. Traffic and Access Management

The ESMP establishes:

- A comprehensive Traffic Management Plan (TMP) including temporary diversions, signage, speed limitations, controlled crossings, and flag personnel.
- Measures to maintain access for residents, public transport, emergency services, agricultural users, and roadside businesses.
- Advance communication to communities on all temporary road closures, lane reductions, and works scheduling.

- Pedestrian safety measures, including delineated walkways, temporary pedestrian bridges or underpasses where needed.

6. Occupational Health and Safety (OHS)

The ESMP establishes:

- Full OHS compliance aligned with Law 186-XVI/2008, CP D.02.18:2017, and EBRD PR2/PR4.
- Compulsory use of PPE, safety training, toolbox talks, and high-visibility clothing.
- Traffic safety training for all drivers and machinery operators.
- Emergency response plans, first-aid availability, fire-protection measures, and safe confined-space procedures.
- A Worker Code of Conduct outlining behavior rules toward communities and environmental protection.

7. Community Health, Safety, and Social Measures

The ESMP establishes:

- Safety fencing, night illumination, and exclusion zones around work sites.
- Protection of vulnerable groups (children, elderly, persons with disabilities) through safe pedestrian detours and informational materials.
- A functioning Grievance Redress Mechanism (GRM) accessible in Romanian and Russian, enabling anonymous submissions.
- Engagement with LPAs and communities regarding disruptions, construction scheduling, and access arrangements.

8. Land Acquisition, Access, and Economic Displacement Management

The ESMP establishes:

- Clear procedures for managing land acquisition and temporary/permanent land occupation, aligned with Moldovan legislation (Land Code, expropriation provisions) and EBRD PR5 principles (Full Replacement Cost, livelihood restoration, consultation).
- Maintenance of access to residential plots, agricultural land, and roadside businesses during construction through temporary bypasses, controlled crossings, and coordinated work sequencing.
- Advance notification to affected landowners and users on the timing of works, expected duration of disruptions, and any temporary restrictions on access or agricultural activities.
- Procedures to minimize temporary economic displacement, including ensuring uninterrupted access for delivery trucks, clients, and agricultural machinery, and avoiding prolonged blockage of entrances, driveways, and field accesses.
- Clear delineation and fencing of work zones to avoid accidental damage to crops, orchards, vineyards, and privately owned structures.
- Compensation protocols to address accidental damages or losses to crops, trees, or assets during construction, consistent with contractual obligations and the RAP (if applicable).
- A coordinated interface between the Contractor, Supervision Engineer, NRA/PIU, and Local Public Authorities (LPAs) to ensure timely communication and resolution of access and land-related complaints.
- Integration of land-related grievances into the GRM, with rapid referral for field verification and resolution within established timeframes.

9. Monitoring Requirements

The ESMP establishes:

- Periodic air and noise monitoring during construction and in early operational years, especially near settlements, schools, and sensitive receptors.
- Water quality monitoring near watercourses and drainage discharge points.
- Soil quality checks in storage zones, camps, and asphalt/batching areas.
- Biodiversity monitoring in and near Emerald critical habitats.
- Social monitoring of access constraints, grievances, traffic incidents, and community concerns.

Conclusion

The Project will significantly improve road safety, mobility, and regional connectivity, while supporting Moldova's economic development and EU integration objectives. Environmental and social impacts are manageable through the implementation of the ESMP and adherence to EBRD Performance Requirements. With appropriate mitigation and monitoring, the Project is expected to deliver substantial long-term socio-economic benefits with acceptable environmental and social risk.

1.1. Key Environmental and Social Impacts

The Environmental and Social Management Plan (ESMP) for the M3 Chişinău–Giurgiuleşti Road Rehabilitation and Upgrade Project outlines the measures necessary to avoid, minimise, and manage the key environmental and social risks associated with the Project throughout its lifecycle. The ESMP translates the ESIA findings into actionable mitigation, monitoring, and management requirements for the Client, EPC Contractor, supervision teams, and relevant institutions.

Preconstruction Phase:

- Land Acquisition and Land Tenure Clarification
- Noise and vibration affecting nearby settlements;
- Permanent Land Acquisition (Lot-specific);
- Temporary Economic Displacement Risks;
- Access Restrictions and Mobility Adjustments;
- Community Concerns, Information Gaps, and Perception-Based Impacts;
- Administrative and Procedural Impacts;
- Vegetation Removal or Clearance in Preparation Zones;

The pre-construction phase of the M3 corridor is characterised by administrative, land-related, and community-focused impacts that are largely procedural in nature and manageable through timely coordination, transparent communication, and appropriate planning measures. The most material risks relate to land acquisition and land-tenure clarification, including both temporary and permanent land requirements that may generate economic displacement, access restrictions, or mobility adjustments for affected landowners and users. These are complemented by secondary effects such as short-term noise and vibration, limited vegetation clearance, and community concerns linked to information gaps or expectations about upcoming works.

Construction Phase:

- Temporary dust and exhaust emissions from machinery and transport;
- Noise and vibration affecting nearby settlements;
- Risk of soil erosion and localized slope instability;
- Temporary impacts on biodiversity near Emerald sites;
- Short-term disruption to traffic and local access roads;
- Occupational health and safety risks for workers;
- Community Health and Safety risks;
- Short-term traffic disruption and access restriction;

Despite their intensity, these impacts are well-defined, predictable, and fully manageable through the measures established in the ESMP, including the Traffic Management Plan, OHS Management Plan, Biodiversity Management Procedures, and site-specific method statements. With proper implementation, monitoring, and enforcement, construction-phase impacts remain localised, reversible, and limited to the duration of active works. Effective coordination with LPAs, continuous community communication, and strict environmental controls ensure that construction activities can proceed without causing long-term environmental degradation or sustained disruption to affected communities.

Overall, the construction phase represents the period with the highest volume of physical activity and therefore the greatest potential for impact, yet all identified risks fall within the scope of standard international best practice and can be mitigated to acceptable levels through diligent ESMP implementation.

Operation Phase:

- Long-term traffic-related air emissions and noise;
- Improved traffic flow leading to reduced congestion and lower vehicle operating emissions compared to the current condition;
- Reduced heavy transit traffic through Giurgiulești village due to the bypass, improving local environmental quality and road safety.

In the operational phase, the M3 corridor is expected to generate long-term but moderate environmental and social impacts, primarily linked to traffic-related emissions and noise associated with normal road use. These impacts are anticipated to remain within national and EU-aligned environmental standards, particularly due to the improved road geometry, smoother pavement structure, and enhanced traffic flow achieved through the rehabilitation works. Reduced congestion and lower vehicle operating emissions represent a net environmental improvement compared to existing conditions. Socially, the operational stage delivers lasting positive outcomes, most notably through the diversion of heavy transit traffic away from Giurgiulești village via the new bypass, resulting in improved local air quality, reduced noise levels, and enhanced community road safety. The upgraded infrastructure will also support safer mobility, more reliable transport connections, and broader socio-economic opportunities along the corridor. Overall, the operation phase is characterised by stable, predictable, and manageable impacts, with a clear shift from short-term construction disturbances toward long-term environmental and community benefits. Routine monitoring and maintenance, as outlined in the ESMP, will ensure that operational impacts remain controlled and that the improved conditions are sustained throughout the lifecycle of the rehabilitated M3 road.

1.2. Mitigation and Monitoring

The **Environmental and Social Management Plan (ESMP)** consolidates all mitigation, monitoring, and management requirements necessary to ensure that construction and early operation of the M3 corridor are implemented in a safe, compliant, and environmentally responsible manner. The ESMP integrates Moldovan legislation, sector standards (CP D.02.18:2017; CP D.02.30:2023; NCM D.02.01:2024), and relevant EBRD Performance Requirements.

In addition to the core measures listed below, the ESMP incorporates broader social, community health and safety, land access, and stakeholder communication obligations that are essential for minimizing project impacts on Aol communities.

1. Air Quality and Dust/Emission Control

The ESMP establishes:

- Dust suppression measures, including routine water spraying of construction areas, haul routes, and access roads.
- Covering of trucks transporting loose materials and enforcement of reduced speed limits near settlements.
- Regular maintenance of machinery to limit exhaust emissions and use of low-emission equipment where feasible.
- Siting of asphalt plants, crushers, and batching facilities away from sensitive receptors and in compliance with environmental permits.

2. Noise and Vibration Management

The ESMP establishes:

- Restricted working hours near residential zones, schools, and vulnerable receptors to limit disturbance.
- Use of low-noise machinery, temporary acoustic screens, and proper equipment muffling.
- Vibration monitoring at sensitive structures, with stop-work triggers if thresholds are exceeded.
- Community notification regarding any activities likely to generate elevated noise.

3. Soil Protection, Stabilization, and Erosion Control

The ESMP establishes:

- Stabilization of exposed soils through mulching, compaction, temporary cover, or vegetation.
- Installation of erosion control measures (silt fences, diversion channels, geotextiles, sediment traps).
- Proper storage and reuse of stripped topsoil following good agricultural practice.
- Prevention of soil contamination through designated refuelling zones, spill kits, and hazardous material storage protocols.

4. Biodiversity Protection and Monitoring

The ESMP establishes:

- Measures to safeguard flora and fauna, especially in and around Emerald Network sites, including access restrictions, reduced footprint, and phased clearing.
- Pre-construction species surveys and monitoring during construction in critical periods (breeding, migration).
- Avoidance of unnecessary vegetation removal and mandatory revegetation/rehabilitation of disturbed areas.
- Implementation of wildlife crossings and fencing in locations where fauna collision risk is elevated.

5. Traffic and Access Management

The ESMP establishes:

- A comprehensive Traffic Management Plan (TMP) including temporary diversions, signage, speed limitations, controlled crossings, and flag personnel.
- Measures to maintain access for residents, public transport, emergency services, agricultural users, and roadside businesses.
- Advance communication to communities on all temporary road closures, lane reductions, and works scheduling.
- Pedestrian safety measures, including delineated walkways, temporary pedestrian bridges or underpasses where needed.
- Identification of locations for the installation of sound-absorbing panels, which are essential to ensure the diffraction of sound waves and to reduce noise levels below the maximum permissible limits established by current legislation, protecting both public health and species of conservation interest.

6. Occupational Health and Safety (OHS)

The ESMP establishes:

- Full OHS compliance aligned with Law 186-XVI/2008, CP D.02.18:2017, and EBRD PR2/PR4.
- Compulsory use of PPE, safety training, toolbox talks, and high-visibility clothing.
- Traffic safety training for all drivers and machinery operators.
- Emergency response plans, first-aid availability, fire-protection measures, and safe confined-space procedures.
- A Worker Code of Conduct outlining behavior rules toward communities and environmental protection.

7. Community Health, Safety, and Social Measures

The ESMP establishes:

- Safety fencing, night illumination, and exclusion zones around work sites.
- Protection of vulnerable groups (children, elderly, persons with disabilities) through safe pedestrian detours and informational materials.
- A functioning Grievance Redress Mechanism (GRM) accessible in Romanian and Russian, enabling anonymous submissions.
- Engagement with LPAs and communities regarding disruptions, construction scheduling, and access arrangements.

8. Land Acquisition, Access, and Economic Displacement Management

The ESMP establishes:

- Clear procedures for managing land acquisition and temporary/permanent land occupation, aligned with Moldovan legislation (Land Code, expropriation provisions) and EBRD PR5 principles (Full Replacement Cost, livelihood restoration, consultation).
- Maintenance of access to residential plots, agricultural land, and roadside businesses during construction through temporary bypasses, controlled crossings, and coordinated work sequencing.
- Advance notification to affected landowners and users on the timing of works, expected duration of disruptions, and any temporary restrictions on access or agricultural activities.
- Procedures to minimize temporary economic displacement, including ensuring uninterrupted access for

delivery trucks, clients, and agricultural machinery, and avoiding prolonged blockage of entrances, driveways, and field accesses.

- Clear delineation and fencing of work zones to avoid accidental damage to crops, orchards, vineyards, and privately owned structures.
- Compensation protocols to address accidental damages or losses to crops, trees, or assets during construction, consistent with contractual obligations and the RAP (if applicable).
- A coordinated interface between the Contractor, Supervision Engineer, NRA/PIU, and Local Public Authorities (LPAs) to ensure timely communication and resolution of access and land-related complaints.
- Integration of land-related grievances into the GRM, with rapid referral for field verification and resolution within established timeframes.

9. Monitoring Requirements

The ESMP establishes:

- Periodic air and noise monitoring during construction and in early operational years, especially near settlements, schools, and sensitive receptors.
- Water quality monitoring near watercourses and drainage discharge points.
- Soil quality checks in storage zones, camps, and asphalt/batching areas.
- Biodiversity monitoring in and near Emerald critical habitats.
- Social monitoring of access constraints, grievances, traffic incidents, and community concerns.

1.3. Objective of the Environmental and Social Management Plan (ESMP)

This ESMP is an umbrella document that gives direction to the development of the full complement of management plans necessary for the Project. The broad aims of the ESMP are:

- To ensure compliance with national regulatory authority stipulations and guidelines, as well as ensuring compliance with the environmental and social (E&S) policies and standards of the EBRD;
- To describe the practical requirements in sufficient detail that resources can be easily assessed and allocated;
- To state the agreed environmental and social objectives for the Project and verify environmental and social performance through information on impacts as they occur;
- To respond to changes in Project implementation not considered in the impact assessment process thus far or to respond to unforeseen events.
- To achieve these objectives, the ESMP contains the following information:
 - Definition of the environmental and social commitments and mitigation strategy identified in the E&S assessment;
 - Overview of the management actions necessary to implement the commitments and mitigation strategy;
 - Description of the means of monitoring and assessing the performance of the social and environmental actions, so that they can be adapted and/or improved; and
 - Definition of responsibilities: roles, communications and reporting process required for the implementation of the ESMP.
- The methods and processes provided in this ESMP will form part of the contractual agreement between NRA

and once appointed, the Contractor(s).

1.4. Source documents and outputs

The ESMP is the framework document that summarises all environmental and social measures recommended in, or required by, the various project documents (i.e. the source documents) and which translates them into management actions. Detailed specific management plans will be further developed and/or executed as outputs of the ESMP during the construction phase or during the operation period. The Figure below illustrates the source documents and outputs of the present ESMP.

The source documents include:

- Environmental and social policies and standards of the Lender (EBRD);
- Legal requirements of Republic of Moldova;
- Respective technical / engineering documentation – upcoming detailed design(s) - to be prepared to meet national regulations as well as the best international practice.
- ESIA Report and the accompanying documents (ESIA package), and upcoming updates.

The output documents are:

- The Contractor CESMP – to be prepared by the Contractor(s) to achieve the E&S performance objectives during Project's construction;
- The Environmental and Social Management System (ESMS) of National Road Administration, required to implement and monitor the management actions described in this ESIA Report;
- Detailed E&S management plans or procedures required to address the mitigation and compensation measures identified through this E&S assessment; and
- Various documents that will be produced and disclosed during the course of the Project's implementation to inform on the Project's construction and operation activities and the results of the environmental and social monitoring activities.

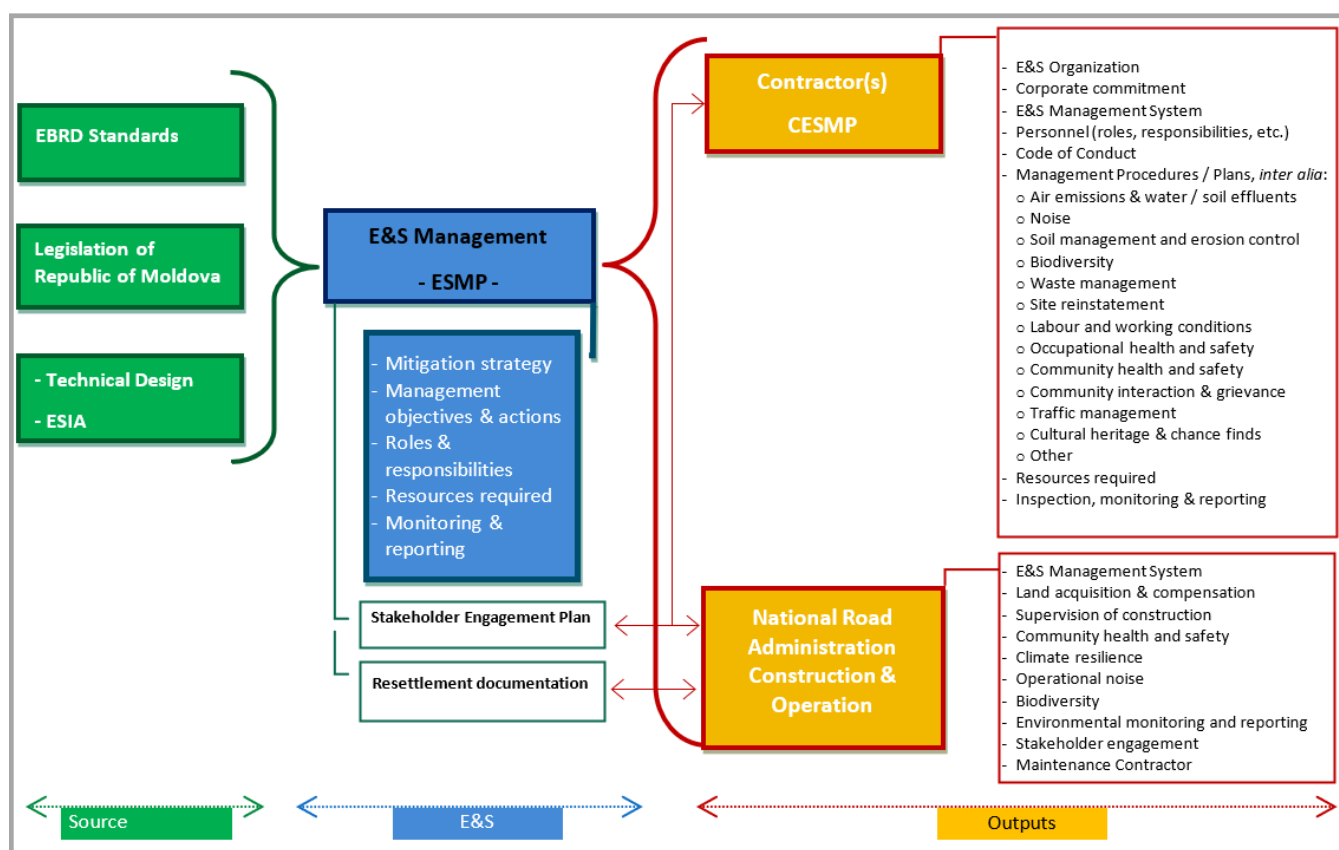


Figure 1-1: Source documents and outputs

2. Environment and Social Management System

The Environmental and Social Management System establishes the institutional framework, systems, procedures and tools that ensure systematic, consistent and auditable implementation of environmental and social good practice throughout the M3 Road Corridor Tranche 2 Rehabilitation Project.

All project actors — primarily the Contractor, Supervising Engineer (SE), Project Implementation Unit (PIU) and National Roads Administration (NRA) also acting as PIU — are required to adopt and maintain key systems and procedures.

2.1. Principles of environmental and social management

The ESMP describes a set of measures or specifications that have been originated following the outcomes of the Project's E&S assessment but also measures that are considered to reflect Good International Practice (GIP).

National Road Administration will be appointed as Project Implementation Unit (PIU), responsible for Project implementation.

National Road Administration takes overall responsibility for the implementation of environmental and social mitigation and compensation measures of the Project. Effective implementation of these specifications before and during the construction phase will be supervised by a Supervision Consultant who is to be appointed by NRA.

NRA will be responsible and take ownership of the measures relevant to the operation and maintenance phase of

the Project.

2.1.1. ESMP during pre-construction

Each requirement resulting from the process of obtaining a specific project-related decision (approval, permit, consent) from the state and/or local statutory stakeholders / competent bodies (municipalities, ministries, agencies, etc.) and/or EBRD during the pre-construction stage will be included in the final documentation for construction.

2.1.2. ESMP during construction

National Road Administration delegates to the Contractor(s) the implementation of the E&S mitigation measures relating to the construction phase . This delegation is ruled by the respective E&S specifications in this ESMP (see Section 4) that will form part of tender documents/ procurement process and the Contractor's contract.

It will be the task of the appointed Contractor(s) to further detail the issues addressed in the ESMP, depending on the progress of project planning, up until and during construction (e.g. establishment of construction zones, temporary facilities for work force, details for storing construction and other materials, traffic and transport aspects, environmental protection and waste management issues, labour management issues, occupational and community health and safety, emergency preparedness, etc.).

2.1.3. ESMP during operation and decommissioning

The operation phase will start with the full commissioning of the Project. At that stage, all works will have been taken over from the Contractor by National Road Administration who will implement most E&S management measures to ensure compliance with the Project's mitigation strategy, using their environmental management system, in order to meet respective regulations and guidelines.

In addition, the implementation of the key E&S mitigation measures relating to the maintenance works would be delegated to the respective Contractor (i.e. the Contractor for maintenance of the M3 road). This delegation will be ruled by specific contractual arrangements.

E&S management actions for the decommissioning phase of the Project cannot be planned at the time of writing of this ESMP due to the anticipated lifespan of the proposed structures.

After construction, the Project will become an integral part of the road network of National Road Administration. As such, the lifespan of the Project elements may be longer than the anticipated time, depending on their condition, refurbishment and the future road network requirements. Decommissioning will, therefore, be undertaken in accordance with the regulations and guidelines applicable at that time.

2.2. Contractor Construction ESMP and National Road Administration ESMS

The Contractor shall develop a CESMP and associated management plans (sub-plans) or procedures detailed in actual ESMP. On behalf of National Road Administration, the Supervision Consultant will review and approve the documents.

With the support of the Supervision Consultant, National Road Administration will implement the requirements and standards set out in their corporative ESMS. The ESMS establishes the organisational structure, responsibilities,

practices and resources necessary for implementing and/or monitoring the Project-specific management plans and procedures set out in this ESMP, covering the construction and/or the operational phase of the Project.

2.3. Project-related environmental and social performance standards

The Project's internal stakeholders (NRA, Supervision Consultant and Contractor(s)) will comply with all norms, standards as defined in the relevant national regulations of Republic of Moldova.

The Project will also comply with the environmental and social policies of the EBRD, i.e. the EBRD's Environmental and Social Policy and relevant Performance Requirements.

National Road Administration will also apply and require its Contractor(s) (and subcontractors) to comply with good international practice while managing environmental, social, and health and safety issues during the Project's construction phase.

2.4. ESMP document schedule

The next Table lists the document schedule that will be prepared by the Contractor(s) and NRA/ Supervision Consultant as part of the ESMP implementation. The requirements and the content of these documents are further described in this ESMP.

A typical outline/ structure of a Management Plan is provided in Annex 1 that can be used for preparing the specific plans, part of the Construction Environmental and Social Management Plan.

Contractor(s) (Plans and Procedures)	National Road Administration (ESMS)
<p>Construction Environmental and Social Management Plan (CESMP):</p> <p>Environmental, Health and Social Organisation</p> <p>Site Environmental, Health and Social Overview</p> <p>Environmental and Social Procedures, to include the following specific Management Plans:</p> <ul style="list-style-type: none"> ▪ Pollution Prevention and Control Plan, to include air quality and water quality management procedures as well as land pollution prevention and control procedures ▪ Soil Management and Erosion Control Plan, including management of excavated material ▪ Noise Management Plan ▪ Chemicals and Hazardous Substances Management Plan ▪ Waste Management Plan ▪ Utilities Management Plan ▪ Site Reinstatement Plan ▪ Occupational Health and Safety Plan ▪ Traffic Management Plan ▪ Community Health and Safety Plan ▪ Labour Management Plan, including Workers' Code of Conduct and Worker Grievance Mechanism ▪ Worker Accommodation Plan (if applicable) ▪ Human Resources Management Plan and Human Resources Policy ▪ 'Chance-Find' Procedure, for archaeological discovery ▪ Emergency Preparedness and Response Plan ▪ Stakeholder engagement and community liaison procedures, based on the Project's Stakeholder Engagement Plan 	<ul style="list-style-type: none"> ▪ Elaboration of internal Environmental and Management System ▪ Resettlement Action Plan (RAP), and monitoring reports ▪ Climate Resilience Action Plan ▪ Labour Management, including Worker Grievance Mechanism ▪ Stakeholder Engagement Plan (SEP), reviews and updates ▪ A company GBVH Policy with procedure for reporting on incidents ▪ Community Health and Safety ▪ Human Resources Policy

Monitoring Reports	E&S Performance Reports
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Table 2-1: Contractor Plans and Procedures, NRA ESMS

3. Project Description

3.1. M3 Road Corridor (Tranche 2) – Project Overview and Strategic Rationale

Tranche 2 of the M3 Road Corridor Project involves the rehabilitation and upgrading of 70.9 km of the M3 Chişinău–Cimişlia–Comrat–Giurgiuleşti corridor, including selected connections to the Romanian and Ukrainian borders. The Project forms part of the Trans-European Transport Network (TEN-T) and supports Moldova’s National Mobility Strategy 2030 and the National Development Strategy “European Moldova 2030”.

The corridor represents Moldova’s main north–south transport axis, linking the capital with key agricultural and industrial regions and with Giurgiuleşti International Free Port, the country’s only maritime and river port. It facilitates both domestic and international freight flows toward Romania and Ukraine and is therefore of strategic national and regional importance.

Tranche 2 is divided into four Lots:

- Lot 1: Airport I/C – Porumbrei (34.4 km)
- Lot 2: Porumbrei – Cimişlia (19 km, widening from two to four lanes)
- Lot 3: Cimişlia – Comrat (12 km)
- Lot 4: Giurgiuleşti Ring Road (5.5 km)

The alignment crosses mainly agricultural and semi-rural areas and passes near four Emerald Network sites (“Moleşti–Rezeni”, “Carbuna”, “Bugeac Steppe” and “Prutul de Jos Lakes”).

Due to the scale and potential environmental and social impacts, the Project has been classified as Category A under the EBRD Environmental and Social Policy and requires a comprehensive Environmental and Social Impact Assessment (ESIA).

The Project addresses critical infrastructure deficiencies such as pavement degradation, limited capacity, and road safety risks. It aims to improve mobility, reduce accidents and vehicle operating costs, facilitate international freight movement, and strengthen Moldova’s economic integration with the EU. The Giurgiuleşti Bypass will divert heavy transit traffic from residential areas, improving local environmental quality and road safety. Overall, Tranche 2 represents a key investment in safe, efficient, and EU-aligned transport infrastructure, supporting regional integration and Moldova’s EU accession process.

3.2. Proposed construction works and subsequent maintenance/operation

The construction activities under Tranche 2 include the following main components:

a) Roadbed and pavement works:

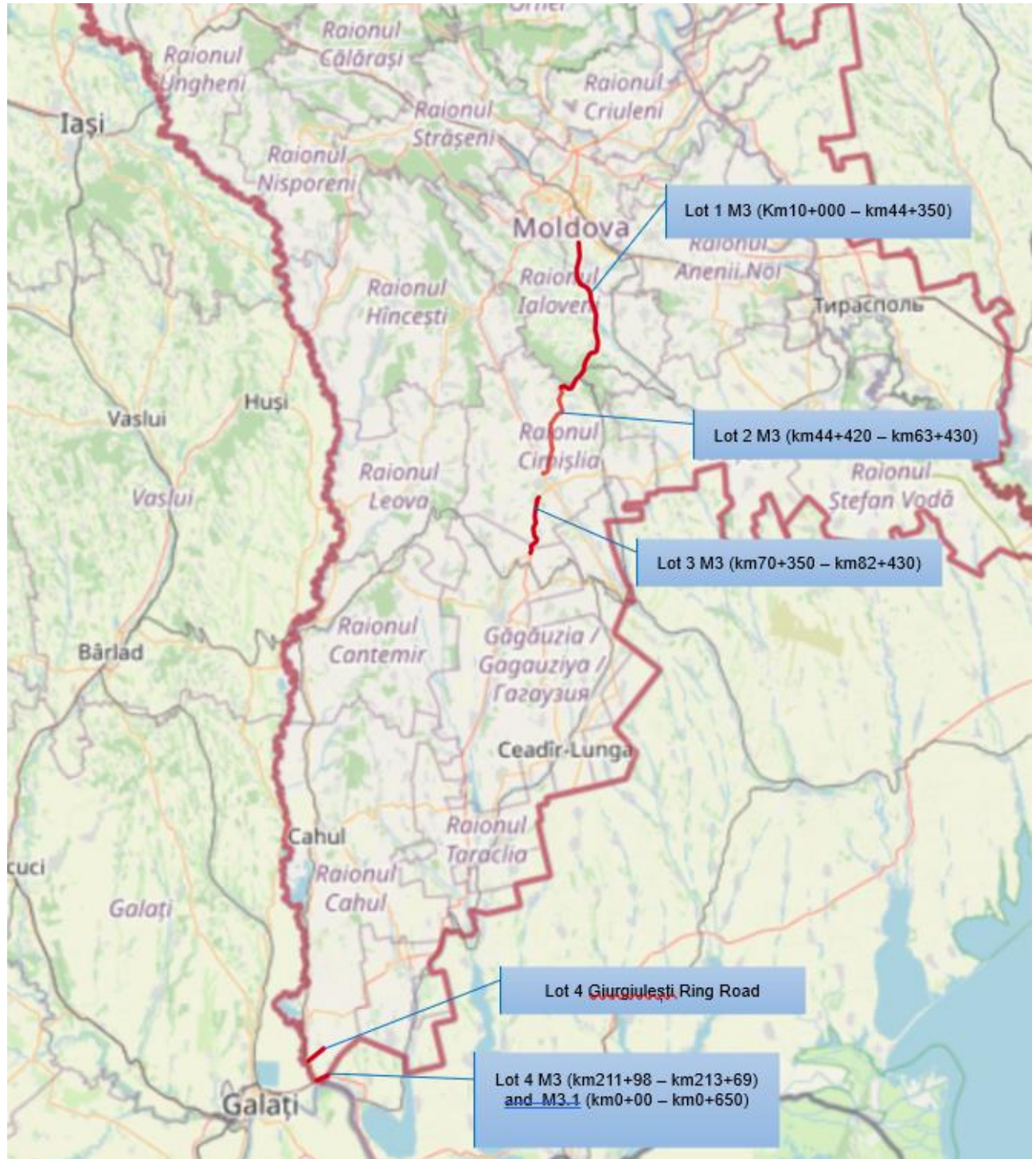


Figure 3-1: Overview of the 4 different Lots

- Rehabilitation of Lot 1, with design option of asphalt pavement layers or alternative including cement-concrete

pavement repair and sealing of joints;

- Upgrading and widening sections from 2 to 4 lanes on Lot 2 (Porumbrei–Cimișlia);
- Rehabilitation of asphalt pavement and restoring structural layers on Lot 3 (Cimișlia–Comrat);
- Construction of a new 2-lane bypass in Giurgiulești (Lot 4);
- Reconstruction of the road connecting the Ukrainian and Romanian border crossing points, by expanding it from 2 to 4 lanes.

b) Drainage and erosion-control works:

- Rehabilitation and construction of drainage ditches, culverts, channels, and slope-stabilisation measures;
- Installation of additional drainage structures in erosion-prone areas.

c) Bridges and junctions:

- Repair or reconstruction of existing bridges;
- Upgrading intersections and implementing safer traffic layouts.

Lot 1 - Airport I/C – Porumbrei

Length: 34.4 km (km 10+000 – km 44+350, with 4 traffic lanes)

Works: Rehabilitation; pavement strengthening; replacement of existing culverts; renewal of horizontal and vertical signage. Minor realignments will improve curvature and visibility near Răzeni and Porumbrei. All works remain within the existing right-of-way. No permanent land acquisition is required.



Figure 3-2: General view of the Lot 1 road section

Lot 2 - Porumbrei – Cimișlia

Length: 19 km (km 44+420 - km 63+430)

Works: Widening of the existing two-lane section to four lanes, with full pavement reconstruction and upgraded drainage. Safety measures include new guardrails, lighting at intersections, and improved grade-separated pedestrian crossings near villages along the route. This section passes mainly through agricultural land and does not intersect protected natural areas within the alignment.

Total land allocated in phase I for construction in the Porumbrei–Cimișlia sector: 91.13 ha. Bridge structures, culverts, engineering networks, and the roadbed are 95–100% complete. At moment, the operational road remains an unfinished construction project, with an estimated completion rate of 80–85%. Completion of the project will undoubtedly have a positive impact on road safety, driver and passenger comfort, as well as the environmental

situation in the region.



Figure 3-3: General view of the Lot 2 road section

Lot 3 – Cimișlia - Comrat

Length: 12 km (km 70+350 – km 82+430)

Works: Rehabilitation of the existing two-lane road with pavement replacement, shoulder strengthening, and selective drainage improvements. Works will restore structural integrity and riding quality while reducing maintenance needs.



Figure 3-4: General view of the Lot 3 road section

Lot 4 - Giurgiulești Ring Road and Border Links

Length: 6.2 km

Works: Rehabilitation of the M3 road (km 211.98 – km 213.69) and the M3.1 road (km 0.0 – km 0.65), as well as construction of a new 3.86 km bypass road around Giurgiulești village. From a logistical perspective, these roads are of strategic importance for the southern region of Moldova. The construction of the bypass will redirect heavy traffic to the border checkpoints with Ukraine and Romania, which currently pass through the village of Giurgiulești, causing discomfort for residents and compromising traffic safety.

M3 road, Tranche 2	Gigiulești Bypass	M3 km211+980-km213+690 and M3.1
Road category (NCM D.02.01:2024)	III	III
Climate zone	IV	IV
Length, km	3,86	2,45
Type of road surface	Asphalt	Asphalt
Number of lanes	2x4,0m	4x3,5m

Table 3-1: Overview of main characteristics of Project Roads (Lot 4)



Figure 3-5: General view of the Lot 4 road section (bypass and connection road between borders)

Scheme map

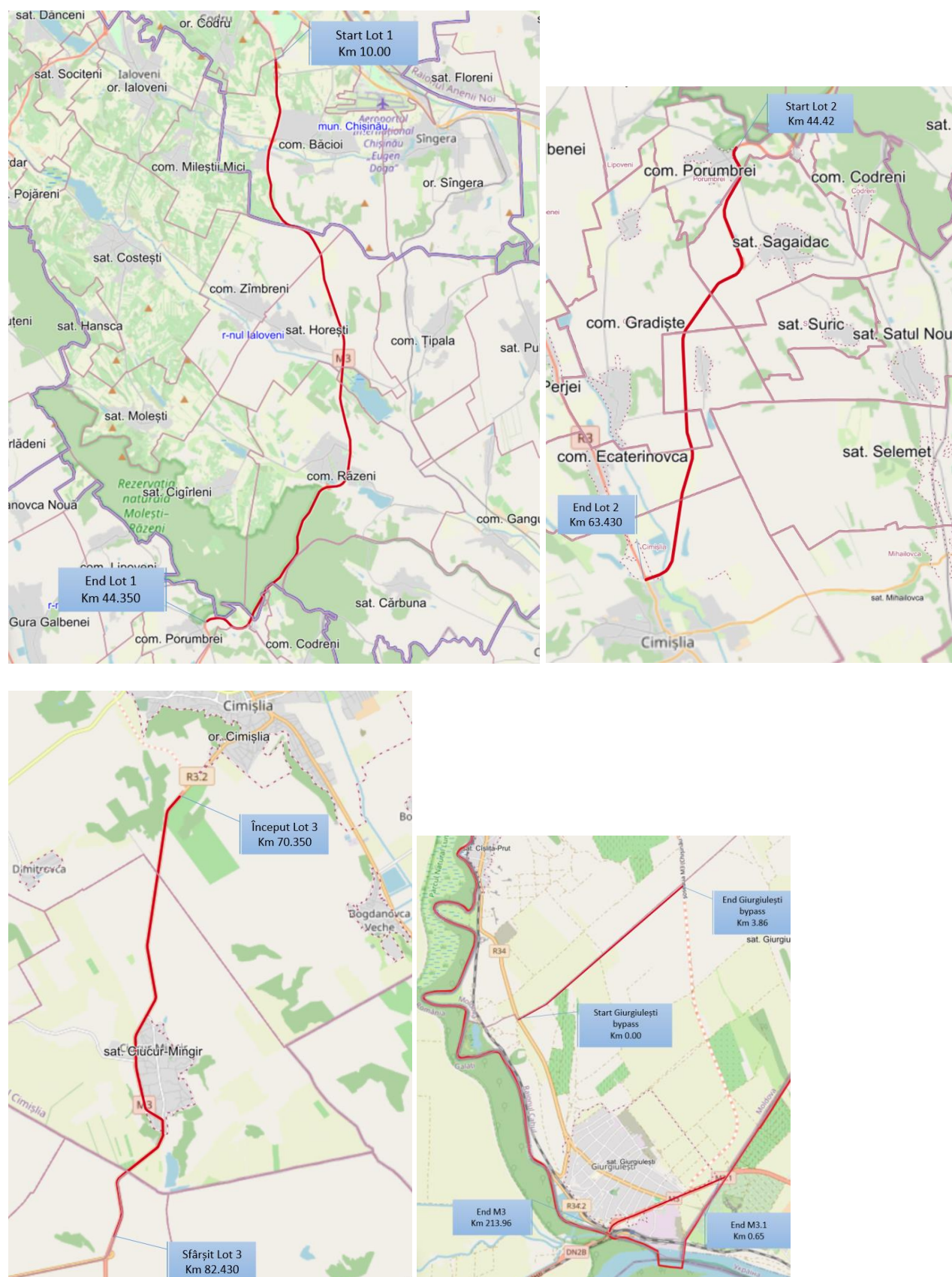


Figure 3-6: General view of the Lots, Tranche 2

3.3. Confirmation of Right-of-Way (RoW) and Design Finalization

The pre-construction phase includes final design confirmation, cadastral works, land acquisition procedures, compensation payment, and disclosure activities. Impacts during this phase are primarily administrative and socio-economic.

The preferred design concept prioritizes rehabilitation and widening within the existing RoW to minimize new land acquisition.

Lot 1 (Airport I/C – Porumbrei, km 10+000–44+350, 34.4 km)

- Rehabilitation works entirely within the existing RoW.
- No permanent land acquisition required.
- No temporary land occupation foreseen.
- No physical or economic displacement expected.

Lot 2 (Porumbrei – Cimișlia, km 44+420–63+430, 19 km)

- Rehabilitation and widening from 2 to 4 lanes.
- Land acquisition completed in Phase 1 (2019).
- 254 land plots acquired (64 public, 190 private).
- Compensation fully paid.
- Bridge structures and roadbed largely completed (95–100%).
- No outstanding grievances reported.
- Independent audit and possible Corrective Action Plan will be conducted.
- No new land acquisition currently foreseen under Phase 2 (detailed design pending).

Lot 3 (Cimișlia – Comrat, km 70+350–82+430, 12 km)

- Rehabilitation connecting two bypasses.
- No detailed design yet.
- No new alignment currently foreseen.
- Additional land acquisition cannot be fully excluded at this stage.

Lot 4 – Giurgiulești Bypass (3.85 km, new construction)

- New alignment requiring wider land acquisition.
- 59 private agricultural plots and 18 public plots affected (including 1 forest land).
- Permanent economic displacement possible.
- Cadastral works currently ongoing.
- Compensation valuation planned for 2026.
- No residential demolition expected.

Lot 4 – M3/M3.1 Connection Sector

- 49 private and 20 public lands affected (based on available data).
- Includes agricultural, construction-designated, gardens, uncategorized and indefinite ownership lands.
- Permanent economic displacement risks linked to access changes.

Potential Impacts

- Requirement for additional land due to design refinements (e.g., safety elements, agricultural access roads,

acceleration/deceleration lanes).

- Procedural delays linked to cadastral clarification or expropriation processes.
- Risk of community dissatisfaction if design changes affect access or land use.

3.4. Policy, legal and administrative framework

The Project is implemented in accordance with both Moldovan national legislation and the EBRD Environmental and Social Policy (ESP 2019), including its Performance Requirements (PRs). As the Project is financed by the EBRD, it has been classified as Category A, requiring a full ESIA and a robust stakeholder engagement process consistent with PR1 and PR10.

Key national laws applicable to the Project include:

- Law No. 86/2014 on Environmental Impact Assessment – transposing EU Directive 2011/92/EU; governs screening, scoping, public disclosure, and permitting.
- Law No. 1515/1993 on Environmental Protection – overarching environmental protection framework.
- Law No. 98/2022 on Atmospheric Air Quality
- Law No. 272/2011 on Water
- Law No. 239/2007 on Vegetal Kingdom
- Law No. 1538/1998 on State-Protected Natural Areas
- Forest Code No. 69/2024
- Land Code No. 22/2024
- Labour Code No. 154/2003 (employment and labour rights)
- Law No. 186/2008 on Occupational Safety and Health
- GD No. 80/2012 (requirements for temporary/mobile construction sites)

Relevant transport and spatial-planning legislation include:

- Law No. 509/1995 on Roads (last amended in 2025)
- Urban Planning and Construction Code No. 424/2023
- Law No. 488/1999 on Expropriation for Public Utility (last amended 2025)
- Law No. 131/2007 on Road Traffic (last amended 2025).

Environmental permitting requirements were verified for each lot of the Project, and Environmental Permits have been obtained or are in progress (Lot 4 permits: No. 0191/566/2024 and 0191/401/2024).

The Project complies with the following EBRD Performance Requirements:

- PR1 – Environmental and Social Assessment and Management;
- PR2 – Labour and Working Conditions (contractor labour, OHS, workers' accommodation);
- PR3 – Resource Efficiency and Pollution Prevention (air, noise, waste, materials, borrow pit);
- PR4 – Community Health, Safety and Security (traffic safety, construction impacts, emergency planning);
- PR5 – Land Acquisition and Involuntary Resettlement;
- PR6 – Biodiversity Conservation (including Emerald Network sites along the corridor);
- PR8 – Cultural Heritage (chance finds);
- PR10 – Stakeholder Engagement and Information Disclosure.

Where there are differences between Moldovan law and EBRD PRs, the Project will follow the more stringent requirements, in line with EBRD ESP 2019.

4. Environmental and Social Baseline

4.1. Physical Environment

4.1.1. Area of influence of the M3 road, Tranche 2

The Project defines specific areas of influence for environmental and social components during both construction and operation phases.

- Air quality: up to 500 m from construction sites and access roads; during operation, impacts may extend along the corridor and near Emerald Network sites (up to approx. 5 km).
- Noise and vibration: up to 500 m from works and operational traffic.
- Biodiversity: direct impacts within 1 km of Emerald sites and 500 m around other project areas; indirect effects up to 5 km.
- Surface water: within 500 m water protection zones; groundwater impacts relate to the underlying aquifer.
- Cultural heritage: within the project footprint and nearby settlements, including Băcioi, Răzeni, Porumbrei, Cimișlia, Ciucur Mingir and Giurgiulești.
- Social impacts: approximately 500 m on each side of the centreline— and the settlements located within roughly 2 km of junctions and access points.

These boundaries guide impact assessment, monitoring, and mitigation planning under the ESMP.

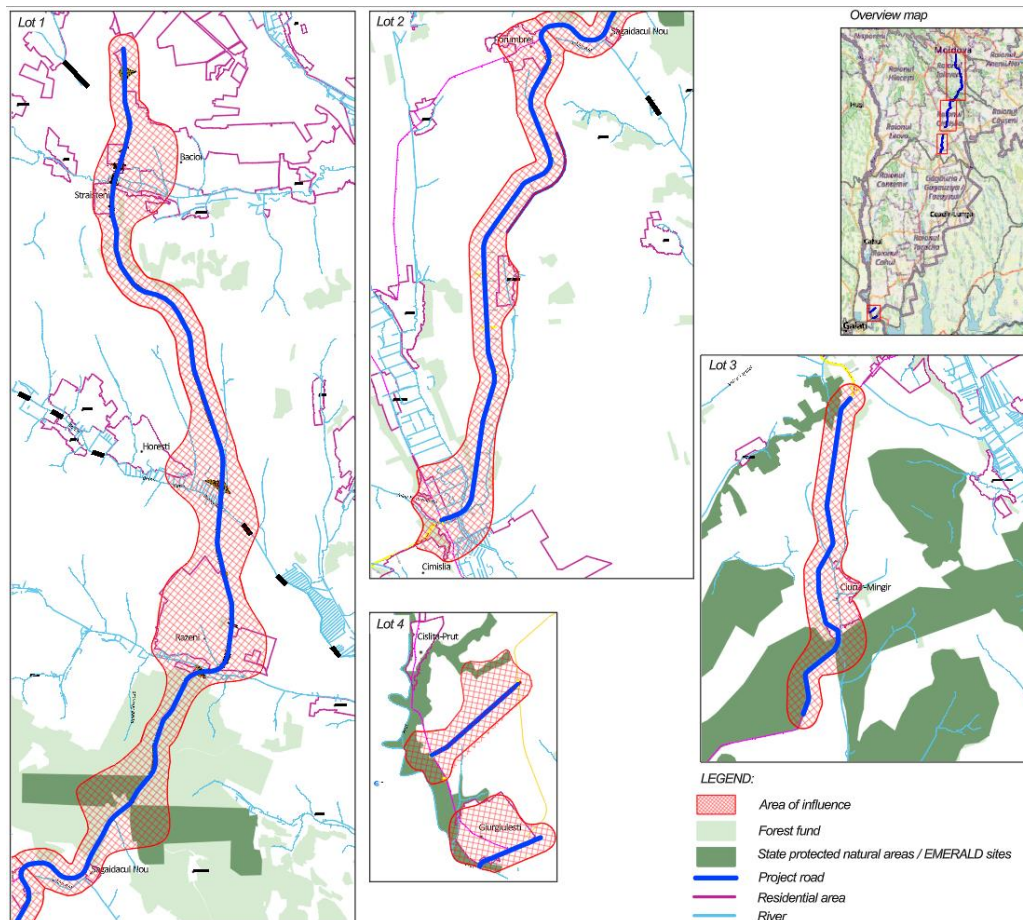


Figure 4-1: Project sites and area of influence

4.1.2. Air-Quality baseline along the M3 Corridor

Air-quality challenges in the Republic of Moldova are primarily concentrated in urban areas and along major traffic corridors, particularly in Chişinău. National statistics (2016–2024) show fluctuations but an overall increasing trend in road-transport emissions, mainly driven by carbon monoxide (CO) and nitrogen oxides (NO₂). This trend highlights the importance of integrating air-quality management into large transport infrastructure projects such as the M3 Road Corridor (Tranche 2).

The M3 corridor crosses predominantly rural and semi-rural areas where no permanent air-quality monitoring stations are installed. The nearest fixed monitoring station (Sarmizegetusa Street, Chişinău) indicates generally good to very good air quality conditions, with most PM_{2.5} values within acceptable limits and only occasional exceedances linked to adverse meteorological conditions. However, this station is not representative of baseline conditions along the Project alignment.

In the southern section, cumulative impacts may occur in the Giurgiuleşti area due to activities at Giurgiuleşti International Free Port and related transport infrastructure. Previous monitoring conducted in October 2022 for the Slobozia Mare Bypass (Cahul Public Health Center) showed that gaseous pollutants (CO, SO₂, NO₂, formaldehyde) remained below national maximum allowable concentrations (GD No. 125/2019). However, exceedances of total suspended particulates (PM_{total}) were recorded at locations influenced by construction activities and heavy traffic on unpaved roads.

These findings confirm that dust generation during construction represents the main short-term air-quality risk, while operational impacts are expected to be moderate and primarily traffic-related.

4.1.3. Noise and vibration

Road traffic is a significant source of environmental noise and ground vibration, generated by tyre–road interaction, engines, aerodynamic effects, and construction activities. Noise levels vary depending on traffic volume, speed, and driving behaviour, while vibration results mainly from dynamic wheel–pavement interaction and heavy construction equipment.

Identified sensitive receptors are located in several settlements along the M3 corridor, including Băcioi, Răzeni, Sagaidacul Nou, Porumbrei, Ciucur Mingir and Giurgiulești, where residential buildings are situated within 100 m of the carriageway. The highest concentration of receptors is recorded in Ciucur Mingir (~3.8 km) and Răzeni (~2.1 km). No existing soundproofing measures are currently in place in these sections.

Section	Position	Length (m)	Locality	Existing/designed soundproofing
1	KM 12+680 - KM 13+950 LS	1260	Băcioi village	No/No
2	KM 14+570 - KM 15+430 RS	860	Băcioi village	No/No
3	KM 14+610 - KM 14+880 LS	342	Băcioi village	No/No
4	KM 31+470 - KM 33+30 RS	1830	Răzeni village	No/No
5	KM 32+460 - KM 32+740 LS	280	Răzeni village	No/No
6	KM 41+753 - KM 42+77 LS	820	Sagaidacul Nou village	No/No
7	KM 44+530 - KM 45+680 RS	1150	Porumbrei village	No/No
8	KM 76+000 - KM 79+150 LS	3150	Ciucur Mingir village	No/No
9	KM 78+500 - KM 79+150 RS	650	Ciucur Mingir village	No/No
10	KM 211+870- KM 212+900 RS	1030	Giurgiulești village	No/No

Table 4-1: Residential area near the Project road, 100m

Baseline noise measurements are being undertaken by the Consultant at representative locations near residential and other sensitive receptors. Results was assessed against national standards (NCM E.04.02-2014 “Protection Against Noise”, SN 2.2.4/2.1.8.562-96) and Directive 2002/49/EC. Applicable limits are:

- 55 dBA (day) / 45 dBA (night) for residential areas (equivalent noise level);
- 40 dBA (day) / 30 dBA (night) inside sensitive buildings (e.g. schools, rest homes).

4.1.4. Geomorphology

Lots 1–3 are located within the Southern Moldavian Plain (Bugeac Plain), a subregion of the Moldavian Plateau situated between the Prut and Dniester rivers. The terrain is predominantly rolling and hilly, with alternating valleys and ridges typical of the southern plateau region.

- **Lot 1 (Chișinău–Porumbrei):** Elevation ranges from 50 m to 255 m. Moderately undulating relief with local slopes up to 8.6% and an average longitudinal gradient of 3.1%.
- **Lot 2 (Porumbrei–Cimișlia):** Elevation ranges from 78 m to 275 m. Gently descending terrain west–east;

maximum slope 8.7%, average 2.1%.

- **Lot 3 (Cimișlia–Comrat):** Elevation ranges from 126 m to 204 m. Undulating terrain with local slopes up to 9.3%, average 2.6%.
- **Lot 4 (Giurgiulești area):** Located in the Danube steppe zone; elevation ranges between 6.5 m and 79 m. The Giurgiulești Bypass shows a “wave-like” profile ($\Delta \approx 71.9$ m), with maximum gradients of 7.4%.

Overall, the relief is moderately uneven, with no major geomorphological barriers but with several slopes requiring stabilization.

4.1.5. Geological Conditions

The Project crosses Neogene formations (Sarmatian and Pliocene), composed mainly of clays, sandy clays, sands, gravels, marls, and sandstones. In the Giurgiulești area (Lot 4), deposits consist mainly of sands with gravel lenses and clays, typical of steppe and alluvial environments.

These lithological conditions indicate:

- Moderate susceptibility to erosion and water infiltration;
- Increased landslide risk in clayey and sandy-clay formations when saturated;
- Variable bearing capacity requiring site-specific geotechnical design solutions.

Seismicity

The M3 corridor is located in two seismic zones:

- 7-degree intensity (Lots 1–3);
- 8-degree intensity (Lot 4).

Strong earthquakes of this magnitude occur on average once every 35–40 years (notably 1977, 1986, 1990). Seismic design considerations are therefore required for bridges, retaining structures, embankments, and slope stabilization works.

4.1.6. Identified Geotechnical Risks

Site investigations and assessments identified localized instability risks:

- Lot 1: Landslides and settlements at km 14+600, 40+800–40+990, and 44+600 (right side), mainly caused by rainwater infiltration through slab joints into water-saturated sandy clays.
- Lot 2: Section km 0+200–0+700 located on unstable terrain prone to erosion and landslides; consolidation works already implemented in Phase I.
- Lot 3: No significant instability observed during site visit; slopes appear stable.
- Lot 4: Geological investigations did not identify significant landslide risks during the analyzed period.

4.1.7. Soil conditions

According to the pedogeographic regionalization of the Republic of Moldova, Lots 1–3 are located within the district of typical slightly humus-rich and leached chernozems of the xerophytic forest-steppe of the Southern Plain. These soils are loamy to clay-loam, moderately fertile (humus approx. 3–4%), with good water-retention capacity but increased vulnerability to erosion and drought-related degradation due to the arid climate.

Lot 4 (Giurgiulești area) is situated in the steppe zone of the Southern Bessarabian Plain, dominated by carbonate chernozems with slightly lower humus content (<3.5%) and alkaline reaction. These soils have moderate natural fertility but are sensitive to erosion and drying under steppe climatic conditions.

Agricultural land quality varies across the Project area:

- The highest bonitation score is recorded in Sagaidac (72 points).
- The lowest soil quality is observed in Giurgiulești (53 points).
- High levels of erosion affect several localities, particularly Ciucur-Mingir (approx. 50% of land area eroded).

Overall, 30–50% of agricultural land in the affected administrative units shows signs of erosion, indicating significant land degradation risks.

4.1.8. Land cover characteristics along the M3 Project corridor

According to the 2023 CORINE Land Cover data, the areas of influence along the M3 project road, analysed across Lots 1–4, predominantly traverse agricultural land, including non-irrigated arable land, irrigated arable land, and areas with complex cultivation patterns.

- In Lot 1, in addition to agricultural land (non-irrigated arable land, pastures and complex cultivation patterns), the area of influence also intersects surfaces classified as “Forest and Semi-Natural Areas”, represented by patches of natural vegetation, natural grasslands and shrub-covered areas.
- In Lots 2 and 3, the influence area overlaps mainly with agricultural land and mixed cultivation zones, with occasional intersections of discontinuous built-up areas and existing infrastructure.
- In Lot 4, the area of influence includes agricultural land, anthropogenic areas associated with road infrastructure and economic activities, as well as zones related to watercourses and wetlands, reflecting the local environmental context.

Overall, the 2023 CLC analysis indicates that the project alignment is located within a predominantly agricultural and human-modified landscape, with only limited intersections with forested and semi-natural areas.

4.1.9. Hydrological context and drainage conditions along the M3 Corridor

The Project crosses all major hydrographic basins of the Republic of Moldova (Dniester, Prut, Danube and Black Sea). Along the alignment, the M3 intersects several rivers, including Ișnovăț River, Botna River, Botnișoara River, Cogâlnic River and Prut River.

According to River Basin Management Plans and field investigations (February 2026), most crossed watercourses are classified as Class IV–V (polluted to heavily polluted), mainly due to:

- high organic load (COD, BOD₅),
- elevated ammonium and total phosphorus,
- diffuse agricultural runoff and insufficient wastewater treatment.

Groundwater used for public supply is generally microbiologically safe but shows elevated ammonium concentrations in several localities. Water from shallow individual wells (e.g., Giurgiulești area) presents significant chemical and microbiological non-compliance and is unsuitable for drinking without advanced treatment. These conditions reflect pre-existing regional pressures, not project-related impacts.

Low flood-risk areas are identified near the Ișnovăț, Botna and Cogâlnic rivers. However, existing drainage infrastructure in several sections—particularly Lot 1 and parts of Lot 4—is in deteriorated condition (damaged joints, silting, erosion, lack of end walls), reducing hydraulic efficiency.

River	Location	River Length (km)	Basin Area (km ²)	Average Annual Discharge (m ³ /s)	Dimensions of the protection zones*, m	Dimensions of the riparian sheets for water protection**, m
Ișnovăț	14+550	59	371	0,2	500	20
Botna	27+300	146	1540	0.79	500	50
Botnișoara	33+450	NA	NA	NA	15	5
Cogâlnic	62+720	104.2	1031.1	0.70	500	50
Prut	213 +400	953	27,540	110	1000	100

Table 4-2: Basic hydrological characteristics of selected rivers

*Within the limits of water protection zones, the following activities are prohibited: discharge of untreated wastewater into the soil or watercourses; cutting of trees and shrubs; extraction of solid sediments (sand, gravel, pebbles, stones) from the minor riverbed for commercial purposes.

** The territory of the riparian strips of water protection is used for the creation of forest curtains, for haymaking and for the restoration of spawning sites in floodplains and river deltas.

Low flood-risk areas were identified near the Ișnovăț, Botna, and Cogâlnic rivers.

Technical inspections show varying conditions of existing drainage structures:

- **Lot 1:** many culverts are deteriorated (cracked joints, siltation, erosion). Actions required include repairs, sealing, cleaning, reconstruction of inlet/outlet ditches, and installation of end walls.
- **Lot 2:** culverts built in Phase 1 are in good condition and require no major interventions.
- **Lot 3:** no inspection data available – further surveys needed.
- **Lot 4:** several culverts in unsatisfactory condition; solutions include replacement with new tubular or box culverts and construction of additional drainage structures (e.g., Giurgiulești Bypass).

Based on hydrological calculations, the project proposes:

- cleaning and repairing existing culverts,
- replacing damaged structures,

- constructing new culverts where drainage capacity is insufficient,
- restoring erosion protection and end walls,
- improving roadside drainage channels.

These measures will enhance drainage efficiency, reduce flood and erosion risks, extend the service life of rehabilitated road sections.

4.2. Biological Environment

The basic conditions of biodiversity in the Central-Southern area are specific and different, considering the geographical position, relief, vegetation cover, animal species and migration routes.

The target groups selected for gap analysis for biodiversity impact for M3 Road are as follows:

- Emerald Sites with Natural Protected areas (NPA);
- Habitats of Flora and Fauna;
- Migratory species;
- Natural ecosystems (forestry, aquatic, palustic).

The M3 Road crosses the territory of four sites of the Emerald Network:

Sensitive Zone	Description	Location
Padurea Molesti-Rezeni (Forest Molesti-Rezeni), Site Code: MD0000026	It represents nature habitat of forest with the distance along the road is 780 m (from km 38+150 - Km 38+930 in the Lot 1 of the M3 Road	
"Carbuna" Natural Reserve (SiteCode: MD0000022) - Lot 1	It represents nature habitat of forest and only a corner is at the limit of the road of Km 39+150 (with a distance of 130 m to the road) in the Lot 1 of the M3 Road	
Stepa Bugeacului" (Bugeac Steppe) (SiteCode: MD0000016) - Lot 3 (Cimislia – Comrat, 12km	The road intersects the Emerald Site in 2 places: between km 79+100 to 79+600 km (with a distance of 500m along the road) in the area of the Dimitrovca village and intersects the road at km 82+900 in the area of the Ciugur Mingir village in the Lot 3 of the M3 Road. It is representing nature and modified habitats.	


<p>Lacurile Prutului de Jos” (Prutul de Jos Lakes) (SiteCode: MD0000012) – lot 4 (Connection with new bridge over River Prut at the Romanian border, 5km)</p>	<p>The road intersects the Emerald Site between km 213+420 to 213+290 km (with a distance of 130m along the road) in the area of the Romanian border.</p> <p>Entry to this area is prohibited, including for the administration of the Lower Prut Reserve, but also for scientific researchers. It is representing nature (degraded) habitats</p>	
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Table4-3: Road crosses the territory of four sites of the Emerald Network

The habitats of the Emerald sites along the M3 Road (Lots 1,3 and 4) will not be influenced with the risk of degradation or change of the areas of the target animal and plant species, with protection status at national, regional and local level, considering that only the rehabilitation works of the road will be organized.

With reference to Lot 2 of the road, there are no Emerald sites in this area, but neither are their important habitats. In the intervention area, also the following sensitive zones and areas of special interest have been established (natural protected areas (NPA) and Natural ecosystems):

Sensitive Zones	Areas of special interest
<p>Natural protected areas (NPA)</p>	<ul style="list-style-type: none"> Lot 1: Nature reserves: “Molești – Răzeni” and “Molești” (Part of Emerald Site „Padurea Molesti-Rezeni” (Forest Molesti-Rezeni, Code: MD0000026) and Landscape reserve: “Carbuna” (part of Emerald Site “Carbuna”, Code: MD0000022); Monument of nature, Geological and Paleontologic: “The Outcrop - Costești”. Lot 2 – there are no NPAs Lot 3: Nature reserve (for medicinal plants):” Bugeac Steppe (Stepa Bugeacului)” (part of the Emerald site” Bugeac Steppe”, Code: MD0000016); Lot 4: Scientific reserve: “Lower Prut” (Prutul de Jos), Biosphere reserve: “Lower Prut” (Prutul de Jos), Wetlands of international importance (RAMSAR List): “Lakes of the Lower Prut” (Lacurile Prutului de Jos)- all part of the Emerald Site “Lacurile Prutului de Jos” (Prutul de Jos Lakes), Code: MD0000012)
<p>Natural Ecosystems</p>	<ul style="list-style-type: none"> Forest Ecosystems: in the area of Lot 2 – forest bodies (Molești, Răzeni) managed by the State Silvo Cinegetic Enterprise “Sil - Răzeni” (Ialoveni District); Aquatic Ecosystems: Prut, Ialpuș, Cogâlnic Rivers and other small rivers form valuable floodplains and wetlands; natural lakes and ponds (Manta, Bealeu – part of the <i>Lower Prut Reserve</i>), Sasyk Liman and its connections with the Danube and Black Sea increase the area’s importance as a stopover site for migratory birds Steppe Ecosystems: in the area of the Bugeac steppe (Lot 3) but also in other areas along the route of the M3 road. Agricultural Ecosystems: the multiannual agricultural plantations (wheat, corn, barley, sunflower, alfalfa, rapeseed, etc.), the vineyards and orchards are encountered along the road

Table 4-4: Overview of sensitive zones



Figure 4-2: Pictures of sensitive zones

The **Flora** species in the Project area is varied (from Lot 1 in the Center to Lot 4 in in the southwestern part of the

Republic of Moldova, along the lower course of the Prut River) and depends on the type of habitats established in these areas. In Lot 1 there are forest habitats on mesotrophic soils and dominated by oak species - *Quercus robur* and *Quercus petraea* and with the presence of other deciduous species: *Fagus sylvatica*, *Carpenus betulus* and *orientalis*, *Tilya cordata*, *Cerasus avium* and others shrubs: *Crataegus*, *Ligustrum*, *Swida*, *Sambucus nigra*, *Staphylea pinnata*. Herbaceous plants were evaluated in the field: *Artemisisa vulgare*, *Arum orientale*, *Asarum europaeum*, *Asparagus officinalis*, *Asparagus thenuifolius*, *Brachypodium sylvaticum*, *Bromopsis benekenii*, *Corydalis solida*, *Cucubalus baccifer*, *Dactylis glomerata* and others.



Figure 4-3: Pictures of flora

The **Forest** in the site is of medium productivity; the trees are of medium and low height and small diameter. There are many invasive species in this area, such as *Robinia pseudoacasia*, *Acer negundo* and *Amorpha*. In Lot 3 is the habitat, dominated by the meadows of the steppe area, with the species of fescue, cheleria, crested pyrus, clover, alfalfa, sparcet, crown, cosacks, which are well adapted to the arid conditions of the south. In Lot 4, the ecosystem is dominated by the Prut River, which constitutes the main hydrological axis and determines the structure of adjacent habitats. The left bank of the river is poor in vegetation, developing in some places natural formations of willows (*Salix alba*, *S. fragilis*, *Elaeagnus angustifolia*, *Populus alba*, *Amorpha fruticosa*, *Juglans regia*) that play a major ecological role in stabilizing the soil, reducing erosion and creating shaded microhabitats, favorable to birds, amphibians and aquatic insects, among others.

According to the data from the technical documents, regarding the deforestation of trees, carried out in accordance with the legal requirements, the following data were established: i) Lot 1 – 3 trees; ii) Lot 2 - In phase 1 of the construction project, about 616 trees were cut. No deforestation planned for phase 2; iii) Lot 3 – there is no information; iv) Lot 4 (Giurgiulești bypass) – 55 trees and Lot 4 M3, M3.1 road -18 trees. In total: **692 trees and shrubs**. All deforested trees and shrubs are located along the road, mostly spontaneously grown and have a diameter of less than 50 cm. Thus, they do not pose a risk to the state forest fund.

The most important species of **Fauna** in the area of interest of the M3 Road are found in the NPA: Molești Rezeni" and "Cărbuna" and the Ramsar Wetland "Prutul de Jos". NPA "Molești Rezeni" is populated by 28 species of mammals, of which are mostly common species: *Erinaceus europaeus*, *Talpa europaea*, *Lepus europaeus*, *Apodemus agrarius*, *Apodemus sylvaticus*), șoarece-gulerat, *Apodemus flavicollis*, *Iethrionomys glareolus*, *Nyctalus leisleri*, *Vulpes vulpes*, *Capreolus capreolus*, *Meles meles*, *Martes foina*. In the last 10 years, the wolf (*Canis lupus*) and the jackal (*Canis aureus*) are often present in the area. Some of these species (in particular *Capreolus capreolus*, *Lepus europaeus*, *Sus scrofa*) are of hunting interest but also poaching. The number of coated animals has increased a lot in the last 10 years.



Figure 4-4: Pictures of fauna

In the southern part of Moldova, the three routes get undercrossed, hence being the zone registering the most intense migration birds in the country. According to the Institute of Zoology of RM monitoring data, organized during the observation period from autumn to summer, in recent years, were observed in the South part of RM, the average number of birds observed is as follows:

- in the spring/summer/early autumn period: 55 bird species - in aquatic, semi-aquatic and palustric ecosystems and 72 bird species - in forest, steppe and semi-steppe ecosystems;
- in the autumn-winter/early spring period: 23 bird species - in aquatic, semi-aquatic and palustric ecosystems and 37 bird species - in forest, steppe and semi-steppe ecosystems.

**Figure 4-5: Overview of bridges used as ecoducts**

3.3 Socio-Economic Environment

The M3 Project is located in the central and southern development regions - areas where poor transport infrastructure limits mobility, trade, and investment. By improving road conditions and regional connectivity, the Project will directly support Moldova's regional-development objectives, stimulate local economies, and enhance household income opportunities along the corridor.

Administrative Districts and settlement within the Project area:

Approximate lengths and main administrative areas are shown and summarised below:

Lot	Approx. Length (km)	Key Administrative Units / Settlements within Aol
1	34,4	Chişinău municipality – Băcioi commune (with Bacioi, Straisteni, Frumuşica and Brăila villages), Ialoveni district – Răzeni commune (with Mileştii Noi village), Horeşti commune and Țipala commune (with Budăi and Bălţaţi villages), Cimişlia district – Porumbrei commune (with Sagaidacul Nou village)
2	19	Cimişlia district – Porumbrei village, Grădişte commune (with Iurievca village), Ecaterinovca commune (with Coştangalia village) and Sagaidac villages, Cimişlia city
3	12	Cimişlia districts – Cimişlia city, Ciucur-Mingir village
4	6,2	Cahul district – Cîşliţa-Prut village and Giurgiuleşti village

Table 4-5: Overview of the administrative areas of the different Lots

National trends frame the more specific situation in Ialoveni (Centre Region) (Lot 1), Cimişlia (Lot 1,2,3) and Cahul (South Development Region – Lot 4).

Ialoveni District (Centre Development Region) – Lot 1

Population and settlement pattern: Ialoveni is a centrally located district adjacent to Chişinău. The district population is about 74,458 inhabitants (2024 census) over ≈783.5 km², giving a relatively high population density

by Moldovan standards. The area is predominantly rural, though with strong peri-urban dynamics due to proximity to the capital; historically over 80% of the population lived in rural localities.

Demographic profile: The population is largely Romanian/Moldovan in ethnicity ($\approx 81\%$ Moldovan, 16% Romanian; small Ukrainian, Russian, Bulgarian and Roma minorities). Fertility is slightly above the national average (TFR ~ 1.86 in 2024), which helps slow but does not stop ageing. Ialoveni has a relatively young and active population compared to many rural southern districts, but with increasing shares of elderly in remote villages.

Migration patterns Ialoveni experiences intense commuting and internal migration towards Chişinău: many residents work or study in the capital while maintaining residence in the district. External migration is also present (mainly labour migration to EU and CIS countries), but the district benefits from its location through better access to jobs and services, which moderates depopulation versus more peripheral districts.

Employment and economic structure Ialoveni's labour market is mixed:

- strong commuter employment in services, industry and construction in Chişinău;
- local jobs in agriculture, viticulture, horticulture and small agribusiness;
- growing trade, logistics and light manufacturing along the main transport axes.

Average wages in Ialoveni (around 9,700 MDL gross/month) are slightly above the national rural average, reflecting this integration with the capital's labour market.

Cimişlia District (South Development Region) – Lot 1-3

Population and settlement pattern Cimişlia District is located along the M3 corridor in the South Region. The 2024 census recorded 30,986 residents over ≈ 924 km², meaning the population has halved since 2004 due to sustained out-migration and low fertility. Settlements are mostly rural villages, with the town of Cimişlia as the administrative centre.

Demographic profile Cimişlia is predominantly Romanian/Moldovan in ethnicity with small Ukrainian, Russian and Bulgarian minorities. The district has a relatively high fertility rate (TFR ≈ 1.96), above the national average and among the higher values in the country, but this is offset by strong emigration and an ageing rural population.

Migration trends Cimişlia is one of the districts with intense net emigration, particularly among young adults. Analytical work based on census and administrative data highlights very high emigration rates for men aged 20–24 in Cimişlia, exceeding 8% in some cohorts and contributing to a sharp decline in the local male working-age population. Household strategies often rely on seasonal or long-term migration to EU or CIS labour markets, with remittances playing an important role in local livelihoods.

Employment and economic structure The district economy is dominated by agriculture (arable farming, orchards, vineyards, livestock), with over half of land in agricultural use. Local non-farm employment is concentrated in public services (education, health, administration), small trade and services in Cimişlia town, and road-related activities along the M3. Limited local job opportunities and low wages are key push factors for emigration and for commuting towards Chişinău and other centres.

Cahul District (South Development Region) – Lot 4

Population and settlement pattern Cahul District, located in the far south bordering Romania and Ukraine, had 72,775 residents in 2024 over about 1,545–1,546 km². The district combines the mid-sized municipality of Cahul ($\approx 22,200$ inhabitants in 2024) with a large number of rural communes (including Giurgiuleşti village). Population density is moderate, but out-migration has significantly reduced the rural population over the last decade.

Demographic profile The population is mainly Romanian/Moldovan, with important minorities (Ukrainians, Gagauz, Bulgarians, Russians) especially in villages near the Prut and in multi-ethnic rural areas. Fertility in Cahul (TFR ~1.59) is below both the Southern Region and national averages, contributing to rapid ageing in rural communities.

Migration trends Historically, Cahul town has had a positive internal migration balance, attracting residents from surrounding rural areas, while the district as a whole faces net external emigration similar to other southern districts. Young people often leave for higher education and work in Chişinău, Romania or other EU countries. Depopulation is most visible in remote villages and those affected by limited access to services and markets.

Employment and economic structure The district economy is mixed:

- agriculture (crops, viticulture, livestock) on the Bugeac plain and Prut lowlands;
- cross-border trade, logistics and services linked to the customs point at Giurgiuleşti and to proximity to Romania;
- public services, education and health concentrated in Cahul municipality (including the state university);
- emerging tourism and spa services around Cahul's thermal resources.

However, structural challenges remain: low wages, limited high-skilled jobs and seasonality drive continued out-migration and underemployment, particularly among youth and women in rural areas.

The economic structure of the Republic of Moldova is defined by a gradual transition from an agriculture-dependent economy to one increasingly driven by services and trade. Services account for over half of GDP, while agriculture and agro-industry continue to employ a significant share of the labour force, especially in rural areas. Industry is moderately developed, with food processing, light manufacturing, construction materials and textiles forming the main subsectors.

Household livelihoods vary significantly between urban and rural areas. In rural communities, income sources are typically mixed, combining wage labour, small-scale agriculture, pensions, and remittances from family members working abroad. Labour migration remains one of the most influential economic factors, with a substantial proportion of households depending on remittances to finance consumption, education and reinvestment in housing or small businesses.

Average gross monthly earnings in the national economy reached about 14,100 MDL in 2024 (approx. 680 EUR), with continued nominal growth in 2025¹ Average gross monthly earnings are higher in Chişinău and lower in the central and southern districts, leading to persistent income disparities. Rural households remain more vulnerable to climate variability, agricultural price fluctuations and reduced labour market access.

Ialoveni District – Lot 1

Economic Activities Ialoveni district, located adjacent to Chişinău, has a peri-urban, diversified economy. The district benefits substantially from its proximity to the capital, which provides expanded employment opportunities.

Key economic sectors include:

- Viticulture and wine processing, with vineyards, wine cellars and agro-industrial cooperatives.
- Agro-industry and food processing, particularly fruit and vegetable products.
- Services and trade, concentrated in Ialoveni town and suburban communes.
- Construction and small manufacturing, linked to the expansion of the Chişinău metropolitan area.

¹ https://statistica.gov.md/en/statistic_indicator_details/2

A considerable share of the working population commutes daily to Chişinău for employment in public institutions, education, health, logistics, retail, and private enterprises. M3 route is daily used by Horeşti, Țipala, Răzeni residents.

Household Income sources in Ialoveni reflect both urban and rural characteristics:

- Primary income: wage employment (in Chişinău and local SMEs), agricultural sales (grapes, fruits, vegetables), and small transport or trade businesses.
- Secondary income: remittances from abroad and pensions, which supplement household budgets in mixed-livelihood families.

Households generally have higher and more stable incomes than in other rural districts due to better labour market integration and diversified economic activity.

Cimişlia District – Lot 1-3

Economic Activities Cimişlia district has a predominantly agricultural and rural economic structure. The district hosts an industrial park and a sub-zone of the “Bălţi” Free Economic Zone, which concentrate several manufacturing and logistics enterprises. Its economy is characterised by:

- Crop production (cereals, sunflower, maize),
- Viticulture and orchards,
- Livestock farming (cattle, sheep, poultry),
- Small-scale processing of food products and construction materials,
- Presence of an industrial park and Free Economic Zone sub-zone, which host small manufacturing, logistics, and storage facilities.

Despite these assets, employment opportunities outside agriculture remain limited, and wage levels are typically below national averages.

Household Income Household incomes in Cimişlia are shaped by the strong agricultural base and limited non-agricultural employment:

- Primary income: agricultural production (family farms), seasonal labour, and local employment in trade, construction, and public services.
- Secondary income: remittances from migrant workers abroad, which remain critical for many rural households; pensions and social allowances.

Income vulnerability is elevated due to climate-related risks (droughts), fluctuating yields and market volatility for agricultural products.

Cahul District – Lot 4

Economic Activities Cahul district is the economic and administrative centre of the southern region, with a more diversified economy than other districts along the M3 corridor. Economic activities include:

- Agriculture on fertile soils (cereals, sunflower, vineyards, vegetable farming).
- Food processing and small industry, including dairy, bakery and wine production.
- Services, trade, education and health, concentrated in Cahul municipality.
- Cross-border trade and transport, supported by the district's proximity to Romania and the Giurgiuleşti international port.
- Tourism and hospitality, including spa facilities, ecological routes and wine routes.

Household Income Income sources reflect the urban–rural divide:

- Urban households (Cahul municipality): depend primarily on wages from services, administration, education, health, banking, logistics and retail.
- Rural households: rely more heavily on agriculture, livestock, seasonal labour and remittances.
- Secondary income sources: pensions, social allowances and remittances, which play a stabilising role in rural villages.

Income levels in Cahul municipality are generally higher and more stable, while rural areas remain sensitive to agricultural conditions and market dynamics.

Across the three districts, the baseline reveals several important considerations for ESIA impact assessment:

- Rural economies (Cimişlia district, rural Cahul district) are highly dependent on agriculture, making them more vulnerable to access restrictions to land, changes in mobility, or disruption to agricultural cycles.
- Ialoveni's peri-urban economy is more resilient, with households better integrated into wage labour markets in Chişinău.
- Remittances remain a vital source of income, especially in Cimişlia and rural Cahul, reducing immediate poverty but also contributing to high out-migration.
- Elderly-headed households relying mostly on pensions are present across all districts and represent a vulnerable group during construction-related disturbances.

Small roadside businesses (trade, services) along the M3 corridor form part of household income and may be affected by temporary access restrictions.

5. Potential environmental and social risks and impacts

5.1. Impact Assessment Methodology

The significance of impacts on environmental and social receptors is determined using three main criteria:

- Intensity (based on magnitude of effect and receptor value)
- Duration (temporal aspect)
- Extent (spatial aspect)

Impact significance is defined as: $\text{Significance} = \text{Intensity} + \text{Duration} + \text{Extent}$

Where:

$\text{Intensity} = \text{Magnitude of Effect} + \text{Receptor Value}$

- Magnitude of Effect evaluates the degree of change to the receptor:
 - High – Loss or major modification of key characteristics, risking loss of identity (e.g., destruction of fertile soil layer).
 - Moderate – Partial alteration reducing quality but not identity (e.g., wind erosion).
 - Low – Minor, temporary changes without lasting degradation (e.g., dust deposition).
- Receptor Value reflects the environmental or social importance of the affected component, based on legal status, sensitivity, or expert judgment.

Duration	Extent	Intensity		
		High	Moderate	Low
Long-term	Regional	H	H	M
Long-term	Local	H	M	L
Long-term	Limited	M	M	L
Medium-term	Regional	H	M	M
Medium-term	Local	H	M	L
Medium-term	Limited	M	L	L
Short-term	National	H	M	M
Short-term	Regional	M	L	L
Short-term	Local	M	L	L

Table 5-1: Semi-quantitative assessment grid

5.2. Project Impact Summary Matrix

All impacts of the M3 Project have been assessed using standard criteria (intensity, duration, extent), and significance remains manageable through mitigation measures, good construction practices, monitoring, and compliance with national legislation and EBRD Performance Requirements.

Phase	Impact	Intensity	Duration	Extend	Significance of impact
Air quality					
C	Dust emissions from construction activities	High	Short term	Local	Moderate
C	Emissions of air pollutants associated with construction-related traffic	Moderate	Short term	Local	Low
O	Dust emissions associated with road traffic	Low	Long term	Local	Low
O	Air emissions generated during operational traffic flow	Moderate	Long-term	Local	Moderate
Soil					
C	Accidental losses of fuel and lubricants	Low	Short term	Local	Moderate
C	Non-compliant management of construction materials and waste	Moderate	Short term	Local	Low
C	Loss of fertile soil quality due to the organization of the construction site	High	Short term	Local	Moderate
C	Increased vulnerability to erosion due to excavation and creation of foundation pits	High	Short term	Local	Moderate
C	Temporary loss of topsoil for the borrow pit and access road; risk of erosion; alteration of the local relief.	Moderate	Medium-term	Local	Moderate
O	Soil erosion caused by rainwater runoff	Low	Short term	Local	Low
O	Accidental losses of fuel and lubricants	Low	Short term	Local	Low
Water resources					
C	Oil and fuel leaks from machinery operation	Moderate	Short-term	Limited	Low
C	Use of water resources for construction activities, potentially competing with local water supply for communities especially in Porumbrei and Giurgulești	Low	Medium-term	Local	Low
C	Water pollution due to improper management of waste and wastewater	Moderate	Short-term	Local	Moderate
O	Oil and fuel leaks from transport and maintenance equipment	Low	Medium-term	Local	Low

Phase	Impact	Intensity	Duration	Extend	Significance of impact
Noise and vibration					
C	Construction noise from machinery (excavators, bulldozers, compressors, vibrators, diesel trucks, asphalt milling machines)	Hight	Medium-term	Limited	Moderate
C	Temporary noise from material transport along haulage roads	Moderate	Medium-term	Local	Moderate
C	Potential impact on sensitive receptors (schools, hospitals, etc.)	Hight	Short-term	Limited	Moderate
O	Noise levels from automobile transport is expected to be reduced due to improved road surface but increase is also possible due to traffic levels growth. (Sensitive area in Băcioi, Răzeni, Cîșlița Prut and Giurgiuilești)	Moderate	Long-term	Local	Moderate
Biodiversity					
C	Impact on the Emerald Site and NPA	Moderate	Medium-term	Limited	Moderate
C	Impact on forest ecosystems and flora	Moderate	Medium-term	Local	Moderate
C	Impact on fauna	Moderate	Medium-term	Limited	Moderate
C	Impact on aquatic fauna (birds, fish other)	Moderate	Medium-term	Limited	Moderate
O	Impact on the Emerald Site and NPA	Low	Long-term	Limited	Low
O	Impact on forest ecosystems and flora	Low	Long-term	Local	Low
O	Impact on fauna	Low	Long-term	Limited	Low
O	Impact on aquatic fauna (birds, fish other)	Low	Long-term	Limited	Low
C	Impact on intangible heritage	Low	None	National	Medium
Land Acquisition and Economic Displacement					
C	Permanent land acquisition	Moderate	Long-term	Local	Moderate
C	Temporary land acquisition	Low	Medium-term	Local	Low
C	Temporary economic displacement	Moderate	Short-term	Local	Low
C	Permanent economic displacement	Moderate	Long-term	Limited	Moderate
Access and traffic restrictions					
C	Access &Severance effects to communities (Limited Access and Loss of access)	Moderate	Medium-Term	Local	Moderate
C	Impacts to local residents and businesses from temporary road traffic deviations and access restrictions	Moderate	Medium-Term	Local	Moderate
C	Road traffic and Road Safety (public transport users, road users, and pedestrians)	High	Medium-Term	Local	High
O	Road traffic and Road Safety	Moderate	Long-Term	Local	Moderate
O	Limited Access	Low	Long-Term	Limited	Low
Community Health, Safety and Welfare					
C	Community Health during construction (dust, noise, vibration, worker community interaction)	High	Medium	Local	High
O	Community Health during operation	Moderate	Long	Local	Moderate
C	Community Safety during construction	High	Medium	Local	High
O	Community Safety during operation	Moderate	Long	Local	Moderate
C	Community welfare during construction	Moderate	Medium	Local	Moderate
O	Community welfare during operation	High	Long	Regional	High Positive
Occupational Health Safety, Labour and working conditions					
C	Occupational Health and Safety gap impacts	Moderate	Long	Regional	High
C	International Tender Procedure aligning with PR2/ESR2 and PR4/ESR4	Moderate	Medium	Regional	Moderate
C	OHS/ Labour and Working Conditions	Moderate	Long	Regional	Moderate

Phase	Impact	Intensity	Duration	Extend	Significance of impact
	client compliance				
C	OHS/Labour and working Conditions during construction	High	Medium	Regional	High
C, O	Supply Chain Management	Moderate	Long	Regional	High
O	OHS/Labour and working conditions during operation	Moderate	Medium	Local	Moderate
Economic Development					
C, O	Regional economic development	High	Long	Regional	High Positive
C	Capital expenditure benefits	Moderate	Medium	Regional	Moderate
C	Employment generation	High	Medium	Regional	High
C	Unequal access to job info	Moderate	Short	Local	Low
C	Temporary business disruption	Moderate	Short	Local	Low
C	Vulnerable group exclusion	Moderate	Short	Local	Low
C, O	Weak monitoring	Low	Medium	Regional	Moderate
C, O	Pressure on local services	Moderate	Medium	Local	Moderate
Historical and Cultural Heritage					
C	Direct impact on unknown monuments	Low	Short	Local	Low
C, O	Indirect dust/noise impact on village centres	Low	Short	Local	Low
C	Impact on archaeological sites	Low	Short	Local	Low
C	Chance finds during excavation	Low	Medium	Limited	Low
C	Impact on intangible heritage	Low	None	National	Moderate

Table 5-2: Assessment matrix on potential environmental and socio-economic impacts

Overall, the M3 Tranche 2 project generates predominantly temporary and moderate environmental and social impacts during construction, concentrated locally around work zones and sensitive receptors (villages, Emerald sites, rivers, residential areas). Key moderate-to-high significance issues include dust/noise/vibration, soil erosion risk, community health/safety, occupational health & safety, road safety during diversions, and temporary access restrictions. These are fully addressable via standard mitigation (dust suppression, noise controls, topsoil handling, spill prevention, traffic management, OHS training, chance-find procedures, biodiversity monitoring) and robust implementation of the Environmental and Social Management Plan (ESMP), ESAP, and Stakeholder Engagement Plan. In the operation phase, residual impacts are low to moderate and largely offset by project benefits: smoother traffic reduces per-vehicle emissions and noise, the Giurgiulești bypass significantly improves local air quality, noise levels, and safety for residents, while improved road geometry and drainage enhance resilience and reduce long-term erosion/pollution risks. No significant long-term adverse effects on biodiversity, water resources, soil fertility, or cultural heritage are anticipated, and several aspects deliver high positive outcomes (community welfare, regional connectivity, EU-aligned transport efficiency, biodiversity conservation support).

With diligent application of mitigation, monitoring, and stakeholder communication, the project complies with Moldovan environmental/social legislation and EBRD standards (PR1–PR10), delivering a net positive contribution to Moldova's sustainable transport infrastructure and regional development.

6. Mitigation of potential Project environmental and social impacts

6.1. Physical Environment

6.1.1. Air and climate change

Construction Phase (to minimize dust and emissions):

- Regular watering of exposed surfaces, access roads, and stockpiles (especially in dry/windy conditions).
- Covering trucks transporting soil, aggregates, or waste.
- Speed limits on unpaved surfaces.
- Regular maintenance of machinery; use low-sulphur fuels; avoid unnecessary idling.
- Asphalt laying only in suitable weather to reduce VOCs.
- Progressive site restoration to limit prolonged dust.
- Locate camps and asphalt plants away from settlements/sensitive areas.
- Schedule works near Ciucur-Mingir gymnasium (Lot 3) during school holidays to protect children.

Operation Phase (to reduce long-term emissions):

- Regular vehicle and road maintenance for fuel efficiency and low exhaust.
- Traffic management to avoid congestion/idling.
- Enforce speed limits to minimize dust resuspension.
- Promote low-emission vehicles (e.g., EV charging points where feasible).
- Keep pavement in good condition for smooth flow.
- Periodic air quality monitoring (PM10, PM2.5, NO₂, CO) at sensitive locations.
- Public awareness for eco-friendly driving.

Climate Resilience Measures (integrated engineering & institutional):

- Climate-resilient materials (asphalt/concrete), upgraded drainage, slope bioengineering, flood protection.
- Reforestation, vegetative belts, recycled/low-carbon materials.
- Routine monitoring post-extreme events, capacity building, cooperation with Hydrometeorological Service.
- Alignment with National Adaptation Strategy 2030, EU–Moldova Agreement, and EBRD Green Transition.

With effective implementation and monitoring of these measures, air quality impacts remain minor, localized, and temporary during construction. No significant deterioration of ambient air is expected, and operational phase benefits include lower per-vehicle emissions due to improved flow and maintenance. The project enhances climate resilience and supports sustainable, low-emission transport infrastructure.

6.1.2. Soil

Construction Phase (to minimize soil erosion, contamination, and fertility loss):

- Identify and demarcate permanent/temporary land take; restrict heavy vehicles to approved access routes only.
- Follow CP D.02.30:2023 environmental regulations for road works.
- No washing/repairs of machinery on site; use sand beds for spill containment; clean vehicle wheels before entering public roads.
- Manage waste per CP A.09.04.2014 and Law 209/2016: collect in designated areas, dispose via authorized services.
- Strip and store fertile topsoil separately (in rolls/piles on dry, elevated sites) during dry/warm periods; stabilize stockpiles with fast-growing vegetation to prevent erosion.
- Reuse topsoil for slope reinforcement, shoulders, gullies, or adjacent farmland recultivation; surplus fill erosion

pits.

- Ensure organized drainage on slopes $>2-3^\circ$; limit stockpiles and equipment to temporary areas.
- For Cîșlița-Prut borrow pit: strip/store topsoil, protect spoil heaps with drainage ditches, rehabilitate site post-extraction (max 1:3 slopes).
- Clean and restore all temporary areas after works.

Operation Phase (to maintain soil stability and prevent long-term degradation):

- Regular waste management and disposal (no intermediate landfills).
- Maintain embankment stability against erosion and mechanical loads.
- Reinforce slopes with grass seeding on fertile layer.
- Immediately remove landslides to prevent further damage.
- Routine road maintenance: clean decanters/oil separators, collect improperly deposited waste.

With full implementation of these measures (topsoil handling, erosion controls, spill prevention, waste compliance, and recultivation), residual soil impacts remain minor and localized. Permanent effects are limited to the road footprint; temporary areas will be fully restored to productive/agricultural use, ensuring long-term soil stability and fertility protection.

6.1.3. Water

Construction Phase (to prevent pollution, spills, and runoff):

- Develop and implement an Emergency Prevention and Pollution Control Plan before works start, including staff training on machinery/equipment to avoid leaks.
- Conduct baseline + periodic monitoring of nearby surface water and shallow groundwater wells.
- Manage waste: Collect domestic waste in segregated containers; remove periodically by authorized company.
- Install and maintain portable ecological toilets emptied by licensed providers.
- Restrict vehicle washing/maintenance to impermeable, contained areas with oil separators and drainage.
- Store excavated soil/materials outside natural drainage zones to avoid erosion/runoff.
- Ensure proper site drainage to prevent ponding; no direct discharge of concrete slurry, process water, or pollutants into water bodies.
- Pay special attention during heavy rain/snowmelt: control erosion, sediment transport, and runoff.
- Channel road runoff via side ditches in low-relief areas; install retention/sedimentation basins near watercourses to trap sediment/pollutants.
- Use ready-mixed concrete to minimize on-site mixing and spills.
- Supervise implementation by Contractor's Environmental Manager; report regularly to Beneficiary and Supervising Engineer.

Operation & Maintenance Phase (to sustain protection):

- Regularly inspect, clean, and maintain stormwater drainage, culverts, and ditches to prevent blockages/overflow.
- Maintain a permanent Emergency Response and Pollution Prevention Plan with procedures and training for spill response, fuel/lubricant handling, and equipment management.

With full implementation and monitoring of these measures, no adverse impacts on surface or groundwater quality are expected during construction or operation. The project will not worsen the already elevated pollution levels in local rivers. Strict adherence to the plans, regular inspections, and compliance with national laws and EBRD requirements will ensure effective protection of water resources throughout the project lifecycle.

6.1.4. Noise and vibration

Construction Phase (to minimize noise, vibration, and community disturbance):

- Inform local communities in advance (via meetings with LPA and working team) about:
 - Working hours and material transport schedules (limited in localities to reduce inconvenience).
 - Any unavoidable night/weekend works (prior notification via LPA).
- Schedule deliveries and works to avoid peak times, overcrowding, and high noise in residential areas.
- Use low-noise equipment/tools where possible; isolate high-noise/vibration sources (e.g., screens/enclosures).
- Continuously monitor noise and vibration levels; stop work if limits exceeded.
- Regularly check/maintain machinery to ensure compliance with noise standards.
- For material transport: Avoid residential areas where feasible; limit speed to max 40 km/h through villages.
- Restrict works to daytime hours (no rest days or public holidays).
- Install acoustic screens near sensitive buildings (e.g., homes, schools).
- Pre-construction survey of potentially affected buildings/structures in villages (to document condition and enable compensation for any vibration-induced damage from heavy equipment).
- It is recommended to use **mobile sound-absorbing panels** at active work sites and in the immediate vicinity of noise-generating activities for the protection of **species of conservation interest** within the **EMERALD sites**, as well as sensitive receptors, particularly residential buildings in the immediate vicinity of the project site. The use of sound-absorbing panels with a **minimum height of 4 meters** is recommended. The table below presents the recommended locations for the use of mobile sound-absorbing panels.

Lot	Sector (km început - km sfârșit)	Poziționare față de drum
Lot 1	km 2+565 - 4+310	Left
	km 4+480 - 6+015	Right
	km 4+620 - 4+975	Left
	km 18+015 - 18+550	Left
	km 20+700 - 23+500	Right
	km 20+915 - 22+975	Left
	km 27+910 - 29+065	Right
	km 29+050 - 29+230	Left
	km 29+975 - 30+540	Left
	km 31+665 - 32+325	Left
Lot 2	km 0+000 – 1+625	Right
	km 18+500 – 18+975	left and perimeter on the western part of the road junction
Lot 3	km 0+380 – 0+860	Right
	km 5+555 – 9+790	Left
	km 6+490 – 6+990	Right
	km 8+065 – 11+987	Right
Lot 4 (Giurgiuilești Bypass)	Western part of the roundabout	in the Lower Prut Lakes area

Lot 4 (M3 – M3.1)	212+000 (M3) – intersection with Highway M3 (Chişinău – Giurgiuleşti; bypass section of the villages of Slobozia, Cişliţa-Prut and Giurgiuleşti) - 213+690 (M3)	Right
	213+035 (M3) - 212+445 (M3)	Left, entrance area to the Giurgiuleşti International Free Port (PILG) – left

Table 6-1: Installation locations of sound-absorbing panels for the project's construction phase

These measures significantly reduce the impacts on residents, buildings, and structures of sensitive receptors.

Operation & Maintenance Phase

To ensure the acoustic comfort of residential communities and to protect biodiversity in the areas adjacent to the M3 route, the Environmental and Social Impact Assessment (ESIA) recommends the implementation of active protection measures. While current technical designs rely primarily on administrative measures—such as speed limits, vehicle maintenance, and traffic management—acoustic simulations indicate a clear necessity for sound-absorbing barriers to comply with the limit values established by current legislation.

The following structures were integrated into the noise propagation models to protect sensitive receptors:

- Type: Forster 20 sound-absorbing panels.
- Material: Specially treated wood for road applications.
- Height: 4 meters.
- Performance: Predominantly absorbent behavior, featuring high acoustic attenuation coefficients specified for the protection of sensitive receptors.

Based on field identification and acoustic modeling, panels must be installed in the following kilometeric intervals:

Lot	Sector (start km - end km)	Position Relative to the Road
Lot 1	km 2+565 - 4+980	Left
	km 4+480 - 6+015	Right
	km 18+015 - 18+550	Left
	km 20+700 - 23+500	Right
	km 20+915 - 22+975	Left
	km 27+910 - 29+065	Right
	km 29+050 - 29+230	Left
	km 30+130 - 30+375	Left
	km 31+665 - 32+155	Left
Lot 2	km 0+000 - 1+625	Left
	km 18+500 - 18+975	Left
	km 18+885 - 18+975	Right
Lot 3	0+380 - 0+860	Right
	5+555 - 9+790	Left
	6+490 - 6+990	Right
	8+065 - 11+987	Right
Lot 4 (Giurgiuleşti Bypass)	Western part of the roundabout	Near Lower Prut Lakes
Lot 4 (M3 – M3.1)	212+495 (M3) - 213+690 (M3)	Right
	213+035 (M3) - 213+690 (M3)	Left

Tabel 6-1: Installation locations of sound-absorbing panels for the project's operation period

Note: The locations recommended by the expert team are detailed in Annex 5.8 of the ESIA report. During the Detailed Design (DD) stage, these recommended sites will be taken into consideration, and the exact location, length, and technical configuration of the barriers will be precisely established through final acoustic modelling

To validate the efficiency of the installed barriers and to monitor long-term impacts on environmental factors, the following actions will be implemented:

- Noise Monitoring: Periodic measurements at representative receptors in inhabited zones for at least 2 years after construction completion.
- Air Quality: Semi-annual verification of pollution indicators at critical points as established by the Environmental and Social Management Plan (ESMP).
- Maintenance: The National Road Administration (NRA) is responsible for the upkeep of the sound-absorbing panels and for ensuring speed limit compliance through appropriate signage.

6.1.5. Waste

Construction Phase (to reduce, segregate, recycle, and safely dispose of waste):

- Implement waste prevention and recycling plans to minimize total waste generation (e.g., reuse materials where possible).
- Collect all solid waste separately at source:
 - Recyclable waste (metals, wood, packaging, etc.) sent under contract to specialized recycling companies.
 - Household/municipal waste transported to an authorized regional landfill (with LPA consent).
- Train all workers on good waste management practices (segregation, handling, 3R principle).
- Operate a dedicated waste collection system on site:
 - Use leak-proof, sealed containers for hazardous/contaminated waste (oily rags, used fuel/lube oil filters, engine oil residues, etc.).
 - Store hazardous waste securely and dispose of it only through authorized, licensed services.
- Ensure proper labelling, temporary on-site storage in designated areas, and regular removal to prevent spills, contamination, or illegal dumping.

These measures promote the 3R principle (Reduce, Reuse, Recycle), ensure full compliance with Moldovan waste legislation (Law 209/2016) and EBRD PR3 requirements, and minimize risks of soil/water pollution from improper waste handling. With training, segregation, recycling contracts, and secure disposal, waste impacts remain minor, short-term, and fully manageable during construction, with no long-term effects anticipated.

6.2. Biodiversity

Construction Phase (to avoid, reduce, or offset impacts on sensitive areas: Emerald Sites, NPAs, forests, nesting zones, rare/protected species):

- Obtain deforestation permits for any tree/shrub removal (only strictly necessary) per Laws 1515/1993, 591/1999, 239/2007, and GD 27/2004.
- Work carefully to avoid damage to roadside forests/green areas.

- Hire an environmental/biodiversity specialist during construction to train staff and oversee works near Emerald Sites, NPAs, forests, and other sensitive zones.
- Prohibit temporary storage of materials, excavated soil, or waste within 1.5 m of trees/shrubs.
- No excavation/compaction near trees without competent authority permission.
- Temporarily fence work sites/warehouses around green areas with light materials (wood/other).
- Contractor fully responsible for any planned or accidental/unplanned vegetation damage/destruction.
- Avoid placing camps, production bases, borrow pits, or access roads in protected areas or nesting zones.
- Restrict pruning/tree felling during bird breeding season (mid-March to end of August); limit to September–mid-March where possible.
- For tree loss: Establish compensation planting (native species adapted to local conditions) in agreed locations with Moldsilva Agency, Contractor, and Engineer.
- Monitor trees with hollows (potential bee swarms, bird nests, bat/reptile/amphibian shelters) before felling.
- Prohibit collecting fruits/flowers/mushrooms, cutting branches, lighting fires, or burning vegetation in adjacent forests.
- Remove tree stumps after felling.
- Wet work areas to control dust affecting nearby vegetation/habitats.
- Collect/dispose of all waste (including oils/chemicals) immediately to avoid attracting wildlife.

Operation Phase (long-term protection & enhancement):

- Regular road maintenance: Clean petroleum products, collect improperly stored waste (especially near Emerald Sites/NPAs/forests).
- No intermediate landfills in biodiversity-sensitive areas.
- Create vegetative belts along roadsides as noise barriers and habitat buffers.
- Install animal crossing warning signs (especially Lot 1 forest areas).
- Permanent monitoring of flora/fauna habitats in Emerald Sites, NPAs, and forests (per national/EU/international requirements).
- Ongoing oversight of invasive species; report to ANSA/Environment Agency if detected.

The requirements for how to mitigate the impact for species and habitats in the Emerald Sites, NPA and forestry are included in the following table:

Notable habitats/ sensible zones	Requirements	Mitigate of impact	Phase	Responsible
Birds Nests of raptors species of birds	If there are habitats with birds of prey species (eagles and falcons), old trees with hollows will be monitored, in which bird nests can be found felling will be avoided	Avoid	Pre- Construction	***Contractor + persons responsible for monitoring environmental/biodiversity aspects***
Emerald Sites Area/ ecosisteme forestiere/ Bird nests	Works in forest ecosystem areas (forest fund) will be avoided as much as possible, especially around the Emerald Sites and NPA - forestry during the animal breeding season (spring and early summer).	Avoid	Construction	

Emerald Sites/NPAs Habitats of rare species with national and international protection status	For rare species with special national and international protection status (Birds Directive and Habitats Directive, Bonn, Berne and CITES Conventions, Red Book of the Republic of Moldova, ed. A III-a): i) the works will not be carried out around the Emerald Sites during the breeding season of the animals (spring and early summer); ii) The works in the vicinity of the NPA can be carried out avoiding noise, vibrations, night lighting, in order to avoid disturbances of wildlife.	Avoid Risk reduction	Construction	
Habitat of wildlife species	Construction waste (including accidental spills of oils and other chemicals) and household waste will be collected and disposed of from the site immediately so as not to attract birds and other wildlife, especially in the NPA area of the Emerald Sites.	Avoid Risk reduction	Construction	
Areas with flora, forest and steppe ecosystems	The work area will be moistened with water to prevent excess dust, which can affect the vegetation of the forests and NPA in the adjacent land near the work area.	Avoid Risk reduction	Construction	
Sensible areas of Emerald Sites/NPAs /Forest ecosystems	Monitoring the habitats of flora species in forest ecosystem areas (forest fund), especially around the Emerald Sites and NPA – important during the migration period and the breeding season of animals and establishing the risk to them.	Avoid	Operation	Environment Agency Forestry enterprises of the “Moldsilva” Agency, NPAs administrations Scientific institutions
Habitats of species with national and international protection status	Monitoring of vulnerable and endangered species, with special national and international protection status and establishing the risk on them at the operational stage, according to the national legal requirements, EU Directives and international treaties, to which the RM is a party	Prevent Risk reduction	Operation	Environment Agency NPAs administrations Scientific institutions

Table 6-2: Requirements for how to mitigate the impact for species and habitats in the Emerald Sites, NPA and forest ecosystems

6.3. Socio-economic

6.3.1. Socio-economic

This section presents a structured assessment of socio-economic risks and impacts for Lots 1–4, organised into clearly defined sub-themes. For each risk/impact, a corresponding mitigation measure and reference to the appropriate management plan is provided. Significance ratings represent pre-mitigation conditions; residual impacts will be reassessed following application of mitigation measures.

Land Acquisition and Economic Displacement

Impact	Mitigation Measure	Relevant Plan / Tool
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Permanent Land Acquisition	Implement Resettlement Action Plan (RAP); full replacement cost compensation; completion of cadastral works;	RAP; LARF; Cadastral Works Program
Temporary Land Acquisition	Negotiated temporary land use agreements with compensation; reinstatement to pre-project condition	RAP; LARF; Construction Management Plan (CMP)
Temporary Economic Displacement	Advance communication; temporary access routes; signage; timely reinstatement	RAP; Access Management Plan (AMP); Traffic Management Plan (TMP)
Permanent Economic Displacement	Parcel-level consultation; redesign access routes where possible; livelihood restoration	RAP; Livelihood Restoration Plan (LRP)

Table 6-3: Impact/mitigation measures land acquisition and economic displacement

Residual Impact: Expected Low, provided that RAP/LARF measures are implemented.

Access and Traffic Restrictions

Impact	Mitigation Measure	Relevant Plan / Tool
Community Severance	Maintain at least one access route; provide detours; temporary access ramps	Access Management Plan; Traffic Management Plan (TMP)
Business Access	Visibility signage; directional boards; phased works to avoid full closures	Access Management Plan; Stakeholder Engagement Plan (SEP)
Road Safety (Construction)	Speed limits; flaggers; barriers; lighting; secure pedestrian routes	Traffic Management Plan; Community Health and Safety Plan (CHSP)
Road Safety (Operation)	Consolidation of access points; deceleration lanes; grade-separated crossings	Road Safety Audit (RSA) Implementation Plan

Table 6-4: Impact/mitigation measures access and traffic restrictions

Residual Impact: Expected reduced to Low–Moderate with Traffic Management Plan and Road Safety Audit compliance.

Community Health, Safety and Welfare

Impact	Mitigation Measure	Relevant Plan / Tool
Dust/Noise/Vibration	Watering, covering trucks, day-only works, noise barriers, monitoring	Community Health and Safety Plan (CHSP); Construction Management Plan (CMP)
Worker–Community Interaction	Code of Conduct; GBVH training; worker screening; no camps in settlement	Gender Based Violence and Harassment (GBVH) Action Plan; Community Health and Safety Plan (CHSP)
Pedestrian Safety	Safe crossing points; fencing; temporary footpaths; school route coordination	Traffic Management Plan; Community Health and Safety Plan (CHSP)
Vulnerable Groups	Communication campaigns; targeted safety measures for schools/elderly	Stakeholder Engagement Plan (SEP), Community Health and Safety Plan (CHSP)
Health Infrastructure Pressure	Emergency coordination; on-site first aid; hygiene protocols	Community Health and Safety Plan (CHSP); Emergency Response Plan (ERP)

Table 6-5: Impact/mitigation measures community health, safety and welfare

Residual Impact: Expected Low–Moderate; Welfare impact remains High Positive

Occupational Health and Safety (PR4), Labour and Working Conditions (PR2)

Impact	Mitigation Measure	Relevant Plan / Tool
OHS legal/tender gaps (PR2/PR4)	Update FIDIC clauses to reference PR2/PR4; explicit labour and OHS rights clauses; requirement for contractors to comply with Project LMP and OHSP; alignment with ILO and ISO 45001.	Labour Management Procedure (LMP); Contractual Addenda to FIDIC; Occupational Health and Safety Management Plan (OHSP)
Contractor OHS Performance	Prequalification, audits, KPIs, Job Hazard Analysis (JHAs), toolbox talks	Occupational Health and Safety Management Plan (OHSP)

Impact	Mitigation Measure	Relevant Plan / Tool
Supply Chain Risks	Supplier screening; audits; child/forced labour prohibition	Supply Chain Management Plan (SCMP)
OHS During Construction	Safe work-zones; PPE provision and enforcement; task-specific JHAs and method statements; heat/cold stress protocols; noise/vibration control; near-miss reporting; behaviour-based safety.	Occupational Health and Safety Management Plan (OHSP); Traffic Management Plan (TMP); Emergency Responsive Plan (ERP)
OHS During Operation (maintenance crew)	Maintenance-specific risk assessments; Maintenance TMP; reflective PPE; shadow vehicles and signage for mobile works; training for night work and winter conditions.	Maintenance Traffic Management Plan; OHSP (Operations); Emergency Response Plan (ERP)
Gaps in HR policies & Code of Conduct	Develop PR2-compliant HR Policy and Code of Conduct; include provisions on child/forced labour, GBV/SEA, non-discrimination, working time, freedom of association, worker GM, supply chain obligations.	HR Policy & HR Management System (HRMS); Code of Conduct (CoC)
Unclear working relationships / contracts	Require written employment contracts or written terms for all workers (including non-standard contracts); ensure contracts are in a language understood by workers; induction on rights and obligations	LMP; Standard Contract Templates; Induction & Training Plan
Child labour / young workers in hazardous work	Age verification procedure (ID checks, records); explicit prohibition of <18 in construction and hazardous work; monitoring of contractors and recruitment agencies.	LMP; Contractor Labour Management Plan (CLMP); Contractual Child Labour Clause
Forced labour / modern slavery (esp. migrant workers)	Zero-tolerance policy; prohibition of passport retention and recruitment fees; due diligence on recruitment agencies; confidential GM for migrant workers; regular audits.	Modern Slavery / Forced Labour Procedure; LMP; Contractor Management Plan (CMP)
Non-discrimination & unequal opportunities	Non-discrimination clauses in HR Policy and contracts; transparent recruitment and promotion criteria; monitoring of gender and vulnerable groups in workforce; corrective actions where inequities identified.	HR Policy; LMP; Equal Opportunity & Diversity Procedure
Restriction of freedom of association & collective bargaining	Explicit commitment to respect workers' rights to organise; non-interference clauses in contracts; engagement with worker representatives/unions; access to GM for union issues.	HR Policy; CoC; LMP
Excessive working hours / unpaid overtime	Working Time Procedure consistent with Labour Code and PR2; timekeeping system; premium rates for overtime; regular monitoring and reporting; toolbox talks on fatigue.	Working Time & Overtime Procedure; LMP; OHSP
Inadequate wages & benefits	Contractual requirement to meet at least national minimum wage and industry standards; periodic	LMP; Payroll Procedures; Contractual Wage Clauses
Weak protection of personal data & privacy	Data Protection Protocol for HR; limited access to personnel files; clear rules for handling data in GM and investigations; staff training on data protection.	Data Protection Protocol; HRMS; Worker GM Procedure
Inadequate Worker Grievance Mechanism (GM)	Establish confidential, accessible Worker GM; multiple channels (boxes, hotline, email, worker reps); guaranteed non-retaliation; defined timelines; GM extended to contractor workers.	Worker Grievance Mechanism Procedure; GM Register; HRMS
Contractor labour management gaps	Require Contractor Labour Management Plans; include PR2 clauses in contracts; pre-qualification based on labour performance; regular labour audits and reporting; corrective action plans.	Contractor Management Plan (CMP); CLMP; Owner's Engineer ToR
Supply chain labour risks (child/forced labour, poor conditions)	Supplier screening and pre-qualification; inclusion of PR2 clauses in purchase contracts; audits of high-risk suppliers (quarries, asphalt plants, etc.); termination clauses for non-compliance.	Supply Chain Management Plan (SCMP); Procurement Procedures; Supplier Code of Conduct
Non-employee workers (subcontractors, agency workers)	Extend PR2 requirements to all non-employee workers via contracts; ensure access to Worker GM; monitoring of recruitment practices and working conditions; regular inspections.	CMP; CLMP; LMP; Worker GM Procedure
Worker accommodation – substandard camps	Develop Worker Accommodation Plan aligned with IFC/EBRD 2009; minimum standards for space, WASH, fire/electrical safety; gender-	Worker Accommodation Plan (WAP); CoC; OHSP

Impact	Mitigation Measure	Relevant Plan / Tool
	sensitive facilities; regular inspections and corrective actions.	
GBV/SEA, harassment and bullying	GBV/SEA Action Plan; CoC with explicit GBV/SEA prohibitions; mandatory induction and refresher training; confidential reporting channels; survivor-centred response protocols; contractual zero-tolerance clauses.	GBV/SEA Action Plan; CoC; Worker GM; LMP
Security personnel abuses affecting workers (if required)	Security Management Procedure aligned with Good International Practice; vetting of security providers; training on human rights and GBV/SEA; clear rules on use of force; GM to receive complaints about security staff.	Security Management Plan (SMP); Security Provider Contracts; Worker & Community GM
Ineffective communication of worker rights (language barriers)	Provide contracts, policies and key procedures in languages understood by workers (Romanian/Russian/English/other as needed); use visual aids; toolbox talks; worker representatives to support communication.	LMP; Induction & Training Plan; Site Noticeboards
Weak monitoring and enforcement of PR2 requirements	Integrate PR2 monitoring into ESMP and Owner's Engineer ToR; regular site audits; KPIs for labour and OHS; reporting to Client and EBRD; corrective action tracking.	ESMP; CMP; Monitoring & Reporting Framework
Retrenchment / collective dismissals (if applicable for O&M)	Develop Retrenchment Plan aligned with ESR2; analyse alternatives; consult workers and unions; define compensation and support measures; integrate GM; clear communication plan.	Retrenchment Plan; HRMS; Worker GM Procedure

Table 6-6: Impact/mitigation measures occupational health, safety and labour conditions

Residual Impact: Expected Moderate (OHS is inherently high-risk but manageable).

Historical and Cultural Heritage

Impact	Mitigation Measure	Relevant Plan / Tool
Direct/Indirect Impacts	Avoidance of protection zones; dust/noise control	CHMP (Cultural Heritage Management Plan)
Chance Finds	Formal Chance Finds Procedure; stop-work authority	Chance Finds Procedure (CFP); Cultural Heritage Management Plan CHMP
Supply Chain Risks	Supplier screening; audits; child/forced labour prohibition	Supply Chain Management Plan (SCMP)
Worker Awareness	Training on artefact identification; monthly refreshers	Cultural Heritage Management Plan CHMP; Contractor Training Plan (CTP)

Table 6-7: Impact/mitigation measures historical and cultural heritage

Residual Impact: Is expected Negligible.

6.3.2. Construction Camps

Construction camps (worker accommodation, offices, canteens, workshops, laydown areas, parking, and ancillary facilities) will be established by the selected Contractor to support the execution of works across the M3 Tranche 2 lots. The exact number, size, and locations of camps are not known at the ESIA stage and will be determined by the Contractor based on the detailed construction programme, lot sequencing, and available sites. All camp locations and layouts must be approved by the Supervising Engineer (SE) and NRA prior to establishment.

Mitigation Measures for Construction Camps

Siting and Selection

- Camps and laydown areas shall be located outside protected areas (Emerald Sites, NPAs, forest fund), floodplains, wetlands, riparian zones, and at least 500 m from sensitive receptors (schools, hospitals, places of worship, residential clusters) where feasible.

- Preference shall be given to previously disturbed or industrial sites, existing laydown areas, or land agreed with Local Public Authorities (LPAs).
- Sites shall have good access to public roads, avoid steep slopes (>10%), and be located above flood levels with adequate natural drainage.
- No camp shall be placed in biodiversity-sensitive zones (e.g., near Molești–Rezeni, Carbuna, Bugeac Steppe, or Prutul de Jos Lakes) or within 100 m of watercourses without special justification and mitigation.
- Final locations shall be submitted to SE/NRA for approval, including environmental screening and consultation with LPAs and EPI.

Design and Setup

- Camps shall comply with EBRD/IFC Guidance Note on Workers' Accommodation: Processes and Standards (2009) and Moldovan GD No. 80/2012.
- Provide separate, secure accommodation for male and female workers (if applicable), with adequate privacy, lighting, ventilation, and fire safety.
- Include canteen/kitchen facilities meeting sanitary standards, potable water (bottled or treated), sewage system (septic tanks or connection to municipal network), solid waste segregation/collection points, and wastewater treatment (oil separators for vehicle washing areas).
- Provide first-aid station, fire-fighting equipment, emergency exits, and security fencing/lighting.
- Designate impermeable areas for fuel/oil storage (with bunds >110% capacity), vehicle maintenance, and washing (with drainage to oil separators).
- Install portable ecological toilets (or connect to sewerage) and ensure regular emptying by licensed services.

Operation and Management

- Appoint a dedicated Camp Manager responsible for daily OHS, environmental, and social compliance.
- Implement strict waste management: separate collection of recyclables, hazardous waste (oily rags, filters, batteries), and domestic waste; regular removal by authorized companies.
- Control dust/noise/light spill: water unpaved internal roads, limit night works, use low-noise generators, and direct lighting downward.
- Prevent soil/water contamination: no on-site vehicle washing outside designated areas; spill kits and emergency response plan in place.
- Manage social risks: code of conduct for workers (respect for local communities, zero tolerance for GBV/SEA), grievance mechanism accessible to workers and nearby residents, no unauthorized visitors.
- Provide regular training to camp residents on waste, hygiene, fire safety, and community interaction.

Decommissioning and Restoration

- At the end of use, remove all structures, equipment, waste, and contaminated soil.
- Reinstate the site to original or better condition (topsoil replacement, revegetation, grading for drainage).
- Conduct final environmental inspection by SE and obtain clearance from NRA and local authorities before handover.

Monitoring and Reporting

- Contractor's Environmental Officer shall conduct weekly camp inspections and report to SE.
- SE shall verify camp conditions during routine site visits and include findings in monthly compliance reports.

- Any non-compliance (e.g., inadequate sanitation, spills, community complaints) triggers immediate corrective action and escalation to NRA/EBRD if serious.

These measures ensure that construction camps minimize environmental footprint, protect worker welfare, prevent community disturbance, and comply with national legislation and EBRD standards. Final camp plans and locations will be detailed in the approved C-ESMP once the Contractor is selected and the construction programme is finalized.

6.3.3. Quarries, Borrow Pits, and Material Sources

Construction of the M3 Road Corridor Tranche 2 (rehabilitation, widening, and new bypass) requires substantial volumes of aggregates (crushed stone, gravel, sand), fill material for embankments, and other granular materials. These will be sourced from approved quarries, existing borrow pits, or new temporary borrow areas identified by the selected Contractor.

At the ESIA stage, specific sources, locations, and volumes are not yet finalized and will be determined by the Contractor during detailed design and construction planning. All sources must comply with national legislation (Law 1515/1993 on Environmental Protection, Law 1538/1998 on Protected Areas, Forest Code, and relevant GDs on mineral extraction) and EBRD requirements.

Potential Impacts

- Soil erosion and loss of fertile topsoil at borrow sites.
- Dust generation from extraction, loading, and transport.
- Noise and vibration from blasting/excavation.
- Alteration of local relief, drainage patterns, and landscape.
- Risk of water pollution from runoff/sedimentation near rivers.
- Biodiversity disturbance if sites are near Emerald Sites/NPAs or sensitive habitats.
- Traffic safety and road wear from haulage.

Mitigation Measures

Sourcing and Selection

- Prioritize existing licensed quarries and previously used borrow pits to minimize new land disturbance.
- New borrow pits shall only be opened if no viable alternatives exist; locations must be approved by SE/NRA and Environmental Agency.
- Prohibit sourcing from protected areas (Emerald Sites, NPAs, forest fund, riparian zones, floodplains, wetlands, or within 500 m of watercourses without special justification).
- Avoid sites on steep slopes (>15%), arable land of high bonitation, or near residential/recreational areas.
- Contractor to submit a Materials Sourcing Plan (including maps, volumes, transport routes, and environmental screening) for SE/NRA approval before extraction begins.

Site Preparation and Operation

- Strip and separately store fertile topsoil (minimum 20–30 cm depth) in stabilized stockpiles (seeded with fast-growing grass) for later reuse in site rehabilitation.
- Install perimeter drainage ditches, silt fences, and sediment traps to control runoff and prevent sedimentation into nearby water bodies.

- Limit excavation depths and slopes (maximum 1:3 gradient for stability and safety).
- Wet unpaved surfaces and haul roads regularly to suppress dust.
- Restrict blasting (if required) to daytime hours, with prior notification to nearby communities and vibration/noise monitoring.
- No on-site washing of aggregates unless in contained areas with wastewater treatment/oil separators.
- Implement speed limits (max 30–40 km/h) on haul roads and cover trucks transporting loose material.

Transport and Traffic Management

- Use approved haul routes agreed with LPAs to minimize impact on public roads and communities.
- Clean vehicle wheels before entering public roads to prevent mud tracking.
- Schedule haulage to avoid peak traffic hours and school times near sensitive receptors.

Decommissioning and Rehabilitation

- Upon completion of extraction, re-grade the site to ensure stable slopes and proper drainage.
- Replace stored topsoil, level the area, and revegetate with native species (grass, shrubs) suitable for local conditions.
- Conduct final inspection by SE and obtain clearance from Environmental Agency and local authorities before site handover.
- Restore any temporary access roads to original condition or better.

Monitoring and Reporting

- Contractor's Environmental Officer to inspect borrow pits/quarries weekly and report compliance.
- SE to verify rehabilitation progress and include findings in monthly reports.
- Monitor erosion, dust, and water quality near active sites per the Monitoring Plan (Table 7-1).

These measures ensure responsible sourcing of materials, minimize land disturbance, protect soil/vegetation/water resources, and prevent secondary impacts (dust, traffic, sedimentation). Final sourcing plans, including exact locations and volumes, will be detailed in the approved C-ESMP once the Contractor is selected and quantities are calculated. All activities remain subject to permit requirements and EBRD oversight.

7. Environmental and Social Monitoring Programme

Environmental and social monitoring is essential for ensuring that mitigation measures in the Environmental and Social Management Plan (ESMP) are effectively implemented, that the project complies with Moldovan legislation, EBRD Environmental and Social Policy (2019) and Performance Requirements (PR1–PR10), and that adverse impacts remain minimal while delivering intended benefits (improved safety, reduced emissions, better traffic flow, Giurgiulești bypass diversion).

Table 7-1 presents the detailed **Environmental and Social Monitoring Plan** for the M3 Road Corridor Tranche 2 Rehabilitation Project (70.9 km across four lots). This plan outlines the specific environmental and social indicators/parameters to be monitored, their locations, frequency, type of monitoring (laboratory analyses, site monitoring, or visual observations during site checks), responsible party, and indicative costs.

The monitoring plan is designed to:

- Verify the effective implementation and performance of mitigation measures outlined in the ESMP (Table 6-1).

- Detect any changes in environmental and social conditions attributable to project activities (especially during construction).
- Ensure early identification of non-compliance, emerging impacts, or performance issues.
- Provide objective data for compliance reporting to the National Roads Administration (NRA), EBRD, Environmental Agency, and other authorities.
- Support adaptive management, corrective actions, and continuous improvement throughout the project lifecycle.

Monitoring focuses on key parameters relevant to the project's Category A classification and sensitive context (dust/air quality, noise/vibration, water quality, soil erosion, biodiversity near Emerald Sites/NPAs, waste management, community health/safety, and traffic/road safety). It combines:

- Laboratory analyses (e.g., water/sediment samples, air quality if required).
- Instrumental/site monitoring (e.g., noise meters, dust gauges).
- Visual observations during regular site inspections and checks.

The plan is proportionate to the project's risk profile and will be integrated into the Contractor's Construction Environmental and Social Management Plan (C-ESMP).

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
LAB ANALYSES / SITE MONITORING					
Soil contamination Hydrocarbons contaminations	Areas most vulnerable to the discharge of hydrocarbons	1 x prior to start of works; 1 x upon completion of construction – same sites	Accredited lab (sampling, lab analysis and data interpretation)	Contractor; SE to approve sampling points and reports	Contractor costs
Ambient air emissions Ambient air quality during peak construction activities (CO, SO ₂ , NO _x , particulates PM10 and PM2.5, hydrocarbons, and benz(a)pyrene)	Potentially most affected residential areas, houses on roadside; pedestrian areas	1 x prior to start of works 1 x at the peak of construction inside each village affected by construction	Accredited lab (sampling, lab analysis and data interpretation)	Contractor; SE to approve sampling points and reports	Contractor costs
Ambient noise pollution Ambient noise levels during peak construction activities – compliance with maximum exposure limit of 70 dBA	Most affected residential areas along the Project route	Maximum noise impact period during construction in settlements; in case of complaint. If the results are unsatisfactory undertake weekly measurements	Handheld equipment (analyser) with application software	Contractor; SE to approve sampling points and reports	Contractor costs
Vibration	Infrastructure (e.g. houses, walls, wells, etc.) in the immediate vicinity of construction sites or transport routes – especially where heavy equipment will be used. Properties as indicated by owners	Once prior to start of works and again upon completion of construction works in respective settlement	Inspection/documentation on the condition of relevant infrastructure (e.g. existing cracks on buildings or other physical damage)	Contractor with supervision engineer visual monitoring; - photographic documentation	
Drinking water quality: Permanent risk of impact on local water resources due to the proximity of wells to the road edge The following physical-chemical parameters are to be monitored: pH, electroconductivity; suspended matter, BOD5, COD. The following specific pollutants are to be monitored: heavy metals, oil products; formaldehyde, E. coli, and total coliform.	Wells close to the road edge along M3.	1 x prior to start of works upon completion of construction (only at those wells where water was initially found to be suitable for drinking purposes)	Accredited lab (sampling, lab analysis and data interpretation)	Contractor SE to approve sampling points and reports	Contractor costs
Air emissions during operation phase	Potentially most affected residential areas, houses on roadside; pedestrian areas	According to the monitoring plan developed by the NRA and approved by the Environmental Agency	Accredited lab (sampling, lab analysis and data interpretation)	NRA/SE	Operational cost
Noise pollution during operation phase	Most affected residential areas along the Project route	According to the monitoring plan developed by the NRA	Handheld equipment (analyser) with application software	NRA/SE	Operational cost

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
		and approved by the Environmental Agency			
MONITORING PLAN					
Material supply					
Asphalt plant Possession of official permit / valid license	Asphalt plant/Contractor documentation	Prior to start of construction works (and renewal checked annually)	Presence of valid environmental permit, operational license and conformity certificates (e.g., air emissions permit, waste management authorization, water use permit if applicable)	SE	NA
Stone quarry Possession of official permit / valid license	Quarry/Contractor's documentation	Prior to start of works / during construction (quarterly or at each major supply delivery stage)	Verification of valid extraction permit / quarry operating license; confirmation of compliance with environmental and land-use requirements (environmental permit, water use permit if applicable, waste management compliance)	SE	NA
Sand and gravel pit Possession of official permit / valid license	Sand and gravel borrow pit / separation	Prior to start of works / during construction (quarterly or at each major supply delivery stage)	Confirmation of valid extraction license, environmental permit, land-use authorization, and proof of legal operation; verification of compliance with environmental and OHS obligations. Document review, cross-checking extraction permits, site inspection, verification of supplier compliance records.	Borrow pit or separation operator/ SE	NA
Soil for embankment construction Compliance with provision of license	Construction site/ Contractor's borrow area documentation	Prior to start of works / during construction (e.g., per delivery batch or monthly)	Verification that soil is sourced from legally permitted/licensed borrow areas; confirmation of authorization for excavation, transport, and placement. Document review, verification of borrow pit license, site inspection, checking transport documentation and conformity certificates	Borrow pit or separation operator/ SE	NA
Material Transport					
Asphalt, Stone, Sand & gravel, Soil. Truck load covered	Construction site and access roads	Unannounced inspections at least once weekly (more frequently during high-traffic periods)	All trucks transporting materials must have loads fully covered with tarpaulins/nets to prevent spillage, dust generation, and traffic safety hazards. Visual inspection, spot checks at site entrances/exits, photographic evidence	Contractor/SE	NA
Transport routes Compliance with approved transport routes as per Contractor's Method Statement	Construction site surrounding local roads; haul route checkpoints	Unannounced inspections at least once weekly (and additional checks during peak material delivery periods)	Verification that all construction vehicles use only the approved transport routes as defined in the Contractor's Method Statement / Traffic Management Plan. Field inspection, GPS/route spot checks, visual monitoring at key junctions, photographic documentation	Contractor/SE	NA
Monitoring of the compliance with the agreed construction transport and traffic safety measures and procedures.	At and near the construction site, haul road entrances/exits, detours	Permanently (daily monitoring; continuous during active construction hours)	Continuous verification that all construction traffic follows the approved safety procedures: signage, flagging, speed limits, barriers, designated access points, pedestrian protection, detours, lighting and	NRA/SE	NA

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			work-zone layout. Visual monitoring, routine safety walkthroughs, inspection checklists, photo documentation		
Construction Site – Construction Phase					
Noise level (neighbouring population; workers)	Most affected residential areas near construction; workplace / machinery zones	During maximum noise-impact periods in settlements and periodically during construction (e.g., weekly or during high-noise activities)	Measurement of environmental noise levels at most affected residential areas and worker locations to confirm compliance with national limits and EBRD PR4 requirements. Instrumental noise measurements using calibrated noise meter; supervision checks; visual observation of high-noise activities	Contractor/SE	NA
Vibration Effects of vibration on properties	Properties indicated by owners or identified as sensitive structures	Upon complaint (and immediately during high-vibration works near settlements)	Assessment of potential vibration-related damage to nearby properties following community complaints or reports from owners. Visual inspection, photographic documentation, crack mapping; instrumental vibration measurement if needed	Contractor/SE	NA
Dust impact (suspended particles)	Construction site; haul roads; residential areas adjacent to works	Unannounced inspections during delivery of materials and during construction; upon complaint	Verification of dust levels and dust-generating activities; confirmation that dust suppression measures (water spraying, covered loads, speed control) are effectively applied. Inspection / visual observation. Inspection / visual observation, photographic records; spot checks of water-spraying frequency, covered loads, and site cleanliness	Contractor/SE	NA
Traffic disruptions; problems	At and near the construction site; detours; temporary traffic diversions	Once per week during peak and non-peak hours (and more frequently during critical works)	Verification of traffic flow conditions near construction areas; identification of delays, congestion, unsafe manoeuvres, or blocked access points during peak and non-peak hours. Visual inspections, traffic observation, informal checks with road users; photographic evidence	Contractor/SE	NA
Access to private property / land / public facilities	Construction site; adjacent properties; local access roads	Random checks at least weekly during construction activities	Verification that construction activities do not block or restrict access to homes, agricultural land, businesses, schools, health centres, or other public facilities. Visual inspection, interviews with affected landowners/residents, photo documentation.	Contractor/SE	NA
Vehicle and pedestrian safety when there is no construction activity (Visibility; safety)	At and near construction site; temporary detours; pedestrian routes	Random checks at least once weekly in the evening / at night	Verification that construction zones remain safe for road users and pedestrians after working hours: adequate lighting, reflective signs, barriers, warning tape, unobstructed paths. Observation, visual inspection, photo documentation	Contractor/SE	NA

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
Water and soil pollution from inappropriate material storage, management and use (Problems; compliance with approved site management plan)	Construction site; contractor's camp/yard; storage areas; workshops	Unannounced inspections	Verification that materials (fuel, oil, bitumen, chemicals, aggregates, waste) are stored, handled, and used in compliance with the approved Site Management Plan; confirmation that no spills, leakages, contaminated runoff, or improper disposal occur. Inspection / visual observation, spill logs review, photographic documentation	Contractor/SE	NA
Monitoring the actions of cutting trees in the forest, so as not to affect the nests of birds, bats and bees	At and near the construction site; forested patches; roadside trees	Prior to start of works and throughout the deforestation period	Verification that tree-cutting activities avoid active nests, bat roosts, and bee colonies; ecological checks performed before removal; compliance with seasonal restrictions. Visual evaluation, ecological pre-clearance survey, inspection of cavities/crevices, photographic documentation	Contractor (Environmental/Biodiversity Expert)/ SE-Environmental Inspectorate, "Moldsilva" Agency	BOQ
Tree plantations Successful tree plantations / the use of species adaptable to stationary and pollution conditions. Caring for planted vegetation and replacing any failed trees	Along the project road	Towards the end of construction (and periodically during the first growing season)	Verification that planted trees are healthy, survive the establishment period, and that species used are suitable for local soil, climate, and pollution conditions; confirmation of maintenance activities and replacement of failed trees. Visual inspection, survival rate assessment, photographic documentation	Contractor (E/B expert)/SE-NRA, Environmental Inspectorate	BOQ
Monitoring forest ecosystems to prevent soil pollution and contamination in forests and vegetated lands with waste, solid and liquid chemicals, which can affect them	Along the project road; adjacent forest and vegetated lands	Permanently (continuous during construction)	Verification that no waste, hazardous substances, construction materials, fuel, chemicals, or contaminated runoff enter forested or vegetated areas; confirmation that forest soil integrity and vegetation remain unaffected. Visual inspection, photographic documentation, waste storage/handling checks.	Contractor (Environmental/Biodiversity Expert)/ Environmental Inspectorate, "Moldsilva" Agency	NA
Monitoring of implementation measures to cover temporary warehouses with construction materials, to avoid the risk to animals.	Along the project road; temporary material storage areas; contractor's warehouse zones	Permanently (continuous during construction)	Verification that temporary warehouses and material storage areas are properly covered, fenced or enclosed to prevent wildlife, domestic animals, and birds from entering and being exposed to hazards. Visual inspection, photo documentation, daily site checks.	Contractor (Environmental/Biodiversity Expert)/	NA
Installation of warning signs regarding the risk of animals appearing on the roadway	Along the project road in sections bordering forests or wildlife habitats	Towards the end of construction/ Operational phase	Verification that wildlife warning signs are installed at locations identified as high-risk for animal crossings, in accordance with design and in consultation with forestry authorities; confirmation of appropriate placement, visibility, and durability. Visual inspection, verification of sign placement, reflectivity, and stability	Contractor/ SE-NRA in consultation with "Moldsilva" Agency	Implementation costs
Monitoring of flora and fauna habitats in sensitive areas (Emerald Sites, NPAs, forest ecosystems)	Along the project road	Construction/ Operational phase	Biodiversity Impact Monitoring	Contractor/ SE-NRA in consultation with "Moldsilva"	NA

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
				Agency	
Monitoring the actions of cutting trees in the forest, so as not to affect the nests of birds, bats and bees	At and near construction site; forested areas along the alignment	Prior to start of works and throughout the deforestation period	Verification that tree removal avoids active bird nests, bat roosts and bee colonies; ecological pre-clearance required prior to works; compliance with seasonal restrictions. Visual evaluation by qualified ecologist; cavity inspection; photographic documentation.	Contractor (Environmental/Biodiversity Expert/ SE-Environmental Inspectorate, "Moldsilva" Agency)	BOQ
Land acquisition and economic displacement					
Planning & Implementation of Permanent Land Acquisition – Lot 4 (Bypass + M3/M3.1)	Lot 4	Continuously on a quarterly basis.	Completion of cadastral works (identification of private/public land, delimitation, correction of errors, updated geometric plans) - Number and type of affected land plots confirmed (private/public; agricultural, construction, gardens, forest, uncategorised) - Share of affected land plots for which agreements/expropriation decisions are finalized (%) Evidence that valuation of affected land is carried out by licensed independent valuers - Compensation rates documented and consistent with full replacement cost and PR5 (incl. transaction costs). Number and % of eligible landowners/land users who received compensation before land entry - Time between compensation agreement and taking possession of land	NRA/ Evaluation Company Review of NRA cadastral documentation and contracts – Minutes of coordination meetings with Cadastre Office and LPAs Review of valuation reports - Comparison of compensation rates vs. market values / land tax values Payment registers; bank transfer records - Random verification with beneficiaries (phone/FGDs)	NRA
Legacy Land Acquisition – Lot 2 Phase 1 (2019) and Associated Corrective Actions	Lot 2	Audit period	Completion of independent audit of 2019 land acquisition and compensation for Lot 2 - Number and type of gaps identified (if any) vs. LARF/PR5 requirements Number of corrective actions identified and implemented (e.g. top-up payments, documentation updates)	Independent Auditor/ NRA Review of NRA historical files - Independent audit report Corrective Action Plan and completion evidence	NRA
Temporary Land Use – Construction Camps, Laydown Areas, Borrow Pits, Access Roads	All Lots	Construction preparation	Number and type of temporary land plots used (state vs private) - Share of temporary land plots with written agreements signed prior to use (%). Amount and duration of temporary land occupied per plot - Evidence of payment of rent/compensation for temporary use at agreed rates. Number and % of temporary land plots reinstated to pre-project condition and returned to owners within agreed timeframe.	NRA/Contractor/ SE Review of Contractor's Land Use Register - Land lease agreements Lease contracts; payment records, Interviews with landowners (sample) Site inspections - Completion documentation co-signed by landowners – Photographic evidence	Contractor Costs
Temporary Economic Displacement During Construction (Access to Businesses and Agricultural Land)	Along the Project Road	Continuous	Number and location of businesses and roadside vendors affected by temporary access restrictions (per Lot) – Duration of access disruption (days).	NRA/Contractor/ SE Contractor traffic management records - Site inspections - Consultations	Contractor Costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			Availability of alternative access routes during construction (yes/no; qualitative adequacy) – Number of locations where temporary access was created/maintained vs. planned. Number of complaints from businesses/farmers regarding access and income loss; time taken to resolve	with businesses and farmers (FGDs, interviews) Review of Traffic Management Plans and method statements – Site inspections GRM log - Follow-up calls with complainants	
Permanent Economic Displacement – Changes in Long-Term Business Viability and Access	All lots	Construction	Number and type of businesses potentially affected by permanent access changes (fuel stations, depots, agro-tourism, storage facilities, roadside markets) Number of businesses with loss of direct access / conversion to controlled access - Average change in travel distance to nearest junction/access (km) Qualitative perception of impact on customer flow, logistics, and operational costs (business survey) Number of livelihood restoration measures implemented (e.g. signage, improved service roads, alternative access, support measures)	NRA Review of final design (access plans, junction layouts) - Stakeholder consultations with identified businesses Comparison of baseline and post-construction access maps - GPS/desk analysis Targeted business survey or FGDs within 6–12 months after opening RAP / Livelihood Restoration Plan monitoring - Site inspection	Implementation Costs
Compliance with LARF / RPF / RAP and PR5 Requirements	All lots	Pre-construction	Existence and approval of LARF, RPF, and Lot-specific RAPs / Supplemental RAPs where needed Implementation status of RAP measures (% of actions completed vs. planned)	Document review (EBRD, NRA) RAP action-plan tracking tool	Implementation Costs
Grievance Redress Mechanism (Land Acquisition and Economic Displacement)	All lots	Continuous	Number of grievances related to land acquisition, compensation, temporary land use, and access/economic displacement - Type of issues raised Average time for grievance resolution (days) - % of grievances resolved within the time limit set in SEP/GRM procedure Level of satisfaction with grievance resolution (sample of complainants)	NRA GRM register analysis (categorisation by theme, location, Lot, gender of complainant where possible) GRM database Short telephone survey with closed grievances	Implementation costs
Information Disclosure and Community Engagement on Land Acquisition	All lots	Continuous	Number and location of public meetings and small group discussions held on land acquisition and access changes (per Lot) - Number of participants (incl. women, elderly, business owners, farmers) Evidence that affected landowners and businesses received early notice about design changes, timing of land entry, and	NRA SEP/engagement log – Attendance lists Copies of notices, letters, private messages, online announcements - Feedback from consultations	NA

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			access arrangements		
Design Changes and Additional Land Acquisition (All Lots)	All lots	Continuous	Number and location of design changes that require additional land acquisition or access reconfiguration compared to original design Time required to complete new land acquisition compared to baseline schedule - Associated delays to construction	NRA Design change register – Land acquisition screening for each change Programme tracking – land acquisition process tracking	Implementation costs
No Physical Displacement Confirmation	All lots	Continuous	Number of occupied residential structures affected (baseline vs. final design) – expected to remain zero	NRA/SE Design review - Field verification	Implementation costs
Stakeholder Engagement Monitoring					
Implementation of SEP Engagement Activities	Along the project road	Continuous	Number of engagement events conducted vs. planned in SEP (public consultations, FGDs, meetings with LPAs, business meetings) - Number of participants (sex/age disaggregation), Inclusion of vulnerable groups Timeliness and adequacy of information disclosed (notice periods, languages, channels used)	NRA/ Contractor SEP engagement log - Attendance sheets - FGD/meeting minutes Review of disclosure materials (webpages, leaflets, LPA notice boards) - Verification with communities	NRA/Contractor E&S budget
Monitoring of Grievance Redress Mechanism (GRM)	Along the project road	Continuous	Total grievances received (categorised: land, access, construction, noise, dust, safety, employment, economic displacement, etc.) - Complaints resolved vs. outstanding (%) Average response and resolution time (days) - % of cases resolved within SEP time limit Satisfaction level of complainants (sample follow-up)	NRA/Contractor GRM database - Review of grievance forms - Site-level GRM registers GRM software/database statistics Phone interviews with closed-case complainants	NRA/Contractor E&S budget
Monitoring of Social and Environmental Issues Reported by Communities	Along the project road	Continuous	Number and type of issues reported (dust, noise, vibration, safety, access, traffic, waste, vegetation removal, cultural sites) Response and corrective actions implemented by Contractor (timeliness, adequacy, recurrence)	NRA/Contractor GRM and consultation minutes - Environmental & Social site inspection checklists Site observations - Contractor monthly reports	NRA/Contractor E&S budget
Monitoring of Compliance with SEP's Inclusion Measures	Along the project road	Continuous	Number of targeted engagements with vulnerable groups (elderly, women, persons with disabilities, minority groups, low-income households) Accessibility of engagement events (location, timing, language availability: Romanian/Russian)	NRA/Contractor SEP logbook - FGD attendance lists Field verification - Participant feedback	NRA/Contractor E&S budget

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
Monitoring of Contractor's Stakeholder Engagement Obligations	Along the project road	Continuous	Existence of Contractor's Community Liaison Officer (CLO) and site-level engagement mechanism Number of contractor–community interactions (site visits, safety briefings, advance notice of works)	NRA/Contractor/SE Contract review - Monthly contractor reports Contractor community register	NRA/Contractor E&S budget
Monitoring of Information on Construction Impacts (Access, Traffic, Safety)	Along the project road	Continuous	Number of information notices distributed about temporary access restrictions or traffic changes Number of complaints regarding poor communication or lack of advance notice	NRA/Contractor/SE Copies of notices - LPA/community feedback, GRM log	NRA/Contractor E&S budget
Monitoring of SEP Compliance Mechanism and Corrective Actions	Along the project road	Continuous	Number of SEP non-compliances recorded (e.g., missed meetings, poor disclosure, inadequate engagement) Corrective actions implemented and closed	NRA/Contractor/SE Internal audits - Supervision engineer verification Corrective Action Plans tracking	NRA/Contractor E&S budget
Monitoring of Stakeholder Feedback on Project Risks and Benefits	Along the project road	Continuous	Community perception of project impacts (traffic safety, access, business visibility, agriculture mobility) Business community perceptions (Horești-Țipala cluster, Sagaidacul Nou, Giurgiulești business zone, agro-tourism on Lot 1)	NRA/Contractor/SE Surveys and FGDs during construction and early operation Business surveys - Interviews	NRA/Contractor E&S budget
Monitoring of Engagement on Design Changes (Access, Junctions, Service Roads)	Along the project road	Continuous	Number of consultations held on access reconfiguration, closure of direct access, parallel routes Stakeholder agreement with proposed access solutions (qualitative feedback)	NRA/Contractor/SE Meeting minutes - Consultation feedback forms	NRA/Contractor E&S budget
Access, Traffic, Agricultural Mobility & Road Safety					
Monitoring Access Restrictions During Construction (Communities & Businesses)	Along the project road	Construction (indicated per monitoring)	Number of side roads / accesses temporarily closed (planned vs. unplanned) - Duration of closures (hours/days) - Adequacy of temporary access arrangements Number of businesses experiencing access disruption (shops, fuel stations, agro-tourism, storage depots) - Number of complaints related to business access Public transport disruptions (bus stop relocation, closure, accessibility issues)	NRA/Contractor/ SE Contractor access logs - Site inspections - TMP checklists (weekly) GRM logs (monthly) - Business engagement records - Consultation minutes TMP records (monthly) - LPA confirmation - Bus operator feedback	Contractor costs
Monitoring Agricultural Land Access (Key Issue Across Lots 1–3)	Along the project road	Pre-construction/ Construction (indicated per monitoring)	Number of agricultural access points blocked/affected - Duration and season of impact (planting, irrigation, harvest) Functionality of temporary access tracks for	NRA/Contractor/SE Site inspections – Contractor impact register – Farmer feedback (weekly in peak	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			tractors/machinery Number of detours required by farmers (km added; time)	seasons) TMP monitoring - Field verification (weekly) GPS tracking; mapping analysis - Farmer surveys (quarterly)	
Monitoring Impacts from Closure of Informal / Direct at-Grade Accesses	Along the project road	Pre-construction/ Construction (indicated per monitoring)	Number of direct informal accesses closed (baseline vs. post-closure) % of affected households/businesses with functional alternative routes Number of grievances relating to loss of access	NRA/Contractor/SE Design vs. as-built comparison - Field inspections (monthly) Site verification - LPA confirmation - GRM follow-up (monthly) GRM log (monthly)	Contractor costs
Monitoring Traffic Safety Risks (Construction Phase)	Along the project road	Construction (indicated per monitoring)	Number of temporary diversions with proper signage and lighting - Compliance with TMP speed limits Accidents or near-misses involving construction vehicles Pedestrian safety near works areas (barriers, crossings, lighting)	NRA/Contractor/SE TMP audits - Joint inspections (NRA + Police) (weekly) Daily site walk-throughs (daily) Contractor incident logs - Police data (monthly)	Implementation costs
Monitoring Traffic Safety Risks (Operation Phase)	Along the project road	Operation (indicated per monitoring)	Post-construction accident rates (baseline vs. Year 1-2) Effectiveness of implemented RSA recommendations (rumble strips, junction design, roundabout geometry, delineation) Use of grade-separated agricultural crossings (if included in design)	NRA/Contractor/SE Police statistics - NRA traffic analysis (quarterly 1-2 years) As-built verification - RSA post-opening audit (at opening + 1year)	Implementation costs
Monitoring Mobility Impacts on Residents (Construction Phase)	Along the project road	Construction (indicated per monitoring)	Average delay time due to detours (minutes) Accessibility to essential services (health centres, schools, LPAs)	NRA/Contractor/SE Traffic monitoring - GPS mapping (monthly) Household surveys (sample) - LPA feedback (quarterly)	Implementation costs
Monitoring of Lot-Specific Risks Identified by RSA	Along the project road	Pre-construction/ Construction/Operation (indicated per monitoring)	Lot 1 (Agricultural Access Mismatch): number of RSA-flagged access points corrected in final design vs. outstanding Lot 4 (Bypass): - adequacy of roundabout geometry - safe merging at border-bound freight flows	NRA/Contractor/SE RSA comparison - Design team reports (monthly) RSA follow-up - Site inspection (monthly – construction/ Year 1 - operation)	Implementation costs
Monitoring Access During Temporary Road Closures	Along the project road	Construction (indicated per monitoring)	Advance notice (days) given for closures -	NRA/Contractor/SE	Implementation costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			Number of households/businesses informed	Communication records; LPAs confirmations (per closure)	
Monitoring of Emergency Access	Along the project road	Construction (indicated per monitoring)	Response times for ambulance/fire services (baseline vs. during works) Number of critical access points temporarily blocked without emergency alternative	NRA/Contractor/SE Emergency service logs - LPA feedback (quarterly) Site inspection (monthly)	Implementation costs
Monitoring of Access Restoration After Construction	Along the project road	Operation (indicated per monitoring)	Number and type of accesses reinstated (household, commercial, agricultural) Community satisfaction on restored access	NRA/Contractor/SE Field inspections - As-built plans (at construction completion) Closing consultations - GRM follow-up (at handover)	Implementation costs
Community Health, Safety and welfare					
Community Health – Dust, Air Quality, Noise and Vibration (Construction Phase)	All Lots; priority: Lot 1 (Băcioi, Străisteni, Răzeni, Horești, Porumbrei); Lot 2/3 village junctions, Ciucur-Mingir; Lot 4 Giurgiuilești	Construction (indicated per monitoring)	Number of dust complaints from residents (per lot/settlement) - Frequency of water spraying near settlements vs. plan - Visual dust observations on haul roads and in village sections Noise levels at sensitive receptors (schools, clinics, churches, dense residential clusters) compared with standards - Number and % of noisy activities restricted to daytime hours as per ESMP Number of vibration monitoring points in Străisteni, Răzeni, Giurgiuilești and other high-risk areas - Number of verified damage claims vs. baseline condition surveys	NRA/Contractor/SE Site inspection checklists - Contractor dust suppression log - GRM database (weekly, daily checks in peak earthworks) Noise measurements (spot & short-term) - Work schedule review (monthly and during high-noise activities) Vibration monitoring reports - Pre- and post-construction condition surveys - GRM/claims records (Before works, mid-construction, and at completion)	Contractor costs
Community Health – Access to Health Services and Emergency Response	Along the project road	Construction (indicated per monitoring)	Reported delays in ambulance/fire response times due to construction detours Number of incidents where access to medical points/clinics was blocked or significantly restricted	NRA/Contractor/SE Emergency services records - LPA feedback (semi-annually) GRM complaints - Site inspection (quarterly)	Implementation costs
Worker–Community Interaction and Communicable Disease Risks	All work camps and construction sites, all affected settlements	Construction (indicated per monitoring)	Implementation of worker health screening and hygiene measures (yes/no; % of workers screened) Number of community complaints related to worker behaviour (harassment, alcohol use,	NRA/Contractor/SE Contractor OHS & HR records - Health & hygiene protocols (quarterly) GRM database - SEP	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			disrespect, noise from camps)	engagement minutes (monthly)	
Community Safety – Traffic and Road Safety (Construction Phase)	Along the project road	Construction (indicated per monitoring)	<p>Number of traffic accidents and near-misses involving project vehicles (classified by type: pedestrian, cyclist, vehicle–vehicle)</p> <p>Compliance with speed limits by construction vehicles in settlements (share of checks within limit)</p> <p>Number of hazardous situations identified during safety inspections (open excavations unfenced, unsafe diversions, missing signs) and % corrected within defined timeframe</p>	<p>NRA/Contractor/SE/Police</p> <p>Contractor incident logs - Police data (monthly)</p> <p>Random speed checks (monthly)</p> <p>Daily/weekly site safety inspections – Non-conformance register</p>	Contractor costs
Community Safety – Pedestrians, Children, School Transport	Along the project road	Construction (indicated per monitoring)	<p>Number and adequacy of temporary safe crossings near schools, bus stops, cemeteries and markets – Presence of barriers/fencing separating pedestrians from work areas</p> <p>Incidents/complaints related to unsafe crossings, bus stop conditions, or school transport issues</p>	<p>NRA/Contractor/SE</p> <p>Site inspections - TMP & CHSP review (weekly)</p> <p>GRM records - Meetings with school directors and transport operators (monthly)</p>	Implementation costs
GBVH and Harassment Risks	Along the project road	Construction (indicated per monitoring)	<p>Existence of GBVH Action Plan and worker Code of Conduct – Percentage of workers trained on GBVH and community interaction</p> <p>Number and type of GBVH-related complaints; proportion resolved and referred to specialised services (if applicable)</p>	<p>NRA/Contractor</p> <p>Contractor training records - HR/induction documentation (quarterly)</p> <p>GRM database (including confidential channels) - NGO/LPAs feedback where involved (quarterly)</p>	Contractor costs
Community Welfare – Economic Activities and Livelihoods (Community Health and Safety Link)	Along the project road	Construction (indicated per monitoring)	<p>Number of businesses reporting loss of customer access or reduced visibility due to construction arrangements</p> <p>Number of cases of crop damage or property damage (walls, fences, gates) registered and compensated</p>	<p>NRA/Contractor/SE</p> <p>GRM data - Business surveys (fuel stations, roadside markets, agro-tourism, storage depots) (quarterly)</p> <p>GRM log - RAP & ESMP records - Damage survey reports (quarterly)</p>	Implementation costs
Community Information and Risk Communication (Community Health and Safety-related)	Along the project road	Construction (indicated per monitoring)	<p>Number of information events/leaflets/social media posts explaining risks, construction schedules, safety measures</p> <p>% of announced works where communities received ≥72 hours advance notice (closures, detours, high-noise works)</p>	<p>NRA/Contractor/SE</p> <p>SEP engagement log – Copies of materials (notices, FB posts, Viber messages) – (monthly)</p> <p>Review of notices vs. actual start dates - LPA confirmation</p>	Implementation costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
				(quarterly)	
Project-Wide Construction Community Health and Safety Risks	Along the project road	Construction (indicated per monitoring)	Number and nature of CHS-related incidents/complaints (dust, noise, unsafe driving, trespass accidents, property damage, worker behaviour) Implementation status of CHS measures in Construction Environmental and Social Management Plan (CESMP) and Community Health and Safety Plan (CHSP)	NRA/Contractor/SE GRM database analysis (coded by topic, location, lot, gender) (monthly) E&S audits - Plan vs. practice review (quarterly)	Implementation costs
Operation Phase – Road Safety and Community Health	Along the project road	Operation (indicated per monitoring)	Road traffic accidents (fatalities, serious injuries) per year after opening vs. baseline (by lot, settlement, type of user) Functionality and use of pedestrian and bus infrastructure (bus bays, service roads, over/underpasses, sidewalks) Perception of community safety and wellbeing (traffic, noise, access to services)	NRA, Police Police and NRA statistics - RSA post-opening assessment (annual Year 1-5) Site inspections - Community feedback surveys (annual first 3 years) Household survey or focus groups (sample) (at year 2-3 of operation)	Implementation costs
Historical and Cultural heritage					
Protection of Known Cultural Heritage Assets (chance find procedure)	Along the project road	As required (in a case of discovery)	All works conducted outside legally defined protection zones (100–500 m) - No intrusion into buffer zones - No material storage near monuments No physical damage to memorials, churches, burial sites, local monuments	NRA/Contractor/SE Site inspections - Photographic evidence – monthly construction Field inspections - LPA confirmations	Contractor costs
Protection of Archaeological Resources (Chance Finds)	Along the project road	Continuous	Number of chance finds reported - Timeliness of reporting to authorities (within 24 hours) Adherence to Chance Finds Procedure (works stopped, area secured, GPS recorded, notification sent)	NRA/Contractor/SE Chance Finds Register - Worker reports - Incident record forms Review documentation - Interview workers - Audit by Engineer – per incident	Implementation costs
Avoidance of Sensitive Areas (Trajan's Wall – Lot 2)	Lot 2	Construction (indicated per monitoring)	No excavation, trenching, or material removal within defined boundaries - No vehicle/machinery circulation in restricted zone	NRA/Contractor/SE Physical demarcation with fencing - GPS control points - Weekly inspections	Implementation Costs
Dust, Noise, and Vibration Impacts on Cultural Heritage in Villages	Along the project road	Construction (indicated per monitoring)	Dust deposition near churches/monuments visibly controlled - No excessive dust accumulation	NRA/Contractor/SE Visual inspection- Photographic checklist -	Implementation Costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
				Weekly during construction; daily in summer	
Preservation of Access to Cultural and Memorial Sites	Along the project road	Construction (indicated per monitoring)	No blockages to cemeteries, churches, festival grounds - Traffic management during local ceremonies	NRA/Contractor/SE TMP reviews - LPA confirmations - Field inspections Monthly; extra before holidays (Easter, Memorial Days)	Contractor costs
Worker Awareness and Training	Along the project road	Construction (indicated per monitoring)	Number of workers trained in cultural heritage protection and chance finds (induction + toolbox talks) Workers can identify potential archaeological items (survey tests)	NRA/Contractor/SE Short on-site Q&A during audits -quarterly	Contractor costs
Monitoring of Giurgiuleşti Cannon Monument	Giurgiuleşti	Construction (indicated per monitoring)	No accidental contact/damage during works - Protective barriers installed if working nearby Coordination with LPA regarding planned relocation activities	NRA/Contractor/SE Visual inspection - Photo logs Monthly construction Meeting minutes - Confirmation from LPA – as needed	Contractor costs
Intangible Cultural Heritage (Festivals, Rituals)	Along the project road	Construction (indicated per monitoring)	No interruption to cultural events - Traffic management adapted during major local festivals	NRA/Contractor/LPAs Coordination with LPAs – TMP – annual before known events updates	Contractor costs
Compliance with National Legislation and EBRD PR8	All lots	Construction (indicated per monitoring)	All approvals/notifications made prior to works - Cultural heritage permits updated (if required)	NRA/Contractor Document review - Baseline update checks – before works and annually	Implementation Costs
Occupational Health and Safety (PR 4), Labour and Working conditions (PR2), Supply Chain OHS & Labour					
Overall OHS Performance in Construction	All lots	Construction (indicated per monitoring)	Total Recordable Injury Frequency Rate (TRIFR) - Lost Time Injuries (LTI) per month/lot - Number of near-misses reported vs. investigated and closed Number of serious incidents (fatalities, permanent disability, major accident) - Number of serious incidents reported to client/EBRD within required timeframe	NRA/Contractor/SE Contractor OHS statistics - Incident & near-miss registers - OHS dashboards (Monthly OHS Report; Quarterly E&S Monitoring Report) Incident logs - Incident notification forms (as incidents occur; aggregated monthly)	Contractor costs
Traffic-Related Worker Safety	All lots	Construction (indicated per monitoring)	Number of work zones with compliant work-zone protection (barriers, cones, shadow vehicle, signage) vs. total active work zones -	Contractor/SE Daily work-zone inspections - TMP compliance checklists -	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			Number of traffic-related incidents involving workers	Incident logs (daily checks; weekly summary)	
Noise, Vibration, Weather Exposure (Workers)	All lots	Construction (indicated per monitoring)	<p>% of workers in high-noise tasks using hearing protection - Number of noise monitoring points vs. plan</p> <p>Number of recorded heat stress / cold stress incidents - Implementation of heat/cold protocols (rest breaks, shaded areas, warm PPE)</p> <p>Number of workers with high vibration exposure (hours/day) - Use of anti-vibration tools/job rotation for those tasks</p>	<p>Contractor/SE</p> <p>PPE compliance inspections – Noise measurements (monthly)</p> <p>OHS medical records - Site inspections (checklists)- monthly (more frequent in extreme seasons)</p> <p>Task logs - JHAs/method statements - monthly</p>	Contractor costs
Falls, Slips, Trips and Work at Height	Bridges, culverts, embankments, gantries (all lots)	Construction (indicated per monitoring)	<p>Number of work-at-height permits issued vs. compliance inspections - Findings of inspections (proper harnessing, anchorage, guardrails)</p> <p>Number of slip, trip, fall incidents - Housekeeping non-conformances identified and closed</p>	<p>NRA/Contractor/SE</p> <p>Permit-to-work system - Work-at-height inspection forms – biweekly</p> <p>Incident records – Housekeeping inspection checklists - weekly</p>	Contractor costs
OHS Training, Induction, Job Hazard Analyses	All lots	Construction (indicated per monitoring)	<p>% of workforce having received OHS induction - % of workers trained for specific high-risk tasks (work at height, confined space, traffic management, hot works)</p> <p>Number and quality of Job Hazard Analyses (JHAs) prepared for high-risk activities - Frequency of toolbox talks (per crew/week)</p>	<p>NRA/Contractor</p> <p>Training registers - Induction attendance sheets – monthly</p> <p>JHA records - Toolbox talk minutes - weekly</p>	Contractor costs
Roadside Maintenance Safety (PR4 – Operation and Monitoring)	All lots	Operation (indicated per monitoring)	<p>Existence and implementation of Maintenance Traffic Management Plan (MTMP) - Number of maintenance worksites with full temporary traffic control in place (signs, cones, speed restriction, shadow vehicle)</p> <p>Number of accidents/near-misses involving maintenance crews and live traffic</p> <p>Use of high-visibility PPE by maintenance staff (% compliance)</p>	<p>NRA/Maintenance Contractor</p> <p>MTMP review - Field inspections (quarterly; each maintenance campaign)</p> <p>Incident records; Police data - quarterly</p> <p>Spot checks - monthly during maintenance works</p>	Contractor costs
Work Scheduling & Weather Risk in Operation and Monitoring	All lots	Operation (indicated per monitoring)	Number of maintenance activities conducted during off-peak vs. peak hours - Number of	NRA/Maintenance Contractor	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			unplanned works during hazardous conditions (fog, snow, low visibility)	Work orders - Maintenance logs quarterly	
HR Policy, Labour Management System (Client – NRA)	All lots	Construction (indicated per monitoring)	Existence and adoption of PR2-aligned HR Policy and Labour Management Procedures - Number of internal reviews of LMP implementation per year.	NRA Document review - Management review minutes - Annual PR2 Compliance Report.	Implementation costs
Contractor Labour Management (Construction Phase)	All lots	Construction (indicated per monitoring)	Existence of Contractor Labour Management Plan and Worker Code of Conduct (aligned with PR2) - Number of labour audits/inspections carried out by Owner's Engineer/NRA Non-compliances identified (working hours, wages, PPE, welfare, contracts, discrimination) and % with CAPA closed	NRA/Contractor/SE Contract review - Audit reports - Site inspection records – quarterly Labour audit findings - CAPA tracking sheet - quarterly	Contractor costs
Working Hours, Wages, Contracts	All lots	Construction (indicated per monitoring)	% of workers with written contracts meeting Moldovan law and project requirements - % of workers with recorded working hours and wage payments Number of grievances related to wages, working hours, unfair dismissal, discrimination	NRA/Contractor/SE HR records - Payroll and timesheets - Worker interviews – (quarterly) Worker GRM database (monthly)	Contractor costs
Worker Accommodation (if used)	All worker camps (if any)	Construction (indicated per monitoring)	Existence and implementation of Worker Accommodation Plan - Number of inspections of camps vs. non-compliances (overcrowding, hygiene, fire safety, WASH, gender-sensitive facilities)	NRA/Contractor/SE Camp inspection reports - OHS/HR audits (monthly)	Contractor costs
GBV/SEA, Harassment and Non-Discrimination	All lots	Construction (indicated per monitoring)	Code of Conduct including GBV/SEA, non-discrimination and harassment clauses signed by % of workers - Number of GBV/SEA trainings delivered and participants (by gender, contractor) Number of GBV/SEA or harassment-related complaints, and % resolved in line with procedure	NRA/Contractor/SE HR training records – CoC sign-off forms (quarterly) Confidential worker GRM records (quarterly)	Contractor costs
Worker Grievance Mechanism (Internal GRM)	All lots	Construction (indicated per monitoring)	Availability of anonymous, accessible worker GRM (multiple channels) - Number of grievances, average resolution time, % resolved vs. pending	NRA/Contractor/SE Worker GRM statistics - Worker interviews - monthly	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
Worker Participation and OHS Governance	All lots	Construction (indicated per monitoring)	Existence and activity of Joint OHS Committees (meetings held, issues raised, actions tracked)	NRA/Contractor/SE Minutes of OHS Committee meetings - Action trackers - quarterly	Contractor costs
Supplier Screening and Pre-Qualification (PR2/PR4)	All lots	Construction (indicated per monitoring)	% of high-risk suppliers (quarries, asphalt plants, bitumen suppliers, transport subcontractors) screened for OHS/labour compliance before engagement Existence of supply-chain due diligence procedure in Contractor's LMP/OHS system	NRA/Contractor Supplier questionnaires - License and permit review (prior to contract award; annual update) Document review - annual	Contractor costs
Supplier OHS and Labour Performance	All lots	Construction (indicated per monitoring)	Number of supplier site audits conducted per year - Number and type of non-compliances identified (PPE, unsafe plant, working hours, child/forced labour indicators) Number of serious incidents at supplier sites linked to Project; corrective actions taken	NRA/Contractor Supplier audit reports - Follow-up visits (semi-annually, more frequent for very high-risk suppliers) Incident notifications from suppliers - Contractor audit follow-up - as incidents occur	Contractor costs
Supply-Chain CAPA (Corrective and Preventive Actions)	All lots	Construction (indicated per monitoring)	Number of CAPA raised with suppliers and % closed within agreed timeframe	NRA/Contractor CAPA tracking tool - Audit follow-up checks - quarterly	Contractor costs
Prohibition of Child and Forced Labour in Supply Chain	All lots	Construction (indicated per monitoring)	Contractual clauses on child/forced labour included in all major supply contracts (yes/no) - Evidence of age verification and employment practices at supplier sites (spot-checked)	NRA/Contractor Contract review - Supplier audits - Worker interviews (annual, plus during high-risk supplier audits)	Contractor costs
Transport-Related Community & Worker Risks (Suppliers)	All lots	Construction (indicated per monitoring)	Number of traffic violations or accidents involving supplier trucks on the M3 corridor and approach roads	NRA/Contractor Police and project incident records	Contract costs
Economic Development, Employment and Local Value Creation					
Regional Economic Development & Trade	All lots Key nodes: Băcioi, Răzeni, Porumbrei, Cimișlia, Giurgiu-lești, Free Port / border area	Operation (indicated per monitoring)	Qualitative perception of economic benefits (improved connectivity, trade, access to markets) among businesses and LPAs - Examples of new/expanded businesses citing M3 improvements as a factor Change in average travel time on key sections (Chișinău–Porumbrei; Porumbrei–	NRA/Contractor/LPAs Interviews / FGDs with businesses and LPAs - Short post-construction survey - once in early operation (Year 2–3) NRA traffic/time–distance	N/A

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			Cimișlia; Cimișlia–Giurgiulești) vs. baseline	surveys (once at opening + once in Year 2)	
Local and National Supplier Participation	All lots	Construction (indicated per monitoring)	Value and % of contracts awarded to Aol/district/national suppliers (works, services, goods) - Number of active local suppliers (by sector) engaged during construction Inclusion of ESG / labour / OHS criteria in supplier pre-qualification and selection	NRA/Contractor Contractor procurement records - Contract registers - Supplier database – (quarterly during construction) Review of tender documents and contracts – (at tender & contract award)	Contractor costs
Local Employment and Skills Development	All lots	Construction (indicated per monitoring)	Total number of workers employed on the Project (per month) - % of workforce by origin: Aol localities / district / rest of Moldova / foreign Number and % of unskilled and semi-skilled posts filled by Aol residents (vs. indicative target, e.g. 30–40%) Number of induction and skills-training sessions delivered (OHS, traffic management, equipment operation, concrete/asphalt works) and number of participants (by origin and gender) Number of vulnerable job-seekers (women, youth, low-income) hired through targeted outreach (if tracked)	NRA/Contractor/LPAs Contractor HR records - Monthly workforce statistics (monthly) HR and recruitment records - LPA lists of referred candidates (quarterly) Training registers - Certificates (where applicable) – quarterly Recruitment and HR data - LPA / social worker inputs – semi-annual	Contractor costs
Equal and Transparent Access to Job Information	All lots	Construction (indicated per monitoring)	Number and type of channels used to advertise job opportunities (mayor's offices, notice boards, online, ANOFM, job portals, local radio) Number of job announcements shared via LPAs and ANOFM vs. those only via online/private channels Perception of fairness and transparency in recruitment among local residents (esp. women, youth, low-income households)	NRA/Contractor SEP and CLO logs - Copies of advertisements – quarterly Cross-check with LPAs and ANOFM – quarterly Short community survey or FGDs (once mid-construction + once in late construction)	Contractor costs
Vulnerable Group Inclusion in Economic Opportunities	All lots	Construction (indicated per monitoring)	Existence of inclusion measures in recruitment procedures (non-discrimination, outreach to women, youth, disadvantaged households) Number of information events where employment opportunities are presented to vulnerable groups (women's associations, youth groups, low-income households,	NRA/Contractor Review of Contractor HR policies and procedures - Contract annexes – annual SEP/CLO logs - Attendance lists – semi-annual	Contractor costs

Environmental indicator / parameter	Location	Frequency	Type of monitoring	Responsibility	Cost
			minority communities where relevant)		
Monitoring of Employment and Economic Benefits	All lots	Construction (indicated per monitoring)	<p>Submission of monthly Contractor employment and procurement statistics to NRA (yes/no; on time)</p> <p>Number of internal audits or spot-checks on employment data, recruitment practices and local hiring claims</p> <p>Integration of employment and local value indicators into overall ESMP/ESIA monitoring and reporting</p>	<p>NRA/Contractor</p> <p>NRA document register - Contractor reporting – monthly</p> <p>Audit reports - Consultant review findings – semi-annual</p> <p>Review of E&S monitoring reports - annual</p>	Contractor costs
Pressure on Local Services (from Influx & Economic Change)	All lots	Construction and operation (indicated per monitoring)	Qualitative feedback from LPAs on changes in pressure on local services (water, waste management, roads, social services) due to project workforce and economic activity	<p>NRA/Contractor/LPAs</p> <p>Semi-structured interviews with mayors and local service providers- Annually during construction and early operation</p> <p>GRM categorisation by theme – Monthly; summarised quarterly</p>	N/A
Cross-Border and Logistics Benefits (Giurgiulești Bypass & Border Roads)	Lot 4	Operation (indicated per monitoring)	<p>Functionality and utilisation of truck parking area and improved access road (occupancy rates, user feedback)</p> <p>Perceived improvement in traffic flow and logistics performance by key stakeholders (truck operators, customs brokers, local businesses)</p>	<p>NRA/Port/CBP</p> <p>Port/BCP operator statistics - Truck parking operator logs - User surveys (sample) – (annual first 3 years of operation)</p> <p>Stakeholder interviews - short questionnaires (year 2–3 of operation)</p>	Implementation costs

Table 7-1: Environmental and Social Monitoring Programme

8. Institutional Arrangements. Roles and responsibilities

The successful implementation and monitoring of the Environmental and Social Management Plan (ESMP) for the M3 Road Corridor Tranche 2 Rehabilitation Project relies on a clear institutional framework with defined roles, responsibilities, and lines of accountability. The main parties involved are the National Roads Administration (NRA) as the Project Beneficiary and Implementing Agency, the Contractor (Execution Contractor), the Supervising Engineer (Technical Supervision Consultant), and relevant public authorities. All parties are required to appoint dedicated environmental, social, and occupational health & safety (OHS) specialists to ensure effective coordination, compliance, and performance.

A. National Roads Administration (NRA) – Project Beneficiary and Implementing Agency

NRA is the overall responsible entity for project delivery and ensuring full compliance with Moldovan legislation, EBRD Environmental and Social Policy (2019) and Performance Requirements (PR1–PR10), and the approved ESMP.

Key responsibilities:

- Overall coordination and oversight of environmental, social, health & safety, and stakeholder engagement activities throughout the project lifecycle.
- Preparation and inclusion of the ESMP, SEP (Stakeholder Engagement Plan), and GRM (Grievance Redress Mechanism) in tender documents and construction contracts.
- Procurement and selection of the Contractor and Supervising Engineer.
- Review and approval of the Contractor's Construction Environmental and Social Management Plan (C-ESMP).
- Coordination with local public authorities (LPAs), Environmental Protection Inspectorate (EPI), Public Health Centers (PHC), and other regulatory bodies for inspections, permits, and compliance verification.
- Maintenance of the central Grievance Register and regular reporting to EBRD on grievances, status, and resolutions.
- Organization of public consultations, stakeholder meetings, and ongoing engagement.
- Preparation and submission of quarterly and annual environmental/social monitoring reports to EBRD and relevant authorities.
- Oversight of Contractor and Supervising Engineer performance; escalation of serious non-compliance.
- Assumption of ESMP monitoring and road maintenance responsibilities during the operation phase.

B. Contractor (Execution Contractor)

The Contractor, selected through NRA's public procurement process (via MTender platform), is responsible for the physical execution of works and day-to-day implementation of all ESMP mitigation and management measures.

Key responsibilities:

- Preparation, submission, and implementation of the site-specific Construction Environmental and Social Management Plan (C-ESMP), which must fully incorporate the project ESMP, permit conditions, and EBRD requirements.
- Appointment of qualified Environmental Officer/Specialist, Social Consultant, OHS Officer, and (where

required) Biodiversity Specialist.

- Day-to-day execution of mitigation measures (dust suppression, noise/vibration control, waste management, spill prevention, biodiversity protection near Emerald Sites/NPAs, traffic management, etc.).
- Daily site inspections, compliance monitoring, and record-keeping.
- Worker training on environmental, social, OHS, and emergency procedures.
- Immediate reporting of incidents, non-compliances, or grievances to the Supervising Engineer and NRA.
- Implementation of the approved Traffic Management Plan (TMP), waste management plan, emergency response plan, and Chance Find Procedure (CFP).
- Site restoration, recultivation, and handover of rehabilitated areas upon completion.

C. Supervising Engineer (Technical Supervision Consultant / “Engineer”)

The Supervising Engineer, appointed by NRA, acts as the independent supervisor of construction works on behalf of the Beneficiary.

Key responsibilities:

- Review, approval, and ongoing verification of the Contractor's C-ESMP before commencement of works.
- Daily/regular site inspections and audits to monitor Contractor compliance with ESMP, C-ESMP, permits, and contract requirements.
- Liaison between NRA, Contractor, LPAs, EPI, PHC, communities, and other stakeholders.
- Approval of temporary facility locations (camps, laydown areas, borrow pits), waste disposal arrangements, and other site-specific plans.
- Monitoring of environmental and social performance, including effects monitoring (air, noise, water, soil, biodiversity).
- Preparation and submission of monthly C-ESMP implementation reports to NRA.
- Issuance of instructions/notices for corrective actions in case of non-compliance.
- Participation in final acceptance of works and preparation of the final environmental/social report.

D. Public Authorities and Other Stakeholders

- Environmental Protection Inspectorate (EPI): Conducts inspections of construction sites, verifies compliance with environmental legislation and permits, and enforces corrective measures or sanctions if required.
- Public Health Centers (PHC): Monitors public health aspects (e.g., dust/noise impacts on communities, sanitary conditions at camps), conducts inspections, and supports grievance resolution.
- Local Public Authorities (LPAs): Participate in consultations, support grievance resolution at local level, approve traffic diversions, and coordinate community notifications.
- Moldsilva Agency, NPAs administrations, and scientific institutions: Provide input and oversight on biodiversity-related matters (Emerald Sites, protected areas, compensation planting, monitoring of sensitive habitats).
- Environmental Agency: Issues environmental permits and verifies compliance during construction.

E. Lender

EBRD (“the Lender”) is considering financing the Project. The Lender will require the submission of progress reports that monitor the EHSS performance of the Project against its set of specific Performance Requirements

(PRs) for key areas of environmental and social sustainability.

The ESMP and associated plans are contractual obligations attached to the tender and construction contract. Non-compliance triggers graded enforcement (notices → corrective plans → payment withholding → suspension → penalties). All parties must maintain open communication and cooperation to ensure timely identification and resolution of issues.

9. Implementation Plan

The implementation of the Environmental and Social Management Plan (ESMP) will be fully integrated into the overall project timeline and the Contractor's detailed construction programme. The ESMP will be executed as a binding component of the construction contract, with all mitigation, monitoring, and management measures applied systematically throughout pre-construction, construction, and early operation phases.

Phase	Key Activities / ESMP Actions	Timing / Triggers	Responsible Party	Notes / Dependencies
1. Pre-construction	- Finalize & approve Contractor's C-ESMP - Obtain all permits & authorizations - Baseline surveys & monitoring (noise, air, water, biodiversity, building conditions) - Hire/train ES/OHS specialists & staff - Stakeholder consultations & GRM setup - Demarcation of land take, topsoil stripping/storage, site setup with controls	Prior to mobilization / commencement of physical works on any lot	Contractor (with PIU/SE approval)	Critical for all lots; must be completed before site access
2. Construction	- Progressive ESMP implementation per mobilized lot/section - Daily/weekly compliance monitoring & inspections - Application of mitigation (dust suppression, noise controls, waste management, seasonal restrictions) - Effects monitoring (air, noise, water, soil, biodiversity) - Regular reporting & immediate corrective actions - Special scheduling near sensitive receptors (e.g., school holidays in Ciucur-Mingir)	During active works on each lot (sequence TBD)	Contractor (day-to-day) SE (supervision) PIU (oversight)	Priority likely given to sensitive lots (e.g., Lot 1 near Emerald sites, Lot 4 bypass); exact order to be confirmed
3. Post-construction / Early Operation	- Site restoration, recultivation & handover - Final biodiversity monitoring & compensation planting verification - Air/noise monitoring at receptors for at least 2 years - Transition to NRA routine monitoring - Annual performance review & lessons learned	Defects notification period + first 1–2 years after completion	Contractor (initial) NRA (ongoing)	Applies project-wide after each lot/section is handed over; long-term monitoring continues

Table 9-1: General Phased Implementation Approach for ESMP

Note: Indicative – to be detailed and updated once the Contractor's construction programme, lot priorities, and start dates are confirmed.

10. E&S General Management Measures under responsibility of National Road Administration/Supervision Consultant

This section outlines the general environmental and social responsibilities of National Road Administration throughout the life cycle (phases) of the Project.

10.1. Environmental and Social Management System

To ensure full alignment with EBRD Environmental and Social Requirements (ESR 1–10) and to strengthen long-term institutional capacity, the National Road Administration (NRA), as Client and Implementing Agency, is required to develop, formalize, and operate a comprehensive Environmental and Social Management System (ESMS). This ESMS will provide the overarching framework for managing environmental, social, labour, land-related, and OHS risks across all NRA-implemented road projects, including the M3 corridor. The ESMS shall include an Environmental and Social Policy, detailed management procedures, HR and labour management policies, contractor management protocols, supply-chain controls, monitoring and reporting procedures, and tools for incorporating EBRD requirements into procurement and supervision. Establishing this ESMS is essential for ensuring consistent compliance, improving oversight of contractors, and embedding proactive risk management throughout the NRA's institutional practice and future project portfolio.

The ESMS shall include, at minimum, the following core components:

- 1. Environmental and Social Policy** - a formal, publicly available E&S Policy that: defines NRA's commitment to environmental protection, social responsibility, labour standards, community safety, and continuous improvement; is aligned with EBRD ESR1–10 and relevant national regulations; is communicated to all NRA departments, contractors, subcontractors, and supervision entities.
- 2. ESMS Procedures and Management Processes** - a structured set of procedures governing: identification and evaluation of environmental and social risks; integration of E&S considerations into project planning, procurement, and contracting; implementation of the Project ESMP and approval of Contractor ESMPs; monitoring and reporting requirements for the full project lifecycle; emergency preparedness and response arrangements; management of non-compliance and corrective actions.
- 3. Labour and Human Resources Management** - institution-wide procedures aligned with PR2, covering: fair recruitment, working conditions, equal opportunity, and non-discrimination; prohibition of child and forced labour; worker accommodation standards where applicable; worker grievance redress mechanism; oversight of contractor and subcontractor labour performance.
- 4. Contractor and Supply-Chain Management** - tools and procedures for: embedding E&S requirements in tender documents and contracts; prequalification screening based on E&S performance; verifying contractor capacity to implement the ESMP and labour standards; monitoring supply-chain risks (e.g., quarries, materials, transport providers); ensuring non-retention of worker documents, ethical recruitment, and compliance with all E&S clauses.
- 5. Monitoring, Reporting, and Record-Keeping** – including requirements for: routine site inspections, audits, and compliance checks; environmental monitoring (air, noise, water, soil, waste, biodiversity); social and land-related monitoring (engagement, grievances, livelihood impacts); OHS performance indicators and incident

reporting; periodic reporting to NRA senior management and to the financiers.

6. Stakeholder Engagement and Grievance Management – including systematic processes for: maintaining and updating the Stakeholder Engagement Plan (SEP); ensuring continuous, inclusive consultation throughout project phases; managing community grievances through accessible and transparent channels; documenting responses, resolutions, and follow-up actions.

7. Capacity-Building and Training – including a structured approach to ensure that NRA's E&S, HR, OHS, procurement, and technical staff: are trained in E&S requirements, monitoring tools, and international good practice; understand their roles in implementing the ESMS; have access to internal guidance, templates, supervision checklists, and reporting formats.

8. Continuous Improvement Mechanism - the ESMS shall include provisions for: internal review of system effectiveness; lessons-learned integration; annual updates to procedures, tools, and controls; revision of ESMP and contractor requirements based on monitoring results or changes in project design.

10.2. Procedures for Implementation of the Project

In support to the E&S policies, National Road Administration will develop internal procedures to ensure sound E&S performance throughout its life cycle (phases) of the Project and this ESMP, including the following key topics:

- Mobilisation of the designated NRA project personnel;
- Allocation of sufficient human and financial resources to implement E&S requirements;
- Allocation of the key roles and responsibilities within the appointed NRA Project personnel (tabel below).
- Coordination and clear division of responsibilities among the appointed NRA Project personnel for review of CESMP documents and procedures, and monitoring of their implementation.
- Progress reporting, record keeping, databases (e.g. photographs, grievances, environmental incidents, health and safety issues, etc.).
- Implementation of mitigation measures throughout the operation phase of the Project.

Nr	ESMS key personnel roles	Key responsibilities
	National Road Administration (NRA) / Project Implementation Unit (PIU) - Overall responsibility for ESMP implementation and compliance with EBRD requirements	
1	NRA/PIU Director – Project Owner	Overall accountability for ESMP implementation Ensures alignment with EBRD PRs and Moldovan legislation Approves project-level decisions and ESMP revisions
2	Environmental & Social (E&S) Manager – NRA	Leads NRA's Environmental and Social Management System (ESMS) Coordinates with EBRD, SE, Contractor Reviews and approves CESMP and all Contractor E&S sub-plans Oversees monitoring and reporting
3	Environmental Specialist	Monitors compliance with environmental mitigation measures Reviews pollution, soil, water, waste, biodiversity monitoring Participates in site inspections with SE
4	Social Specialist	Monitors community impacts, access restrictions, livelihood impacts Collects GRM data and analyses grievance trends Coordinates resolution of social grievances Ensures timely referral of grievances Maintains communication with complainants Monitors community impacts Coordinates with LPAs and community leaders Supports SEP implementation

Nr	ESMS key personnel roles	Key responsibilities
		Ensures integration of vulnerable groups Prepares monthly and quarterly social monitoring reports Supports monitoring of land acquisition and RAP-related commitments
5	Land Specialist	Manages land acquisition, RAP obligations, temporary access planning Coordinates with LPAs and PAPs Oversees SEP implementation and disclosure activities Monitors community grievances
6	OHS Specialist	Ensures alignment with Law 186/2008 and EBRD PR4 Monitors Contractor OHS performance and safety KPIs Participates in incident investigations
7	Communications Officer	Leads public information and disclosure Coordinates GRM reporting Prepares announcements and consultation logistics
Supervision Engineer (SE) - Independent compliance, technical and E&S supervision		
1	Team Leader	Ensures all works comply with design, technical, and ESMP requirements Issues site instructions and non-compliance notices
2	Environmental Supervisor	Daily/weekly environmental inspections Verifies CESMP implementation Approves method statements with environmental relevance
3	Social / Community Liaison Specialist	Monitors community impacts, access restrictions, livelihood impacts Collects GRM data and reports to NRA
4	OHS Supervisor	Conducts daily H&S inspections Confirms training, PPE, work permits, safe work method statements Issues Stop-Work Orders for severe non-compliance
Executive Contractor - Primary responsibility for daily implementation of ESMP on site		
1	Contractor Project Manager	Overall responsibility for construction and environmental/social performance Ensures Contractor's resources, staffing, and equipment meet ESMP obligations
2	Contractor EHS Manager (Environmental, Health & Safety Manager)	Prepares and updates the C-ESMP Oversees all EHS staff and subcontractors Reports incidents to SE and NRA Ensures training, emergency preparedness, risk assessments
3	Environmental Officer(s)	Implements environmental sub-plans (air, noise, soil, water, waste, biodiversity) Manages monitoring equipment, records, and non-conformity logs Implements spill response and pollution control
4	Social/Labour Officer	Implements the Labour Management Plan and Workers' Code of Conduct Manages worker GRM and camp-related community interface Oversees recruitment, non-discrimination, worker onboarding
5	Community Liaison Officer (CLO)	Daily communication with LPAs and residents Handles community grievances and notifications Coordinates access arrangements and temporary detours
6	OHS Officers	Conduct daily toolbox talks, site inspections, work permits Ensure compliance with CP D.02.18:2017 and PR4 Investigate accidents, keep safety statistics
7	Traffic Management Supervisor	Implements Traffic Management Plan Manages signage, diversions, pedestrian safety corridors
8	Subcontractor EHS Focal Points	Report to Contractor EHS Manager Implement site-specific method statements and controls

Table 10-1: ESMS key personnel roles and responsibilities

10.3. Climate resilience

The National Road Administration (NRA), as the Client and Implementing Agency for the M3 corridor, shall ensure that climate-resilient design, construction, and operational measures are integrated throughout all phases of the Project. Given the exposure of the M3 alignment—particularly in Lot 1 (Botna/Botnișoara sub-basin), Lot 2

(Cogâlnic watershed), and Lot 4 (Lower Prut wetland areas)—to increasing flood intensity, prolonged drought periods, heat stress, erosion risks, and extreme weather events, the NRA is required to adopt a systematic approach to climate adaptation consistent with EBRD ESR4 and national technical regulations for road design and hydrotechnical safety.

10.3.1. Climate-Resilient Design and Operational Measures

As a minimum, the NRA shall ensure that the following adaptation measures proposed in the ESIA are incorporated into detailed design, contractor specifications, and operational maintenance planning:

- **Flood-Risk Adaptation Measures** - measures shall be integrated to reduce vulnerability in flood-prone sectors, including: reinforcement and elevation of road embankments in areas with recurrent inundation; protection of slopes and sensitive cut/fill zones using gabions, geotextiles, and vegetative cover; stabilization of riverbanks where the alignment approaches the Botna, Botnișoara, Cogâlnic, or Prut watersheds.
- **Hydraulic Modelling and Hydrological Verification** - the NRA shall ensure that updated hydraulic modelling is performed during detailed design to: reassess peak flow conditions under projected climate scenarios; identify potential overflow, ponding, or erosion risks at culverts, channels, and bridges; size hydraulic structures (culverts, ditches, cross-drainage) consistent with future flow projections rather than historic averages.
- **Climate-Adjusted Drainage Design** - drainage systems shall be enhanced to withstand increased rainfall intensity by: enlarging culvert diameters and ensuring self-cleaning inlets/outlets; designing stormwater channels with erosion-resistant linings; installing sediment traps, oil separators, and overflow emergency paths; ensuring adequate longitudinal drainage along cuttings and embankments.
- **Climate-Resilient Pavement and Asset Management** - to address heat stress, freeze-thaw cycles, and increased moisture loads: pavement structures and materials shall be selected based on performance under elevated temperatures and humidity; asset management practices shall include routine inspections of drainage, slope stability, joints, guardrails, and pavements; maintenance schedules shall be adjusted to reflect accelerated wear under climate stressors.
- **Emergency Preparedness and Response** - NRA shall include climate-related emergencies in its Emergency Response Plan, covering: protocols for flooding, slope failure, heavy rainfall, or windstorms; early-warning coordination with local authorities and hydrological services; rapid mobilization procedures for clearing debris, reopening lanes, and ensuring community safety.

10.3.2. Climate Resilience Action Plan (CRAP)

In addition to project-level measures, the NRA shall prepare and implement a Climate Resilience Action Plan (CRAP) to strengthen institutional capacity for identifying and managing climate risks across the wider road network. The Climate Resilience Action Plan shall include, at minimum, the following elements:

- **Climate Data Updating and Integration** - procedures to: periodically update climate projections from national meteorological services and international datasets; incorporate new hydrological and meteorological data into the design of future NRA projects.
- **Monitoring of Climate Impacts and Risks** - a monitoring system to: track the performance of drainage

systems, pavements, slopes, and hydraulic structures under extreme weather events; maintain a climate impact registry documenting incidents (e.g., flooding, erosion, heat-induced cracking).

- **Lessons Learned and Feedback Mechanism** - structured procedures to: review post-event assessments (e.g., after floods or extreme storms); integrate operational lessons into future designs, maintenance standards, and contractor requirements.
- **Identification and Adoption of Additional Measures** - a decision-making framework enabling NRA to: assess when additional corrective or preventive measures are warranted; adopt new engineering standards, materials, monitoring technologies, or resilience solutions; allocate budgetary resources for climate adaptation actions.

The NRA shall ensure that all climate resilience measures are: integrated into the Contractor ESMP and Owner's Engineer supervision requirements; reflected in procurement documents, Bills of Quantities (BoQ), technical specifications, and performance standards; monitored throughout construction and operation with clear responsibility lines and reporting obligations.

10.4. Resettlement

The Project requires land acquisition and restriction of land use. These issues could induce adverse impacts for the affected land owners and users. A Land Acquisition and Resettlement Framework has been prepared in compliance with the EBRD E&S policy that sets out a framework by which the impacts will be mitigated and how compensation will be made. This ESMP section outlines the key management actions the NRA must undertake to ensure that land acquisition, compensation, and livelihood restoration are implemented correctly and equitably.

Key Management Actions Prior to Construction

Preparation of a Resettlement Action Plan (RAP)

Upon completion of the Detailed Design for each Lot, the NRA shall prepare and implement a Project-specific Resettlement Action Plan (RAP).

The RAP will be based on: verification of final land-take requirements using Detailed Design drawings and updated cadastre data; classification of permanent and temporary land impacts, safety-zone needs, and access modifications.

The RAP shall include the following:

Identification of affected persons and Impacts: identification of all affected landowners, agricultural users, tenants, and informal occupants, mapping of affected plots and type of impact (acquisition, temporary occupation, crop loss, access restrictions);

Socio-Economic Survey and Vulnerability Assessment: a full census covering all affected persons, assessment of vulnerable categories (elderly, women-headed households, low-income, disabled persons, large families),

Compensation at Full Replacement Cost (FRC): compensation for land, structures, crops, and economic losses at full replacement cost, valuation carried out by certified Moldovan valuers in line with national regulations and EBRD PR5;

Livelihood Restoration: restoration or improvement of livelihood conditions, especially for agricultural

households; measures may include transition allowances, crop-loss compensation, and access to alternative land;

Consultation and Disclosure: systematic engagement with affected persons, ensuring participation and accessible information; documentation of all meetings, agreements, concerns, and commitments;

Monitoring and Documentation: a RAP database recording: household eligibility, compensation entitlements, payment status, cases requiring additional support, follow-up monitoring results;

Audit of Lot 2 – Previously Expropriated Lands (Phase 1)

Before RAP implementation for Lot 2, the NRA shall undertake a comprehensive Land Acquisition Audit for all plots expropriated during the Phase 1 works (2019–2020) under earlier financing.

This audit is necessary to: verify whether past land acquisition complied with EBRD PR5 principles; confirm whether landowners received compensation at full replacement cost; identify any gaps requiring corrective actions or top-up compensation; assess whether any vulnerable households were affected without receiving adequate support.

Key audit elements shall include: verification of the list of expropriated plots and ownership status; review of compensation amounts, methods, and timeliness; interviews with previously affected persons to assess satisfaction, grievances, or livelihood impacts; identification of any outstanding claims or legacy issues; preparation of corrective measures to bring past actions into alignment with PR5.

The conclusions of the Audit shall be integrated directly into the RAP for Lot 2.

Key Management Actions During Construction and Operation

During Construction: ensure RAP measures are fully implemented before taking physical possession of land. Any temporary land occupation must follow the same principles as permanent acquisition (full compensation, consultation, documentation). Maintain continuous engagement with affected communities.

During Operation: If additional land is required for maintenance, emergency access, or safety works, the NRA shall: apply national legislation and PR5 principles; prepare a RAP addendum where necessary; consult affected persons and provide compensation at full replacement cost.

Grievance Redress Mechanism (GRM)

Before RAP implementation and expropriation procedures, the NRA shall establish and operationalise a dedicated Land Acquisition GRM.

The GRM shall: offer multiple accessible channels for submitting grievances (online, in person, phone, LPAs); record, track, and respond to complaints in a timely and transparent manner; remain active throughout construction and early operation; be clearly communicated to all affected households during consultations.

Resettlement Committee

For cases involving unclear ownership or informal users, the NRA shall establish a Resettlement Committee composed of representatives from: Local Public Authorities (LPAs), cadastral offices, community representatives, NRA land team.

The Committee will support: identification of real land users or tenants; validation of occupancy status; facilitation of socio-economic surveys; communication and grievance resolution.

Support to Vulnerable Groups:

Vulnerable individuals and households shall receive additional assistance, such as: help with documentation or administrative procedures; priority processing of compensation; supplementary livelihood support; transportation

to consultation meetings; facilitated access to the GRM.

10.5. Stakeholder Engagement

A Stakeholder Engagement Plan (SEP) has been prepared for the M3 Tranche II Project and will be implemented by the National Road Administration (NRA). The SEP has been developed in accordance with EBRD Performance Requirement 10 and the applicable stakeholder engagement and public participation provisions of Moldovan legislation, ensuring structured, inclusive, and ongoing communication with all communities and institutions affected by or interested in the Project.

Category A projects are required to carry out a formalized, participatory consultation process integrated into each stage of the environmental and social impact assessment (ESIA) process (Scoping Stage, ESIA engagement and ESIA disclosure package).

The scoping-stage stakeholder engagement for the M3 Tranche 2 corridor conducted by ESIA consultants set out to identify who is affected or interested, capture location-specific concerns, and refine the scope of the ESIA. Stakeholders were mapped through an internal workshop on 29th of August 2025 with NRA against two dimensions—degree of impact and level of interest—and grouped as: national ministries and agencies; regional and district authorities; municipal administrations; project-affected communities (residents, landowners, businesses); workers and labour representatives; potential suppliers and contractors; civil society and thematic NGOs; and local press and online media. The Methods used for **Scoping Stage Engagement** EBRD Guidance Note Information Disclosure and Stakeholder Engagement 2023 included: **Information Disclosure Tools:** Announcements were posted by the National Road Administration and by district and local authorities across their websites and social media. Given the prevalence of community Viber and Facebook groups, local administrations also used these channels to reach residents quickly and collect feedback. Where online presence was limited, notices were displayed physically at mayoralty buildings. This multi-channel approach improved reach and ensured that even small or remote communities were aware of the project, upcoming consultations, and the route for questions or complaints. The A4 leaflet was used in scoping stage.

Multichannel publication demonstrated effectiveness of spreading the information and gather feedback from the residents (63 residents raised concerns regarding actual and recommendations designing the road). Record of feedback (official letters, community requests) are presented in ANNEX of SEP which shall be incorporated into the first Annual Environmental and Social Performance Report, to demonstrate how stakeholder feedback is continually being used to improve the overall design and performance of the Project.

Information boards in villages from Aol of the Project, especially in front or inside mayoralty buildings are useful and familiar for providing regular updates, notifications and contact or grievance mechanism details to local communities, particularly where information boards are already an established means of information dissemination. **In-person meetings** with Local Representatives and residents of the villages per Lot 1-4 (engagement with 10 representatives were conducted). **Individual in-person individual with businesses** along the roadside (12 individual meetings). **Site visits and targeted site visits with mayors** were conducted as a key engagement method to directly identify social receptors, observe local conditions, identify the principal concerns of residents within the Project's Area of Influence, and gather context-specific feedback related to the

proposed road rehabilitation and new construction works. These visits enabled the Project team to validate community priorities, assess potential impact pathways, and integrate locally informed insights into the ongoing design and planning process. **Workshops with NRA, ANTA** to discuss organization of the road project in terms capacity and capability, policies and management systems in place, current compliance with the EU policies and strategies, future programs. Organization of works for the proposed project (management / oversight of contractors for construction work, management of labour), management of environmental and social impacts, stakeholder engagement and management of grievances (labour, communities), management of land displacement and compensation, past legacies, monitoring, reporting and communication, Road Safety Audits performance. The engagement also outlined the **Grievance Redress Mechanism (GRM)** to be operated through the National Road Administration. Core design principles were presented: accessible and free to use; available in Romanian and Russian with male and female contact points; accepting anonymous submissions; providing acknowledgement within seven working days; and allowing escalation to independent mediation or the courts at any time. Special provisions were highlighted for land acquisition and resettlement contexts (advance distribution of leaflets before surveys and at valuation disclosure; field presence to explain options; and recording of grievances centrally to allow trend analysis and timely corrective action). The GRM will be tied to contractor complaint logs during construction and integrated with the NRA/PIU reporting system, with periodic public summaries to build confidence in responsiveness. Overall, scoping engagement confirmed strong support for the project's objectives, provided that design explicitly addresses local safety hotspots, land and access realities, and ecological sensitivities. Key Concerns were integrated into SEP and ESIA reports.

ESIA stakeholder engagement: Between 10–26 February 2026, the Project Implementation Unit (NRA) and ESIA consultants conducted a comprehensive stakeholder engagement and baseline socio-economic survey campaign across all settlements within the Area of Influence (AoI) of M3 Lots 1–4. Activities aligned with EBRD Performance Requirement 10 and Moldovan legislation on public consultation and access to information.

Engagement covered all AoI communities from Lots 1–4, including Băcioi, Străisteni, Răzeni, Horești, Țipala, Porumbrei, Sagaidacul Nou, Sagaidac, Ecaterinovca–Coștangalia, Grădiște, Cimișlia City, Ciucur-Mingir, Cîșlița-Prut and Giurgiulești.

Over 350+ participants attended community meetings and more than 160 household surveys were conducted. Across all localities, a standardised and multi-modal engagement approach was applied, ensuring inclusiveness and accessibility: **Public Announcements and Information Disclosure** Online publication of consultation notices on NRA and mayoralty websites, **Information boards** posted at mayoralty buildings and local platforms, **Leaflet distribution** including Project description, maps, and GRM instructions. **Community Meetings and Focus Group Discussions (FGDs)** Conducted in every locality, ensuring open participation of residents, landowners, farmers, businesses, and social institutions. Used to present Project scope, expected impacts, preliminary design features, and the ESIA process. **Baseline Socio-Economic Survey** Household-level structured questionnaires implemented in all localities (Lot 1–4), covering: Demographics, income, employment, Access to services, Road safety exposure, Community health and safety, Vulnerability, Land use, assets and previous acquisition experience.

A Project-specific SEP and a dedicated Grievance Mechanism have been developed in accordance with national requirements and EBRD PR 10. These instruments will be approved and implemented by the NRA and

Contractors to ensure continuous, transparent, and inclusive engagement throughout the Project lifecycle, during the project preparation stage through to implementation and closure. Further stakeholder engagement will continue during detailed design and construction phases to ensure that all affected groups remain informed and consulted. Ongoing engagement will address the following priority areas:

- Access arrangements to residential properties, commercial facilities, and agricultural land;
- Land acquisition (temporary, permanent)
- Community Health and Safety during construction;
- Pedestrian infrastructure design (crossings, sidewalks, access to schools, churches, kindergartens, and other social facilities);
- Coordination with local development plans and schedules of community infrastructure projects (e.g. water supply and sanitation);
- Access to pastures and agricultural plots along the road;
- Road-safety measures identified in the Road Safety Audit (e.g. reducing access points, removing visibility obstructions, and introducing speed-calming within settlements);
- Long-term planning of the regional road network (traffic forecasts, future bypass plans); and
- Public information on final design solutions, construction schedules, job opportunities, safety precautions, and the Grievance Redress Mechanism.

The SEP will be implemented jointly by the NRA PIU and Contractors, under supervision of the NRA Environmental and Social (E&S) Team, which will coordinate, monitor, and report engagement activities. Stakeholder engagement outcomes and grievance statistics will be summarized in semi-annual environmental and social monitoring reports submitted to the EBRD.

The SEP will remain a living document, updated as the Project design, construction schedule, or stakeholder priorities evolve, ensuring continuous compliance with EBRD PR 10 requirements.

SEP and ANNEXES provide a comprehensive Stakeholder Engagement Program to be followed during the lifecycle of the project. Engagement methods will be tailored to the stakeholder group and stage and are proposed below:

Engagement Methods	Purpose/Description
Electronic publications	On-line publications as announcements, invitation to public consultations (publication 10 days earlier before consultations) are available on web-platforms of lead stakeholders, NRA/PIU and LPA (Local Public Administration) and social platforms as Facebook/Viber to assure a more transparent communication with communities. The links to on-line publications of stakeholders used for scoping consultation are specified in the paragraph 5.1.1
Media releases	The press and media outlets used will raise awareness of the availability of the above documents during each stage of the Project, including links to the PIU's website where the documents will be available electronically. The press and media outlets shall also be used to inform people where physical copies of the documents are, so that they can comment on them, and also physically attend meeting venues when these are organized and the actual date, time and location is known.
Public meetings and hearings	The disclosure of information should support consultation. Consultation is a two-way process of dialogue between the Project implementation team and its stakeholders. These consultations will be held at least twice per year during lifecycle of the Project and provide opportunity for all citizens to raise issues with NRA/PIU. NRA/PIU will also request communities' feedback on how to make consultations more effective into implementation. The results of such consultations will be documented, agreed with community leaders, and posted on NRA/PIU website.
Workshops	The workshops with experts will be held to consult the revision and development of designs during the preconstruction, construction and operational phase. Also, several workshops with citizen/ stakeholders will be carried out. The main topics of these workshops will be

Engagement Methods	Purpose/Description
	the ways of information and awareness of stakeholders on project benefits, established implementation procedure, timing for project implementation, GRM. Other topics relevant for these workshops will be identified during project implementation.
FGD (focus group discussions)	FGDs help identify local concerns, expectations, site-specific risks, and opportunities, ensuring that the ESIA integrates community knowledge, vulnerabilities, and context-specific mitigation measures. Detailed Focus Group Discussions with communities are presented in paragraph 5.1.1 during ESIA preparation and ESIA disclosure plan para.5.2
Key informant interviews	Targeted stakeholder engagement method to gather expert, experience-based insights from individuals with in-depth knowledge of local conditions, institutional processes, and potential project impacts. They support scoping and impact assessment by providing qualitative information on environmental, social, land-use, health, and governance issues, helping to identify risks, refine mitigation measures, and complement data from surveys and public consultations.
Social Baseline/Land use and Resettlement Questionnaire	Document the socio-economic conditions of households, existing land use patterns, and the presence of any formal or informal land rights. It helps identify potentially affected people, understand livelihood dependencies, and establish the reference point for assessing project impacts, eligibility for compensation, and future resettlement or livelihood restoration measures. Questionnaire Presented in SEP and LARF .
Leaflets/Informative Notes	Leaflets with information that might present more interest for affected parties, such as the benefits of proposed investments, will be developed and distributed in the meetings/ public consultations/ public institutions (LPA, FGD etc.). The leaflets will be available in Romanian/ Russian (if needed) languages. The leaflet presented in SEP ANNEX was designed to be used by NRA during project lifecycle.
Information Boards	Using Information Boards of LPA. On these information boards will be placed the information related to the Project, relevant for every phase of Project implementation.
Letters	The letters will be an instrument used in order to facilitate the Project implementation process through good collaboration between the implementing entities and other stakeholders.
Reports	The reports will be used to monitor the Project implementation and to keep informed the main stakeholders of the Project.
E-mails	To facilitate communication between implementing entities
GRM	GRM will be established in line with the EBRD's PR10 requirements. A dedicated grievance mechanism will be set up for the Project. The stakeholders will be able to raise grievances anonymously by phone or online using the PIU's on-line GRM form.
Grievance Log	Where grievances, including those delivered through the online platform, are registered (including grievance delivered by letter mail or in writing) and maintained, followed up and resolved through a database.

Table 10-2: Overview engagement methods

10.6. Grievance Redress Mechanism (GRM)

An effective Grievance Redress Mechanism (GRM) was established for the M3 Road Tranche 2 Project to enable stakeholders to raise questions, concerns, or complaints related to environmental and social performance, access to land, or other project impacts.

The GRM ensures issues are addressed promptly, transparently, and without retribution, in line with EBRD PR10 par 29 and Moldovan Law No.148/2023 on Access to Information of Public Interest, Law No. 64/2010 on Freedom of Expression (last amended 28.12.2023), Law on Transparency in Decision-Making, No. 239/2008 (last amended 28.10.2016) and GD No. 1467/2016 – Regulation on Public Access to Environmental Information (last amended 18.01.2019).

The Objectives of a GRM is to:

- Provide accessible, transparent, and fair channels for stakeholders to submit complaints;
- Prevent escalation of concerns by resolving them at the lowest possible level;
- Strengthen trust between NRA, contractors, and local communities;
- Record, track, and report grievances consistently throughout the project lifecycle.

The Project apply a three-level mechanism:

Level	Responsible Entity	Description / Timeframe
Level 1 – Site / Contractor / LPA	Contractor's E&S Officer / Secretary of LPA	Receive and register grievance; acknowledge within 7 working days;
Level 2 – NRA/PIU.	NRA Environmental & Social Unit	Review cases; propose solutions, corrective actions; feedback, close case within 30 working days.
Level 3 – Appeal / Independent Review	MIDR or national authorities	Complainant may appeal to Ministry or relevant agency; if unresolved, legal remedies remain available under national law.

Table 10-3: Overview of the process

Anonymous submissions are accepted. The mechanism is free of charge and open to all affected persons, including workers and vulnerable groups.

Stakeholders may submit grievances through any of the following means:

- In writing (forms available at LPA offices - secretariat, on construction sites – contractor's E&S staff) . Forms are presented in ANNEX E
- By email or online form on the NRA web-site (details in table below);
- Verbally during meetings or to designated NRA Department of Sustainable Development and Environment contact person (Ludmila Virlan – Environment Specialist – Chief of Department e-mail: ludmila.virlan@andsa.md);
- Via telephone hotline established at the NRA (details in table below).

All complaints are logged in the Project Grievance Register, assigned a tracking number, and monitored until resolution.

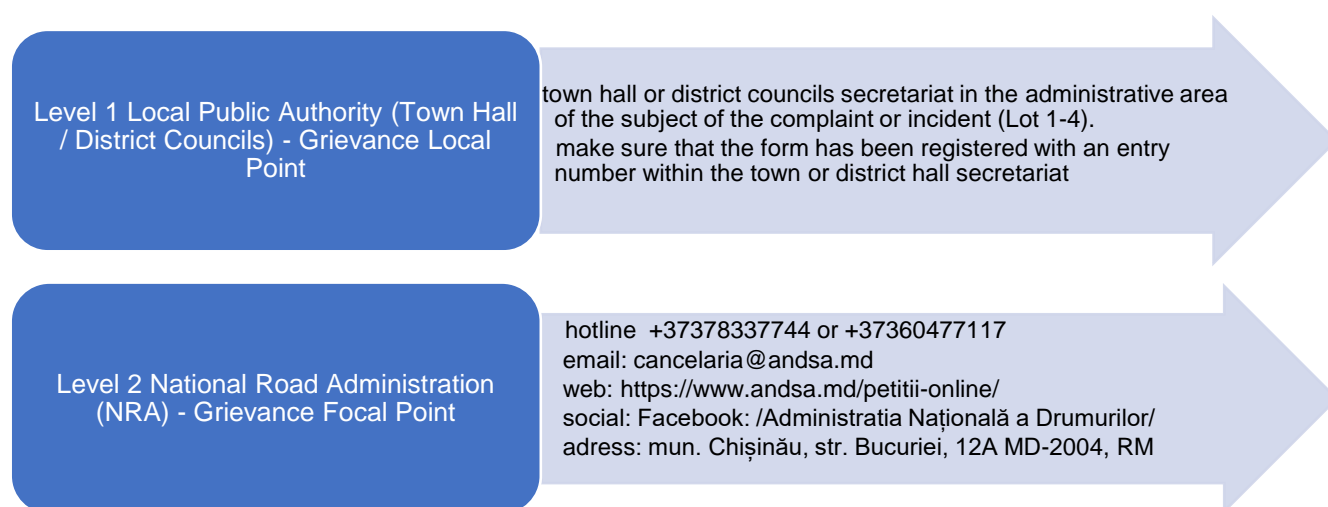


Figure 10-1: Roles and Responsibilities for GRM

The responsibilities for the management of the GRM system include the following and may be updated from time to time in consultation with NRA and the EBRD task teams.

Level 1. Local level. The secretary and technical supervisor of Local Public Authorities (Mayor Offices and District Councils) will act as **Grievance Local Point (GLP)** will be responsible for collecting the grievance from local residents and contractor's employees. The channels for grievance submission will be disclosed for community in front of mayoralty information board and for workers near the construction site in big board format managed by Contractor. For contractor's employee special grievance box, prepared envelopes (with LGP or FGP stamp) with printed forms and e-mail will be available for submitting grievances (including anonymous). The construction

supervision engineer or dedicate E&S specialist will be responsible for collecting grievances from contractors' employees. The complaint/grievance will be filed in a template letter of complaint.

Level 2. The NRA will serve as **Grievance Focal Point (GFP)** who will register the submitted grievances in the Grievance Log (database) and review within 30 days, including the information verification, cross-checking, and analysis, and follow-up with the applicant as needed. As necessary, the **Grievance Focal Point** will involve the other relevant units' specialists in this activity.

All the responsible personnel for GRM have to fill the grievance/inquiry template record (**template ANNEX from SEP**) for comprehensive GRM Log.

The information about the Grievance Redress Mechanism will be available at the online platform and will be included in the communications conducted with the project stakeholders through the communications methods and tools that are part of this stakeholder engagement plan and communications plan under the project, including emails, website, workshops, meetings, focus groups discussions etc.

Complaints should be reviewed as soon as they are received and prioritised for resolution. Regardless of general response and resolution time frames, some complaints may require immediate attention – for example, an urgent safety issue or where it concerns damage to a person's property during a survey. There are some complaints that are simple and can be resolved quickly. Many complaints deal with rather minor construction, disruption or nuisance issues or misunderstandings that can be addressed and fixed promptly. grievance mechanisms should provide a framework to resolve such matters quickly, if at all possible and appropriate. These complaints however should still be recorded and the resolution or action taken to resolve them recorded.

A locally-based project-specific GRM, proportionate to the potential risks and impacts of the project, will be established, building upon existing labour practices and HR procedures.

In addition, a GRM specifically for **direct and contracted workers (non-employee workers)** will be provided in accordance with PR2. Contractors as employers are also obliged to establish their own internal grievance mechanism. The GRM will be designed at an early stage and will be formally established by project effectiveness and before any disbursements and start of the civil works. The responsibilities for managing the Grievance Redress Mechanism (GRM) system are as follows, subject to periodic updates through consultations with the PIU, and EBRD teams. In cases related to labour grievances, the **Construction Supervision Engineer** via **E&S Specialist/Communication Officer**, the **State Labour Inspectorate (ISM)**, and for foreign-specific cases, the **General Inspectorate for Migration**, may be involved as third parties by NRA.

10.7. Environmental and Social Monitoring of Construction

The environmental and social management measures under responsibilities of the Contactor(s) as described in this ESMP are complex and will require detailed planning and supervision to ensure timely and efficient execution. The key responsibilities of National Road Administration/Supervision Consultant for the environmental and social monitoring of the construction are provided below.

Key Management Actions:

- **Permitting:** Verify that all legal environmental permits are obtained prior to the start of the construction works.
- **Review and approval of the CESMP:**

- Confirm mobilisation and suitability of EHS resources allocated by the Contractor(s) as per contract requirements: key EHS personnel (qualification and experience including specific authorisations and/or licenses), logistics, equipment, etc.
- Require timely submission of CESMP specific E&S management plans and procedures as described in this ESMP prior to the start of the construction works, including vegetation clearing.
- Check and review the compliance of the management plans and procedures with the relevant ESHS standards and specifications and, subsequently, approve the plans and procedures.
- Require timely revision of CESMP specific E&S management plans and procedures.
- **Site inspection:**
 - Organise regular scheduled inspection of the different construction sites jointly by the EHS Manager(s) of the Contractor(s).
 - Review the respective reports based on the inspection assessment sheets, including EHS incident reporting and ensure that appropriate corrective measures are undertaken.
- **Coordination meetings:** Organise regular E&S coordination meetings with the Contractors(s) to address all E&S issues relevant for the construction of the Project.
- **Stakeholder engagement:** Ensure the implementation of the requirements of the SEP including the Public Grievance Procedure, which are under the responsibility of the Contractor(s), are timely and appropriately carried out.

10.8. Labour and Working Conditions

National Road Administration must implement and maintain Grievance Mechanism for workers into its ESMS. It must also create and implement relevant labour and working conditions policies (all in compliance with national labour law and its bylaws and EBRD PR2), such as:

- Company's HR Policy
- Non-discrimination and Equal Opportunities Policy
- Policy against GBVH (including procedure for reporting and responding to GBVH)
- Policy against Child and Forced Labour
- Occupational Health and Safety Plan for the tasks delivered to this project
- Code of Conduct (for all workers, including those of sub-contractors)

National Road Administration must organize annual training to its employees on GBVH, and this training must also include sub-contractors' workers engaged on this project. Workers engaged on other NRA projects are welcome to participate on GBVH trainings.

Contractor(s) and the sub-contractors responsible for maintenance of the highway will be required to develop and implement written management procedures related to labour, including procedures to establish and maintain a safe working environment as per requirements of EBRD PR2.

10.9. Community Health and Safety

Contractor(s) and the sub-contractors responsible for maintenance of the M3 road will be required to develop and implement written management procedures related to labour, including procedures to establish and maintain a safe working environment as per requirements of EBRD PR2.

Mitigation measures that should be implemented in order to thoroughly contribute to the health and safety of the passengers, local community and workers by National Road Administration, will include:

- Occupational Health and Safety Plan during Operation;
- Community Health and Safety Plan during Operation, with campaign of traffic safety for local population and school children;
- Conducting regular control and maintenance of traffic signalization;
- Conducting regular inspection and maintenance of the fence along the highway in order to reduce the risks of illegal crossing of the population, wildlife and livestock, as well as the number of accidents.
- Implementation of Emergency Preparedness and Response Plan (EPRP) during operation, Community Health and Safety Management Plan (CHSMP) during operation and EPRP. CHSMP and EPRP must be in compliance with EBRD ESP, and particularly with PR1, PR4 and PR10.
- Road Safety

Before the opening to traffic and during the operation of the highway, regular inspections of the road safety shall be conducted by National Road Administration and respective reports should be prepared.

11. Detailed ESMP procedures

The Environmental and Social Management Plan (ESMP) for the M3 Tranche II Project consolidates all procedures, plans, and operational controls required to ensure that construction and early operation are carried out in full compliance with Moldovan legislation and EBRD Environmental and Social Requirements (PR1–PR10). The ESMP translates the commitments made in the ESIA into practical, implementable management measures for the National Road Administration (NRA), the Executive Contractor, subcontractors, and the Supervision Engineer.

It sets out the mechanisms for managing key environmental, social, labour, OHS, and community-related risks, and includes a suite of thematic management plans that describe how impacts will be prevented, minimised, or mitigated throughout the Project lifecycle. Each management plan defines objectives, key actions, monitoring requirements, and clear roles and responsibilities as follows:

Title:	Stakeholder Engagement Plan and Community Grievance Mechanism
Objectives:	<ul style="list-style-type: none"> ▪ To provide stakeholders with accurate information about the Project design, construction stages, and other relevant information. ▪ To ensure that road users, public transport users, and other stakeholders are informed about the location and expected duration of temporary road traffic deviations that will be in place during the construction stage. ▪ To raise awareness about the Community Grievance mechanism which can be used by a road user, or other stakeholder, to raise a grievance about the Project should they wish to do so

Key content and management measures:

- A summary of requirements for stakeholder engagement and information disclosure from national legislation and PR10.
- Details of the stakeholders identified to date and how they are to be engaged with during the construction and operational stages of the Project.
 - Details of how accurate and timely information associated with the Project is to be disclosed in a culturally appropriate format, including:
 - Advance notification on potential sources of traffic disruption and the available road networks available (deviations) during the construction stage.
 - Lane restrictions that will be implemented along the bridge, including details of which lane direction is open to traffic
 - Potential disruption of utility connections to nearby residents and local businesses.
 - Alterations to public transport routes, timings, and frequency and details of alternative public transport routes that are available.
 - Road safety information to road users, including specific information to pedestrians, cyclists, people with disabilities, and children.
 - A summary of the feedback from stakeholders about the Project which has been received to date, and how this has been used to improve the adjust the design.
 - A summary of the Community Grievance Mechanism and how awareness of this mechanism will be raised so that it is accessible and culturally appropriate
 - Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities

Table 11-1: Stakeholder Engagement Plan and Community Grievance Mechanism

Title:	Utilities Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ To accurately identify the presence of all utility infrastructure that may be impacted by the project so that occupational health and safety risks to the construction workforce are avoided/minimised to the extent possible. ▪ To ensure that local residents and other stakeholders do not experience a temporary loss of access to utilities if possible, and if a temporary loss is essential, this is minimised with stakeholders being informed of the loss in advance. ▪ To ensure that vulnerable people who may be impacted by a temporary loss in utilities are informed in advance and provided with additional support, where necessary to do so. <p>To raise awareness about the Community Grievance mechanism which can be used to raise a grievance about the Project should they wish to do so, including temporary losses of utilities</p>
Key content and management measures:	
<ul style="list-style-type: none"> ▪ A summary of national requirements associated with the process used to relocate a utility and the necessary steps/approvals required from the relevant government authorities. ▪ The outcome of detailed surveys undertaken to identify the presence and layout of utilities that are to be impacted. ▪ Details of the numbers of people that are expected to be impacted from any temporary loss in utilities, and the types of sensitive receptors impacted (if any) such as healthcare facilities, schools, etc. Whilst there are no such sensitive receptors identified in the immediate area at each of the 4 project locations, it is still possible that any loss could impact the local area/region as the utility is relocated. ▪ A summary of the Community Grievance Mechanism and how awareness of this mechanism will be raised in connecting with this activity. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. 	

Table 11-2: Utilities Management Plan

Title:	Resettlement Plan
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that the PIU complies with national and PR5 requirements during all resettlement planning and implementation. ▪ To ensure that impacts associated with resettlement are avoided, and where avoidance is not possible, minimised in accordance with the mitigation hierarchy. ▪ To ensure that resettlement planning is undertaken with the informed, consultation and participation of the displaced persons, in relation to the resettlement choices available to them, the design of economic restoration measures, and that vulnerable people are provided with additional support. ▪ To ensure that the economically displaced persons are able to restore at a minimum, if not improve, their economic earning

	capacity and standards of living within the shortest time possible (if this is relevant).
Key content and management measures:	
<ul style="list-style-type: none"> ▪ A summary of the policy and regulatory framework for resettlement, the applicable requirements from PR5, key differences between national legislation and PR5, and details the steps the PIU shall take to address them. ▪ Resettlement principles, objectives, and details of the method used to prepare the RAP. ▪ A summary of Project impacts that are expected to occur. ▪ A calculation of the compensation and that will be provided to the displaced persons. ▪ Details of how economic restoration and standard of living improvement measures are to be provided to the economically displaced persons, along with details as to how vulnerable people are to be assisted during the RP implementation process. This will also include measures designed to enhance the operation of the impacted businesses in the future. ▪ Details of stakeholder consultation and information disclosure activities undertaken during preparation of the RAP, and how this shall continue during implementation of the RAP. ▪ A schedule and budget for RAP implementation. ▪ Internal training, awareness raising activities, monitoring and evaluation using KPIs, and roles and responsibilities. 	
NOTE: The Resettlement Action Plan will be prepared using the Land Acquisition and Resettlement Framework as a basis.	

Table 11-3: Resettlement Plan

Title:		Worker Code of Conduct and Security Personnel Code of Conduct
Objectives:		<ul style="list-style-type: none"> ▪ To ensure that all workers, including security personnel, are made aware of the minimum standard of behaviour that are required in the workplace, to minimise the risk of harassment and discriminatory behaviour. ▪ To ensure that senior management within the PIU and construction contractor provides leadership in the standard of behaviour required. ▪ To ensure that all workers receive training on the content of the Code of Conduct and formally acknowledge that they have understood and agree to adhere to its content. ▪ To ensure that State Police act proportionally following a security incident. ▪ To address potential risks to women from GBVH
Key content and management measures:		
A requirement for all workers to:		
<ul style="list-style-type: none"> ▪ Prioritise the safety of themselves and other people in the workplace. ▪ Exercise their right to 'Stop Work' if they see an unsafe act in progress. ▪ Look after the Personal Protective Equipment (PPE) which is issued to them and ensure that it is correctly used when necessary to do so. ▪ Report any incident, near-miss, or other issue of concern to their immediate supervisor as quickly as possible. ▪ Not consume any illegal substances such as alcohol or illegal drugs, comply with the random alcohol testing programme that shall be in place, and to ensure that all prescribed medication taken in the workplace is approved in advance in writing by a Site Medical Officer. ▪ Never behave in a way that could be considered by others as being offensive, disrespectful, bullying, or harass another member of the workforce, or a member of the public. ▪ Never allow race, colour, religion, gender, age, national origin, sexual orientation, gender identity, marital status, disability, or any other characteristic to influence their judgement when it comes to their attitude or behaviour towards others in the workplace, including colleagues, suppliers or members of the public. ▪ To be informed of the importance that the workplace is suitable for the presence of women, and that GBVH is prohibited in the workplace. ▪ Never distribute or display offensive material, including inappropriate pictures, cartoons, and symbols of hatred. ▪ Inform your immediate supervisor if a member of the public or other person (such as a worker in a supply chain company) approaches you to raise a grievance. 		
A requirement for all security personnel (in addition to the above) to:		
<ul style="list-style-type: none"> ▪ Wear uniform always so that they can clearly be identified as a security personnel and display their unique identification badge clearly. ▪ Be friendly when greeting all visitors, undertaking duties in a professional manner. ▪ Never abuse their position of authority. ▪ Only use force is absolutely necessary and in proportion to the scale and magnitude of the threat. ▪ Never carry or use an item which could be considered threatening, including firearms, unless it is absolutely necessary to do so and use only in reasonable and proportionate measures. ▪ Report all security incidents to their immediate supervisor without delay. ▪ Cooperate with government-provided security personnel at all times. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. 		

Table 11-4: Worker Code of Conduct and Security Personnel Code of Conduct

Title:	Labour Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ Ensure fair, safe, and lawful labour practices in accordance with Moldova labour legislation, ILO Core Conventions, and EBRD PR2. ▪ Define and manage all categories of workers (direct, contracted, and primary suppliers) to ensure consistent application of PR2 requirements. ▪ Protect workers' rights, including equal opportunity, non-discrimination, freedom of association, and prevention of child and forced labour. ▪ Ensure robust HR systems, grievance management, and transparent recruitment. ▪ Promote local employment and procurement, supporting economic benefits to affected municipalities. ▪ Ensure safe, healthy, and dignified living conditions for workers in accommodation facilities, aligned with IFC/EBRD standards. ▪ Strengthen contractor capacity through training, policy compliance, and independent assessments prior to mobilization.
Key content and management measures:	
<p>The Contractor(s) must prepare and implement several interrelated labour management instruments within the CESMP.</p> <ul style="list-style-type: none"> ▪ Labour Use Overview: definition of labour categories: direct workers, contracted workers, primary supplier workers, estimated workforce numbers and distribution. ▪ HR Policy: Non-Discrimination and Equal Opportunity Policy, GBVH prevention policy (including reporting and response procedures), child and forced labour policy, workers' organisation policy; Code of Conduct (for direct and subcontracted workers); Worker Grievance Mechanism (WGM), compliance assessment: independent external assessment of HR policies and labour practices; gap analysis against national law and EBRD PR2; corrective action plan prior to construction mobilisation. ▪ Labour Conditions: contracts and employment terms; social, pension, and medical insurance coverage; working hours, overtime, rest and leave; wage and benefit standards; non-discrimination and harassment protection ▪ Local Employment and Procurement Plan: target of minimum % local workers; equal employment opportunities for women and vulnerable groups, local procurement opportunities and transparent advertising of positions; workforce recruitment, development and Training Plan; transparent recruitment procedures; skills development; annual GBVH training for all workers (including subcontractors); Mandatory OHS and Code of Conduct induction. ▪ Worker Accommodation Plan: standards aligned with IFC/EBRD Worker Accommodation Guidelines layout, hygiene, safety, fire protection, drinking water, waste management. ▪ Monitoring and Reporting: Labour inspections; grievance records; training records; workforce statistics (incl. gender and local worker ratios); 	
Management Measures / Mitigation Actions	
<ul style="list-style-type: none"> ▪ Develop, adopt, and implement all required labour policies; provide policies to all workers in a language they understand; require all workers (including subcontractors and supply chain workers) to sign the Code of Conduct; maintain complete personnel files and HR documentation. ▪ Non-Discrimination, equal opportunity, and GBVH prevention: ensure hiring, promotion, and termination processes are free from discrimination; implement a survivor-centred GBVH response procedure; conduct annual mandatory GBVH training for all workers; enforce disciplinary actions for violations of the Code of Conduct. ▪ Working Conditions: ensure compliance with national labour law on: working hours, rest, and overtime; wages and regular payment; leave entitlements; minimum age; prohibit child and forced labour in all project tiers, including suppliers; enrol all workers in social, medical, and pension insurance schemes. ▪ Worker Grievance Mechanism: establish a confidential, accessible GM for direct and subcontracted workers; ▪ Provide induction training on WGM use and workers' rights; install complaint boxes and display GM contact details at key locations; register every grievance and provide a formal, documented response; ensure no retaliation against complainants. ▪ Local Employment and Procurement: implement transparent recruitment with preference for workers from affected municipalities; achieve a minimum of 30% local workforce; advertise jobs through municipal authorities and local information channels; ensure equal opportunities for men, women, and vulnerable groups; prioritise local suppliers where feasible. ▪ Workforce recruitment, development and training: verify identity and age of all workers. provide comprehensive induction covering: OHS, Code of Conduct, GBVH, GM, Site rules and emergency procedures: deliver regular toolbox talks and refresher training. ▪ Worker Accommodation: ensure accommodation meets: Moldova national standards, IFC/EBRD Worker Accommodation Guidance. Provide: Adequate space, ventilation, sanitation, clean drinking water, fire safety and emergency exit, waste management systems; medical access, conduct regular inspections and maintenance, ensure accommodation rules are posted and explained to all residents. ▪ Monitoring and Reporting: conduct routine labour audits and inspections. track workforce composition (local workers, gender, subcontractor workers, etc.); monitor implementation of labour policies; record and report all grievances and 	

resolutions; document training attendance and competency certification, report labour performance to the Client and supervision consultant.

Table 11-5: Labour Management Plan

Title:	Worker Grievance Mechanism
Objectives:	<ul style="list-style-type: none"> ▪ To provide a mechanism for workers, including the workers of supply chain companies, to raise a complaint about their working terms and conditions in accordance with PR2. ▪ To ensure that complaints about working conditions are raised early before they lead to widespread concerns amongst the workforce. ▪ To allow grievances to be raised anonymously. ▪ To allow grievances to be raised by a worker without the fear of retribution against the person raising the concern by senior management or other people in the workplace.
Key content and management measures: <ul style="list-style-type: none"> ▪ A description of the process that can be used by a worker to raise a grievance about any aspect of the Project, including the ability to submit an anonymous complaint, and which assures the confidentiality of complainants. ▪ A description of the process to be used to record, investigate, and report back to the persons raising the grievance, throughout the resolution process. ▪ Details of an appeals process should the person raising the grievance not accept the proposed resolution. ▪ Details of how the existence of the worker grievance mechanism will be raised amongst the workforce and how the effectiveness of the awareness raising activities shall be monitored. ▪ The provision of support to workers to register a complaint should this be needed. ▪ Details of how the confidential nature of grievances shall be maintained. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. <p>NOTE: To assist in the implementation of the Worker Code of Conduct, the PIU will appoint a GBVH focal point and provide regular training and communications for employees and contractors on understanding GBVH risks in the workplace.</p>	

Table 11-6: Worker Grievance Mechanism

Title:	Human Resources Management Plan and Human Resources Policies
Objectives:	<ul style="list-style-type: none"> ▪ To establish an open and transparent recruitment process. ▪ To preferentially target specific groups of people for recruitment, including (1) adults (male and female) who are displaced persons; (2) unemployed adults who are listed on government database; and (3) people who are based in near localities. ▪ To encourage women and vulnerable people to apply so that they can comprise a proportion of the workforce. ▪ To provide information to workers about their terms and conditions in a culturally appropriate and transparent manner, reflecting the combined requirements of national legislation, ILO and PR2. ▪ To provide information to workers temporarily employed on the expected duration of their employment so that when their employment comes to an end, this is not experienced as a sudden shock leading to resentment and/or protests. ▪ To provide a mechanism for regular discussions to take place between workers and managers in an open and transparent manner. ▪ To raise awareness of the Worker Code of Conduct and Worker Grievance Mechanism. ▪ To manage the risks of labour violations (such as child or forced labour) within the supply chain of companies used by the construction contractor.
Key content and management measures: <ul style="list-style-type: none"> ▪ The following policies: Equal Opportunities Policy, a Working Hours and Voluntary Overtime Policy, Human Rights and Modern Slavery Policy, and Occupational Health and Safety Policy. ▪ A summary of worker's legal rights and obligations of the employee and employer reflected by national legislation, international Labour Organisation (ILO) conventions, and PR2. 	

- A summary of the numbers and job description profile required for the construction stage, when this is expected to occur, the expected duration of employment, and the various roles between low-skilled, skilled, and highly-skilled workers, and how local employment positions are to be preferentially offered to the target groups identified above.
- A description of the process used to recruit people, including details of how positions are to be publicly advertised, how candidates can apply and what support shall be provided to candidates seeking to apply who are not able to complete an application form for any reason (language barriers, etc.), how candidate details shall be recorded on a central register/database, and how candidates shall be individually screened based upon a clearly defined criteria for each role to determine the suitability of candidates against specific job requirements.
- Details of how workers will be able to obtain a fitness to work certificate following a medical examination which shall be organised and paid for by the employer.
- A prohibition of recruitment of local people spontaneously (at working sites, etc.) to prevent people from moving towards the sites seeking work. Any person wishing to apply for an employment position must follow the formal procedure and people will not be employed 'on the spot'.
- Targets for women to form a part of the low-skilled, skilled, and highly-skilled construction workforce, and details as to how women shall be specifically encouraged to apply for employment positions.
- Details of the Community Grievance Mechanism that can be used to raise a concern about the way in which local people are being recruited, and the Worker Grievance Mechanism which can be used to raise a concern during their employment.
- The outcome of a supply chain risk assessment, procurement questionnaire and audit protocol to check for the potential for forced and child labour to be present in the supply chain of the construction contractor.
- How the legal rights and terms and conditions of employment are to be provided to workers at the start and periodically during their employment using a Worker Handbook (or other type of document). This will include details of the Worker Code of Conduct, their salary and payment process, right of freedom of association and collective agreements, severance pay, working hours, overtime payments, tax and other types of deductions, provision of occupational health and safety insurance, data protection, appraisals, disciplinary policy and procedures, emergency leave arrangements, maternity and paternity leave entitlements, probation arrangements, redundancy procedure, sickness and absence policy, stress at work, request for unpaid leave, whistleblowing policy, and training policy.
- Details of the training activities that each worker shall be provided with, including initial induction training on the Worker Code of Conduct and HSE.
- A reference to the Worker Code of Conduct which must be signed by all workers, and how workers will be reminded of their expected standard of behaviour on a regular basis.
- Details of the Worker Grievance Mechanism which shall be available during the initial recruitment process and throughout their duration of employment.
- Details of a 'whistle-blower hotline' where allegations of bullying or harassment can be reported anonymously (to be administered by the PIU).
- How temporary workers shall be reminded about the temporary nature of their work during their employment, and providing them with adequate notice prior to termination, so that notification does not come as a sudden shock and trigger resentment or protests. A Retrenchment Plan will be prepared and implemented by the construction contractor, if this is required.
- How worker-employee relationships shall be managed through regular meetings between management and workers, including the use of worker representatives.
- A commitment to provide a certificate to each worker that describes their job title, roles and responsibilities, vocational training received (if any) and any certifications, duration of employment, and contact details for a future employer to use to check that the information contained therein is accurate and valid once their involvement in this Project is complete.
- How the above arrangements will be applied (and checked) to the internal supply chain companies of contractors.
- Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities.

NOTE: To assist in the implementation of the Worker Code of Conduct, the PIU will appoint a GBVH focal point and provide regular training and communications for employees and contractors on understanding GBVH risks in the workplace.

Table 11-7: Human Resources Management Plan and Human Resources Policies

Title:	Worker Accommodation Plan (if required)
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that the building(s) selected to provide accommodation to the non-local workforce take into consideration the presence of nearby environmental and social sensitivities. ▪ To ensure that the non-local workforce is provided with decent and safe accommodation. ▪ To ensure that the standard of accommodation provided to the non-local workforce reflects the combined requirements from national legislation and PR2.
Key content and management measures:	

- All worker accommodation shall be constructed and operated in accordance with the applicable content of the IFC/EBRD publication entitled: "Workers' accommodation: processes and standards - A Guidance Note (2010)". This includes details of the minimum control specifications covering fire safety, electrical safety, the availability and quality of sanitation facilities, the security of worker's personal belongings, food safety, the availability of drinking water, air conditions/heating, the availability of recreational activities, and gender separated bedrooms and sanitation facilities.
- Details of how entry into accommodation units shall be controlled using designated entry/exit points staffed by security personnel.
- A commitment for each building used to have an emergency response plan to ensure the safe evacuation of workers in the event of a fire or other type of emergency, with fire exits clearly marked and kept free of obstructions, and how the plan will be regularly tested using fire drills.
- Details of how workers are to be provided with medical advice and support free of charge. Workers requiring specialist advice or treatment shall be transported to the nearest government medical centre.
- Monthly meetings shall be held between management representatives and worker representatives, to discuss the conditions of the accommodation and facilities.
- A reference to the Worker Code of Conduct.
- Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities.

Table 11-8: Worker Accommodation Plan

Title:	Emergency Response Plan
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that there is an adequate plan in place to respond to an emergency event that occurs during construction in accordance with national legislation and PR4. ▪ To ensure that the roles and responsibilities within the PIU for reporting, responding and notifying relevant government departments are clearly defined and tested. ▪ To present details of the nearby emergency response facilities and how they are to be contacted to request support during an emergency response if required. ▪ To ensure that a large-scale response to an emergency event is coordinated between the PIU and relevant government departments.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ An assessment will be conducted to identify a range of realistic emergency scenarios that could occur during construction. This will include a description of the event, their level of severity, potential impacts on environmental and social receptors (biodiversity, water quality, worker health, public safety, etc.), and any other relevant information. Using the outcome of this assessment the Emergency Response Plan will be designed to respond to the scenarios identified. ▪ Emergency response flow charts will be prepared for each emergency scenario including a step-by-step process flow chart that indicates the actions to be undertaken, and who is responsible for each one. ▪ Details of an Internal Emergency Response Team within the PIU who come together to jointly lead the emergency response effort from the PIU with the assistance of government departments. ▪ Communication protocols to notify PIU personnel (including the Emergency Response Team), relevant government departments, and community leaders. This will include a list of up-to-date contact names and telephone numbers. ▪ Details of government emergency response resources and the type of support that they could provide during a response covering fire and rescue, police, and medical support. ▪ Details of the construction contractor's minimum emergency response resources such as on-site spill kits, first aid stations, and other equipment. ▪ Subsequent incident investigation activities which will include a root cause analysis and corrective action plan processes. ▪ Emergency response drill plan (including frequency of training, desktop drills and 'live' drills) to test the Emergency Response Plan. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. <p>NOTE: A draft copy of the Emergency Response Plan shall be shared with government authorities who have responsibility for emergency planning and response, to gather their feedback and clarify the notification and reporting arrangements. During these engagements the type and extent of resources that they could provide during an emergency response will be agreed on and recorded. A record of how the engagement has helped define the content of the updated Emergency Response Plan shall be prepared.</p>	

Table 11-9: Emergency Response Plan

Title:	Occupational Health and Safety Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that occupational health and safety risks are identified, assessed, and adequate management controls are implemented to reduce them to As Low As Reasonably Practicable (ALARP).

	<ul style="list-style-type: none"> ▪ To ensure that occupational health and safety risks are managed in accordance with national legislation and PR4. ▪ To ensure that the occupational health and safety performance of all contractors involved in construction works are continuously monitored, with the aim of improving their performance over time.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ The outcome of a documented risk assessment shall be used as the basis for the development of the Occupational Health and Safety Management Plan which shall be informed through the completion of a hazard identification workshop. ▪ A Risk Register shall be developed that describes the potential risk, its likelihood and consequence, overall significant rating, control measures to be applied, and monitoring measures to ensure that the controls implemented are effective. ▪ Key sources of risk include the need to lift heavy loads, the use of rotating and mechanical machinery, the presence of excavations, and the need to conduct construction works adjacent to temporary pavements roads that are in use by members of the public. ▪ The 'Golden Rules' which apply to all construction activities covering several topics such as walking under suspended loads, use of PPE, isolation and lockout, permit to work, authorisation before starting excavation activities, confined space entry, fall protection whilst working from height, use of seat belts in vehicles, use of cell phones whilst driving, no alcohol or drugs, and use designated smoking areas. ▪ A Permit to Work (PTW) system. ▪ Define requirements for site segregation such as fencing and the provision of safe routes for pedestrians. ▪ Define the internal and external notification procedures following an incident and an accident and investigation procedure that includes a root cause analysis; ▪ Details of how senior managers will provide leadership to the workforce through their personal involvement in safety briefings, award ceremonies, and similar activities. ▪ The use of toolbox talks, preparation of method statements, and task-based risk assessments where necessary. ▪ Ensuring that competent personnel only are used for specific roles such as the supervision of complex tasks, or the use of construction machinery. ▪ The distribution and training to workers on the use of PPE which shall be provided free of charge. ▪ The provision of occupational insurance so that workers are provided with compensation should an injury/fatality occur. ▪ A programme of future audits and inspections to monitor and record the occupational health and safety performance of contractors over time. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. 	

Table 11-10: Occupational Health and Safety Management Plan

Title:	Community Health and Safety Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that potential community health and safety risks are identified, assessed, and adequate management controls are implemented to reduce them to As Low As Reasonably Practicable (ALARP). ▪ To ensure that community health and safety risks are managed in accordance with national legislation and EBRD's PR4. ▪ To ensure that the community health and safety performance of all contractors involved in construction works are continuously monitored, with the aim of improving their performance over time.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ The outcome of a documented risk assessment shall be used as the basis for the development of the Community Health and Safety Management Plan which shall be informed through the completion of a hazard identification workshop. A Risk Register shall also be developed that describes the potential risk, its likelihood and consequence, overall significant rating, control measures to be applied, and monitoring measures to ensure that the controls implemented are effective. Key sources of risk include the potential for unauthorised entry of local people into construction areas, the presence of excavations, moving construction machinery, temporary road diversions, changes in street lighting and traffic signals, the presence of security personnel at entry/exit points of construction sites, and the generation of air emission including dust, and noise. ▪ The use of protective barriers surrounding all construction sites to prevent unauthorised entry. ▪ Raising awareness of the dangers of trying to enter construction sites within local schools, during public meetings, and including this in disclosure materials that will be publicly available. This will target local schools to inform children to stay away from construction areas. ▪ Installing a series of signs on the protective barriers warning people to keep out along with contact details of the PIU's Community Liaison officer who will be able to respond to any questions or concerns, in accordance with the Stakeholder Engagement Plan. ▪ The design and implementation of a road safety awareness programme which is targeted to the general public, and particularly towards vulnerable road users (pedestrians and cyclists). ▪ The future control measures to be installed at temporary road crossing points, including signage and road markings to warn drivers to slow down and allow people to safely cross the road. 	

- The time period when street lighting becomes temporarily unavailable shall be minimised to the extent possible. Nearby residents and businesses affected by the changes in street lighting shall be informed in advance of these being switched off and informed once again so that they are aware of when street lighting will become available once more.
- The PIU will install temporary street lighting at public areas to ensure the safety of local residents, including women, should this be necessary to do so. Details of the locations where temporary lighting will be installed shall be included in the Plan.
- A cross-reference to the Pollution Prevention Plan which includes controls to manage the generation of noise and air emissions including dust.
- A risk of the incoming, non-local workforce from spreading communicable diseases amongst nearby settlements.
- A programme of future audits and inspections to monitor and record the community health and safety performance of contractors over time.
- Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities.

Table 11-11: Community Health and Safety Management Plan

Title:		Traffic and Transport Management Plan
Objectives:		<ul style="list-style-type: none"> ▪ To ensure that the level of disruption to other road users during the construction stage is minimised to the extent possible, and that access continues to be maintained where possible to other parts of the city. ▪ To ensure that the movement of construction vehicles are carefully managed so that they do not create an obstacle or congestions to other road users. ▪ To ensure the safety of other road users and pedestrians during the construction stage
Key content and management measures:		
<ul style="list-style-type: none"> ▪ The outcome of a detailed planning study to identify the section of road, estimate how long construction will take, and identify alternative routes, using an approach that involves the participation of different types of road users. ▪ A series of road layout diagrams will be prepared to indicate where temporary changes in access, signage, signals, and pedestrian walkways will occur, and for how long. These road layout diagrams will subsequently be discussed with the relevant government agency to ensure that they are satisfied with the plans and any changes needed shall be made. ▪ Using the updated layouts, a series of temporary access routes, signs and signals will be identified and installed, so that road users and pedestrians clearly understand where to go to move around the construction works safely. ▪ Media and press releases will issue details of temporary road deviations so that road users and pedestrians are informed about this, in advance of the changes being implemented. ▪ Details of the Community Grievance mechanism shall be installed at various public places along with supporting maps of temporary deviations, so that people can raise a concern or complaint about these, should they wish to do so. ▪ Construction vehicles shall not be overloaded. Speed limits must be obeyed at all times. Seat belts must be worn by all passengers. Drivers shall not be permitted to make phone calls whilst driving. ▪ The movement of construction vehicles transporting materials and personnel shall be carefully planned to avoid creating congestion at the entry of sites. One-way circulation shall be used on construction sites where practicable. Loading, unloading and reversing of vehicles shall be under the control of a competent signaller (also known as a 'banksman'). ▪ All vehicles and plant used shall be inspected on a weekly basis for their general condition, safety-critical features (lights, horn, brakes, windscreen, mirrors, tyres, etc.). Any vehicles found to be defective will not be used until they are repaired. ▪ Ongoing monitoring of road traffic delays which are recorded from quantitative road monitoring surveys. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. 		

Table 11-12: Traffic and Transport Management Plan

Title:		Pollution Prevention Management Plan
Objectives:		<ul style="list-style-type: none"> ▪ To ensure that effective measures are in place to protect the environment and avoid/minimise the generation of nuisances to local residents and road users. ▪ To ensure that the management of noise, air emissions, wastewater, artificial lighting, and any other sources of pollution are managed in accordance with national legislation and EBRD's PR3
Key content and management measures:		
Air emissions, dust and noise		
<ul style="list-style-type: none"> ▪ All construction plant and vehicles shall be modern and maintained in accordance with the manufacturer's specifications, applicable industry codes, or engineering standards to ensure their safe and reliable operation. The generation of a black emissions upon start-up shall be avoided to the extent possible through effective preventative maintenance. 		

- All construction plant and vehicles shall be switched off whilst not in use to prevent the unnecessary generation of noise and air emissions.
- The drivers of construction plant and vehicles shall be trained and provided with equipment that aims to prevent the generation of dust from tyres, and from the transport of spoil and other materials that could generate dust.
- All construction workers shall be provided trained and provided with equipment which aims to minimise the generation of construction dust. This shall include the use of water sprinklers where this is appropriate to use.
- The drivers of construction plant and vehicles shall be trained and provided with equipment that aims to prevent the generation of noise (including clanging noises) during the transport of materials and equipment.
- Where large volumes of materials are stockpiled, these shall be regularly inspected and constructed with minimum slow height to prevent the generation of dust and turbid runoff.
- Where possible, electricity from the local grid shall be used to provide power at construction sites to avoid the use of portable mobile generators which generate noise and air emissions.
- Construction vehicles and plant (including crushing plant) shall be located as far as possible from nearby sensitive receptors to the extent possible. If required, such plant shall be housed in suitable acoustic enclosures to prevent the generation of noise.
- The use of noisy equipment (such as the crushing plant) shall be restricted to day-time periods only, defined as 07:00 - 22:00 which is when day-time noise standards apply.
- Additional noise baseline data shall be collected at sensitive receptors in the vicinity of the construction works, and these will be used as a comparison during future monitoring activities.
- When selecting large plant that is to be used for extended periods, preference shall be given to plant that is compliant with EU Noise Directives 2000/14/EC and 2005/88/EC.
- Periodic audits shall be undertaken to confirm effectiveness of measures to minimise dust which shall include observations of meteorological conditions including wind speed, direction and general weather conditions.

Wastewater and drainage

- Details of the minimum standards from national legislation and EBRD's PR3 associated with the discharge of wastewater into the sewer, surface water, or other receptor. This will involve a comparison between the national standards and EBRD's PR3 with the stricter standard being adopted.
- Details of national permits, licences and authorisations that are required to discharge wastewater.
- All wastewater to be discharged shall be tested for its quality and compliance with the Project Standard before being disposed of.
- A site-specific assessment shall be conducted to check that the selected disposal site is suitable for the volume and quality of water which is planned to be discharged.
- The volume and sources of wastewater discharged shall be recorded along with the results of the testing.
- All sewage generated shall be contained into a tank and transferred to a municipal sewage treatment facility in accordance with the Waste Management Plan.
- Details of temporary drainage arrangements to ensure that parts of the site do not flood if they are subjected to periods of heavy rainfall.

The prevention of soil, groundwater and surface water contamination

- All hazardous materials (diesel, oils stored at vehicles workshops) shall be located within a secure, bunded area. The secondary containment must be able to hold 110 % per cent of the container's capacity, or where there is more than one container within the secondary containment, 110 % of the largest container or 25 % of the total, whichever is greater.
- A dedicated refuelling area shall be available at each construction site which is within an impermeable area so that any leaks and spills can be easily cleaned up. A refuelling procedure shall be used which includes checking the volume of fuel that is required and the capacity in the tank, temporary containment in the form of drip trays, communications between personnel, and a post-fuelling check to ensure any leaks are cleaned up immediately.
- Spill kits shall be available across the site in accordance with the Emergency Response Plan to deal with minor leaks and spills.
- No wastewater shall be discharged into a river unless it has been subjected to a site-specific assessment and water quality testing (as above).
- No vehicle washing shall be undertaken within 50m of a river.
- All areas of land temporarily used during the construction stage shall be restored back to their original condition.
- No waste or other material shall be left and the site shall be inspected by the PIU before the contractor's scope is considered to be completed and the final invoice paid.

The use of water resources

- The steps to be taken to minimise the use of freshwater resources during the construction stage.
- Details of the future volume of water required during the construction stage and where this is to be sourced from.
- Details of national permits, licences and authorisations that are required to abstract water from the identified sources.

General

- Systematically review material inputs and design for resource efficiency through minimising material use, use of prefabrication, selecting lower embodied-energy or recycled products and/or specifying lower maintenance-interval solutions.
- Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities.

Table 11-13: Pollution Prevention Management Plan

Title:	Soil Management and Erosion Control Plan, and Excavated Material / Spoil Management Plan
Objectives:	<ul style="list-style-type: none"> Protect, conserve and reinstate soils disturbed during construction works. Avoid unnecessary excavation and minimise soil removal, degradation, or contamination. Ensure safe handling, storage, re-use and disposal of excavated soils and spoil. Prevent soil erosion and sediment transport, including from slopes, stockpiles, access roads and work sites. Control geological risks such as landslides and slope instability through engineering and drainage solutions. Restore vegetation and natural drainage as soon as practicable to stabilise soils and reduce erosion.
Key content and management measures: <ul style="list-style-type: none"> The Contractor must prepare the SMECP as part of the CESMP, covering: Organisational Arrangements: roles and responsibilities of the Contractor and subcontractors. Relevant licences and certificates required under national legislation. Soil and Spoil Characterisation: quantities and types of excavated soil and spoil per site, classification and suitability for reuse (topsoil, subsoil, spoil). Segregation and Collection Systems: Procedures for separating: topsoil (fertile layer), excavated subsoil and spoil, methods for minimising mixing and contamination. Storage and Stockpiling Requirements: Locations and conditions for temporary storage and stockpiles, measures for run-off control, covering, seeding and preserving fertility. Re-Use and Final Destination: closed-loop reuse principles to maximise reinstatement on site, criteria for off-site transport or disposal where reuse is not feasible. Erosion Risk Assessment: identification of erosion-prone areas (steep slopes, loose soils, drainage lines), Identification of required erosion control measures and locations. Temporary and Permanent Erosion Control Techniques: specification of matting, mulching, drainage works, slope stabilisation, sediment control measures, etc. Drainage Design (as required), additional drainage for areas with high erosion risk or slope instability. Monitoring, Maintenance and Restoration: procedures for monitoring soil condition, erosion, stability and reinstatement performance. Requirements for progressive restoration and re-vegetation. <p>Management measures:</p> <p>Soil Management</p> <ul style="list-style-type: none"> Minimisation and Reuse: Plan works to minimise excavation and allow soil removal only when necessary. Maximise reuse of excavated materials for on-site reinstatement in line with the Site Reinstatement Plan. Handling and Storage: Remove and segregate topsoil from other materials; store separately, store all soils in secure locations with protection from run-off and erosion, cover or seed stockpiles stored longer than 3 months; remove or spread stockpiles at end of construction. Protection of Soil Quality: Limit vehicle movements off-road to avoid compaction—especially in soft soils or on steep slopes, avoid off-road driving during wet conditions; repair ruts or compaction damage immediately. Slope Stability and Earthworks: Avoid earth cutting and access routes on steep slopes; apply engineered stabilisation where unavoidable. Design drainage ditches so that adjacent land stability and hydrology are not negatively affected. Reinstatement and re-vegetation: Avoid leaving ground without vegetation cover unless naturally barren, Re-grade surfaces to restore natural drainage patterns, re-vegetate cleared areas and modified slopes with native species as early as possible. <p>Spoil / Excavated Material Management Plan (EMMP)</p> <p>To be implemented before earthworks begin and must include:</p> <ul style="list-style-type: none"> Planning and Organisation: contractor and subcontractor details, procedures for E&S assessment of borrow pits and disposal sites. Reuse and Material Flow: measures to maximise on-site closed-loop reuse (topsoil and subsoil), material quantities and reuse potential per category and per site. Stockpile Management: requirements to cover stockpiles and protect them from run-off, segregation of clean vs contaminated excavated soils; safe treatment or disposal of contaminated soil, long-term topsoil stockpiles must be outside active work areas and away from drainage ditches. Borrow Pits and Disposal Sites: must be approved by regulators and environmental authorities, require E&S assessment and mitigation development by the Contractor, must be coordinated with municipalities. Quality Protection and Preservation: stockpiles designed to minimise loss, compaction, contamination and degradation, agricultural land used temporarily must be reinstated and returned to agricultural use. <p>Erosion Control – Key Mitigation / Management Actions</p> <ul style="list-style-type: none"> Planning and Exposure Minimisation: Minimise cleared surfaces and areas exposed to erosion, optimise workspace layout to reduce exposed soils. Temporary Erosion Controls: install erosion control matting, mulching, bunds or temporary drainage where needed, protect exposed soil until vegetation is restored. Sediment Control Measures: Install silt fences, sediment traps, check dams or similar measures to control water flow 	

and sediment, apply sediment control particularly on: access roads, construction camps, tower foundations (if applicable), any cut-and-fill areas.

Water Flow and Run-Off Management: Install drainage structures to control surface run-off and reduce sediment mobilisation, maintain all erosion and sediment controls throughout construction.

Table 11-14: Soil Management and Erosion Control Plan, and Excavated Material / Spoil Management Plan

Title:	Construction Noise Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ Prevent, minimise and control noise and vibration emissions from all construction activities. ▪ Ensure compliance with national noise limit values and good international practice (GIP). ▪ Protect nearby receptors (residences, schools, health facilities, workplaces) from excessive noise or vibration levels. ▪ Apply source-based and site-based controls to reduce noise emissions during construction. ▪ Ensure transparent communication with affected communities regarding construction schedules, noisy activities and complaint mechanisms. ▪ Monitor noise and vibration to ensure continual compliance and corrective action.
Key content and management measures:	
<p>The Contractor must prepare the CNMP as part of the CESMP. It shall include:</p> <ul style="list-style-type: none"> ▪ Identification of noise and vibration sources: all machinery, heavy equipment, trucks, generators, compressors, batching plants, crushers, construction stages with high noise intensity (excavation, breaking, piling, asphalt works). ▪ Legal and standards framework: Relevant national legislation in Republic of Moldova (noise limits and time restrictions), GIP standards (e.g., EU Outdoor Equipment Directive, IFC/EBRD guidance values). ▪ Baseline and receptor mapping: Identification of nearest occupied receptors, Sensitive receptor map within 200 m of construction sites and transport routes. ▪ Noise & Vibration control strategy: control at source (equipment specifications, muffling devices), control across site (scheduling, barriers, zoning, sequencing), transport-related noise controls. ▪ Noise and vibration monitoring programme: locations, frequency, parameters, thresholds and corrective actions, complaint-triggered monitoring procedures. ▪ Community information and communication: notification systems for residents, mechanisms to address noise complaints and feedback. ▪ Roles, responsibilities and training: designated noise control officer, worker training requirements (noise reduction, equipment operation). ▪ Reporting and record keeping: daily logs, exceedance records, corrective actions, and reports to authorities. 	
<p>Management measures:</p> <ul style="list-style-type: none"> ▪ Construction planning & scheduling: schedule noisy activities during permissible working hours; avoid early mornings, evenings, holidays and weekends; sequence noisy tasks to avoid long continuous noise exposure; coordinate noisy works between subcontractors to prevent cumulative noise peaks, agree working hours with local authorities. ▪ Use of quieter and well-maintained equipment: select low-noise equipment compliant with EU Outdoor Equipment Directive; ensure regular maintenance and servicing to reduce noise and vibration; conduct periodic noise tests to confirm compliance; keep acoustic covers on engines closed during operations. ▪ Muffling, silencing and engineering controls: fit equipment with silencers, mufflers, acoustic enclosures; use sound-reduced compressors with proper acoustic housing, apply anti-vibration pads under stationary equipment; use low-vibration power tools (e.g., hydraulic instead of pneumatic where possible). ▪ Temporary and natural noise barriers: build temporary barriers using earth berms, spoil stockpiles, containers or acoustic panels; install barriers around stationary high-noise equipment (generators, crushers, batching plants), position equipment as far as possible from sensitive receptors. ▪ Vibration control measures: select low-vibration equipment and methods, use isolation pads, dampers or vibration-absorbing foundations, limit activities with high vibration potential (e.g., pile driving) and notify residents in advance, monitor vibration where receptors are close to excavation or compaction areas. ▪ Worker training & operational discipline: train workers on noise-reduction techniques and proper equipment use; avoid shouting; encourage use of radios or headsets for communication, require workers to use hearing protection (earpieces) in high-noise areas. ▪ Community information & communication: Inform residents in advance about construction activities, timing, and expected noise level; provide updates for any works planned within 200 m of receptors; share contact details for the project's Grievance Mechanism (GM); respond promptly to complaints and implement corrective actions. ▪ Compliance with local regulations: strict adherence to Republic of Moldova noise standards and time restrictions; no night-time, weekend or holiday works unless authorised by local authorities; document and justify any exceptional works requiring extended hours. ▪ Noise monitoring: conduct regular monitoring in accordance with national requirements, use calibrated sound level meters positioned near key receptors; trigger corrective actions when exceedances occur (e.g., relocation of equipment); record complaints and responses. ▪ Additional site-specific noise-reducing Measures (GIP): place noisy machinery away from sensitive areas (schools, 	

houses, businesses); avoid simultaneous operation of multiple high-noise equipment; reduce transport-related noise; limit vehicle speeds to ≤ 10 km/h on temporary site roads; stabilise dirt access roads with gravel; load/unload materials away from receptors; avoid unnecessary engine revving and horn use; switch off engines during idling; start machinery sequentially, not simultaneously;

- Complaint management and corrective action: investigate all noise/vibration complaints; identify the source and assess need to: adjust working hours, relocate equipment, install additional barriers, enhance operational discipline. Sensitive receptors must be mapped before works begin to enable rapid response.
- Coordination with Authorities: maintain regular liaison with local authorities on: planned works, temporary increases in noise, required exemptions, community notifications, report monitoring results and exceedances as required.

Table 11-15: Construction Noise Management Plan

Title:	Chemicals and Hazardous Substances Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ Ensure safe handling, transport, storage, use, and disposal of chemicals and hazardous substances during construction. ▪ Minimise risks to workers, communities, and the environment arising from spills, leaks, exposure or fires. ▪ Manage hazardous materials in line with national legislation and international good practice (GIP). ▪ Prevent contamination of soil, water, air and sensitive ecological receptors. ▪ Ensure workers are trained and competent in hazardous materials management, PPE use and emergency response. ▪ Implement a clear risk hierarchy: elimination, substitution, isolation, control, safe practices, and PPE.
Key content and management measures:	
<p>The CHSMP must be prepared as part of the CESMP and include:</p> <ul style="list-style-type: none"> ▪ Hazard identification and inventory: full list of hazardous substances expected on-site (fuels, oils, solvents, detergents, paints, sealants, gases, herbicides, etc.); quantities, storage locations, associated risks, and hazard classifications. ▪ Legal and standard framework: national regulations applicable to hazardous substances management in Republic of Moldova; GIP references (Material Safety Data Sheet guidance, safe storage standards, bunding requirements). ▪ Risk Reduction Hierarchy: elimination / substitution of high-risk chemicals; isolation, enclosure, bunding and distance-based protection; engineering controls, safe work practices, PPE. ▪ Roles, responsibilities and training: designated chemical safety officer and responsibilities; training programme for workers, including spill response and safe handling. ▪ Storage and handling protocols: approved storage areas, bund capacity, segregation rules, ventilation requirements; labelling, signage and container management. ▪ Transport Requirements: licenced transporters, route planning, documentation, vehicle requirements, emergency response kits. ▪ Emergency Response Procedures: spill management steps, reporting lines, emergency contacts, interfaces with ERP (Emergency Response Plan). ▪ Waste and disposal arrangements; requirements for segregation, containment, off-site disposal and record keeping. ▪ Monitoring, Inspection and Reporting: weekly inspection requirements, inventory updates, corrective actions and documentation procedures. 	
Management measures:	
<ul style="list-style-type: none"> ▪ Maintain a complete and up-to-date MSDS Register for all hazardous substances, review MSDS before any handling, transport, storage or disposal; train all personnel in safe handling, PPE use, spill response, and emergency procedures; maintain training records; provide spill response kits at all storage facilities and on equipment transporting hazardous substances; ensure availability of suitable PPE (gloves, masks, goggles, chemical-resistant overalls); store all chemicals and chemical wastes in accordance with approved standards and national requirements; fit all site vehicles with appropriate fire extinguishers. ▪ Transport of Hazardous Substances: engage only licensed transporters knowledgeable in hazardous materials regulations; transport hazardous substances in compliance with relevant national regulations; ensure spill kits accompany all vehicles transporting hazardous goods; use properly labelled containers and ensure secure loading to prevent tipping or leakage; ensure drivers are trained in emergency response and reporting procedures. ▪ Storage Requirements: store and use substances exactly as specified in MSDS and manufacturer labels; minimise the number of storage locations; centralise where possible; do not store incompatible chemicals together (flammables, corrosives, toxics); store hydrocarbons (fuel, oils, lubricants) in bunded areas meeting regulatory standards; store drummed hazardous substances on impervious, sloped or bunded surfaces; store flammable, corrosive and toxic substances separately, with regulatory labelling; prohibit all ignition sources near flammable storage tanks; provide safety showers, eyewash stations and first aid kits near hazardous storage areas; maintain spill kits at all storage areas and on equipment handling hazardous substances; prohibit storage or use within 50 m of watercourses or drainage lines, install appropriate warning and hazard signage at all hazardous storage locations. ▪ Use Requirements: follow safe operating procedures, including correct decanting, mixing and dilution practices; avoid using hazardous substances in windy or rainy conditions where dispersal is likely; ensure containers are sealed when not in use to prevent evaporation or spillage use tools, equipment and containers approved for chemical use. ▪ Disposal of Hazardous Waste: collect and dispose of hazardous wastes in accordance with the Construction Waste 	

<p>Management Plan; use only licensed disposal or recycling facilities approved by national authorities; segregate hazardous waste from general waste; label containers clearly; maintain documentation of quantities, disposal dates, transporter and destination;</p> <ul style="list-style-type: none"> ▪ Spill Prevention and Response: follow the spill management procedures in the Emergency Preparedness and Response Plan (EPRP); immediately contain and clean all spills using appropriate absorbents; report all spills to NRA / Supervision Consultant as required; inspect and maintain all equipment to prevent leaks, especially hydraulic systems; replace damaged hoses, seals or fittings immediately; ensure spill kits include absorbents, sand, booms, neutralisers and fire suppression devices appropriate to risk. ▪ Monitoring and Inspection: maintain a full Hazardous Substances Inventory for the Project, completed at the start of construction and regularly updated; maintain a Safety Data Sheet Register at storage areas and contractor office; conduct weekly inspections covering: storage conditions, bund integrity, PPE availability, spill kit condition, container labelling, evidence of leaks or improper handling, record non-compliances and implement corrective actions, report monitoring results to the Client and supervising engineer.
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Table 11-16: Chemicals and Hazardous Substances Management Plan

Title: Waste Management Plan	
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that the management of solid and liquid wastes (including overburden/spoil) are appropriately managed in accordance with national legislation and EBRD's PR3. ▪ To ensure that contractors are adopting the waste hierarchy, which is to avoid reduce, reduce, recover, recycle and, if none of these options are available, to treat and dispose of waste in a legal and responsible manner. ▪ To track all waste movements, recording how waste may be transferred from one entity to another before it reaches its end point. ▪ To ensure that waste management contractors are assessed and evaluated during procurement process, before they are used, to check that they will be able to management waste according to the requirements of this Plan. ▪ To ensure all waste management facilities are audited against national requirements and EBRD's PR4 requirements before they are used.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ Details of a Waste Inventory that reflects the expected quantity, type and hazardous classification of wastes generated, along which waste types can be recovered and recycled. The inventory will indicate when during the construction stage of the project, large quantities of waste will be generated so that the management of high waste volumes can be planned in advance. ▪ A Waste Register that reflects how the different types of waste will be recovered, recycled or treated/disposed of, and where the final destination of the waste materials could be after being subjected to a detailed audit (see below). ▪ Details of how potential waste contractors are to be audited to ensure that they have the internal capacity to meet the applicable requirements of national legislation and Good Industry Practice. ▪ Details of how potential waste management facilities are to be audited to ensure that they are being operated in accordance with national legislation and GIP. ▪ An up-to-date register of approved waste management contractors and waste management facilities who have been subjected to a successful audit. ▪ Details of how waste generated at each construction site shall be segregated using a simple colour coded system and signage. ▪ How waste storage containers shall be securely stored, banded (where required), fenced off, and labelled including details of international hazard labels and the applicable UN code where required for hazardous waste materials. ▪ How waste storage areas at each construction stage shall be subjected to a weekly visual inspection. ▪ Internal training, awareness raising activities, monitoring using KPIs, and roles and responsibilities. 	

Table 11-17: Waste Management Plan

Title: Site Reinstatement Plan	
Objectives:	<ul style="list-style-type: none"> ▪ Restore all temporary construction areas to their pre-construction condition or better, ensuring they are stable, safe, and environmentally compatible. ▪ Prevent long-term environmental degradation such as erosion, soil instability, contamination, or loss of vegetation. ▪ Rehabilitate land in a sustainable manner using technical and biological reinstatement measures. ▪ Ensure safe closure of construction compounds, temporary access roads, storage zones, stockpiled earth areas, worker camps, and auxiliary workspaces. ▪ Ensure coordination with local authorities and landowners to meet regulatory and community expectations.

	<ul style="list-style-type: none"> Achieve progressive restoration to minimise the footprint and duration of impacts.
Key content and management measures:	
The Contractor must develop an SRP as part of the CESMP. It must include:	
<ul style="list-style-type: none"> Identification and mapping of all temporary construction areas: access roads not required for operation, construction compounds, laydown areas, worker accommodation camps, storage yards and stockpiled earth, temporary utilities and support infrastructure Pre-Construction Baseline Conditions: photographic record of site condition; soil profile (topsoil/subsoil) and existing vegetation; drainage patterns and land use. Reinstatement Strategy: progressive reinstatement aligned with construction sequencing; technical and biological reinstatement measures; methods for topsoil preservation and reuse; standards for grading, contouring, and erosion control; restoration acceptance criteria (visual, structural, vegetation cover). Schedule and Phasing: a reinstatement schedule coordinated with construction milestones; seasonal planning for vegetation establishment (spring/autumn). Roles and Responsibilities: contractor's reinstatement team, environmental specialists, and supervisors; coordination with NRA and local competent authorities. Monitoring and Reporting: vegetation monitoring programme (survival rates, regrowth, erosion); post-restoration inspections and corrective actions. 	
Management measures	
<ul style="list-style-type: none"> All areas temporarily used during construction must be reinstated to pre-construction conditions or better. Reinstatement must comply with all permits and regulatory consents. Close collaboration with competent authorities and NRA is mandatory during planning and implementation. Technical Reinstatement includes physical restoration measures such as: landscaping and re-grading to restore original contours; installation of permanent erosion control structures (ditches, drains, slope stabilisation); ensuring safe runoff management and preventing soil loss; removal of temporary culverts, pipes, access tracks and structures; ensuring reinstated land poses no safety hazards to workers, landowners, or the public. Biological Reinstatement includes ecological restoration using: spreading topsoil previously stripped and preserved; seeding or planting with autochthonous (native) species only; temporary irrigation or erosion mats if required; a detailed monitoring programme to track vegetation establishment, growth, and survival; replanting in case of unsuccessful vegetation establishment. Removal of Temporary Works and Facilities: all temporary construction-related facilities must be removed unless needed for long-term operation. This includes: construction compounds and camps; temporary offices, storage containers, utilities and fencing; all equipment, temporary structures, and residual materials; stockpiled earth or spoil piles; waste and demolition debris (handled per Waste Management Plan). after removal: sites must be graded, stabilised, and re-vegetated. Clean-Up and Waste Removal: all residual materials, debris, stockpiles, and waste must be removed and disposed of in accordance with the Waste Management Plan; contaminated soils must be remediated if identified. Access Roads Restoration: all access roads used only for construction must be restored after works unless required for operational maintenance. Restoration includes: grading, recompaction where needed, topsoil replacement, re-vegetation, drainage reinstatement. Landscaping and Re-Vegetation: re-vegetation must be planned early in the CESMP. Use only locally appropriate, autochthonous plant species. re-vegetation is progressive, not postponed until the end. Apply measures such as: mulching, erosion control mats, protective fencing, soil improvement (where needed) Progressive Reinstatement: reinstatement must occur as soon as areas become redundant for construction. This minimises erosion risk and reduces the disturbed footprint. Progressive reinstatement should follow a clear flow: remove temporary facilities, re-grade and stabilise, replace topsoil, plant/seed. Monitoring and acceptance criteria: vegetation establishment must be monitored for at least one full growing season. Criteria for successful reinstatement include: stable slopes and no erosion, $\geq 70\%$ vegetation cover with native species, restored drainage patterns; reinstated land safe for intended use. Failure to meet criteria requires corrective actions (re-seeding, additional topsoil, erosion control). 	

Table 11-18: Site Reinstatement Plan

Title: Chance Find Procedures	
Objectives:	<ul style="list-style-type: none"> To establish procedures to protect the status of tangible cultural heritage resources that may be unexpectedly found during excavations, earth movements and similar activities in accordance with national legislation and PR8. To ensure that government departments are notified of the chance find as soon as possible to do so. To raise awareness of the Chance Finds Procedure amongst the Construction Contractor's workforce and subcontractors so that work is stopped immediately after a chance find is made
Key content and management measures:	
<ul style="list-style-type: none"> A chance find procedure that includes a commitment to: Temporarily stop all work; Notify the E&S Manager; 	

- Conduct a preliminary assessment based upon what can be observed;
- Document the preliminary assessment that has been made which includes taking photographs, the potential significance of the find and measures required to protect the find;
- For potentially significant finds, notify the relevant government department and wait for their involvement before proceeding, until a future plan of action is agreed; or
- For chance finds assessed to be not significant, extract the remains into a secure container, inspect the surrounding area for further artefacts, and resume works whilst checking for any additional finds.

Table 11-19: Chance Find Procedures

Title:	Training Plan
Objectives:	<ul style="list-style-type: none"> ▪ To ensure that the PIU (if the PIU will be other entity than NRA) has the adequate capacity to manage the E&S risks and impacts that are expected to occur during the construction and operational stages of the project. ▪ To ensure that the PIU is aware of the relevant E&S compliance requirements under national legislation and the applicable PRs.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ To provide training to the PIU's E&S department and senior managers inside the organisation on the following topics: ▪ Stakeholder engagement and grievance management; ▪ Labour and working conditions, ▪ Community health and safety; ▪ Pollution prevention and control; ▪ Safety and security management; ▪ Implementation of the resettlement plan; ▪ The eLearning course developed by EBRD on the E&S management of contractors ▪ The eLearning course developed by EBRD on stakeholder engagement. 	

Table 11-20: Training Plan

Title:	Supply Chain Management Plan
Objectives:	<ul style="list-style-type: none"> ▪ To identify significant labour risks and impacts associated with the project's core supply chains in relation to child labour, forced labour, and occupational health and safety (including GBVH). ▪ To monitor supply chains on an ongoing basis to identify any relevant changes and to identify new significant risks or impacts associated with these changes.
Key content and management measures:	
<ul style="list-style-type: none"> ▪ Details of the core suppliers to the construction contractor and a profile of the labour risks associated with each economic sector such as (for example) the abstraction of aggregate materials from a quarry for road base material. ▪ The outcome of a risk assessment to indicate the likelihood and consequence of supply chain risks in each economic sector and company used. ▪ How the Construction Contractor will be obliged to select low-risk suppliers, where it is possible to do so. ▪ Details of legally binding agreements the PIU will require the Construction Contractor to have with its supply chain of companies to incorporate the prohibition and prevention of forced labour, child labour, and significant life safety risks. ▪ A description of the scope of audits and inspections to be undertaken at a supplier's workplace/facility, depending on the outcome of the risk assessment. ▪ Details of how the PIU will require the Construction Contractor to disengage from suppliers where significant audit findings are not rectified in a reasonable period of time. 	

Table 11-21: Supply Chain Management Plan

12. Environmental and Social Management Plan

The table below presents the **Environmental and Social Management Plan (ESMP)** for the M3 Road Corridor Tranche 2 Rehabilitation Project. The table summarizes the key potential environmental and social impacts identified during the assessment, their assessed significance, and the specific mitigation measures required to avoid, minimize, or offset adverse effects in line with Moldovan national legislation, EBRD Environmental and Social Policy (2019) and Performance Requirements (PR1–PR10), and relevant EU standards.

For each impact, the table specifies:

- Significance of impact (rated as Low, Moderate, or High based on intensity, duration, and extent criteria);
- Mitigation measures to be implemented during construction and/or operation phases;
- Responsibility for execution (primarily Contractor, with oversight by Supervising Engineer, PIU, and NRA);
- Indicative cost (where quantifiable, in USD or percentage of contract value);
- Timeframes for implementation;
- Execution and Monitoring arrangements to ensure effective delivery and compliance.

The ESMP serves as a practical, actionable tool to guide project implementation, ensuring that all identified risks are proactively managed, residual impacts remain acceptable, and project benefits (improved road safety, reduced emissions, enhanced connectivity, and community welfare) are maximized. It forms the core of the project's environmental and social management system and will be integrated into the Contractor's Construction Environmental and Social Management Plan (C-ESMP), with regular monitoring, reporting, and adaptive management as outlined in the ESMP Monitoring Framework.

The measures in **Table 12-1: Environmental and Social Management Plan** are prioritized for the construction phase (where most impacts occur) but include provisions for operation where relevant. Full compliance with this plan is mandatory under the project contract and EBRD financing conditions.

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
						Pre-Construction period
Site organizations/ Temporary Sites and Locations	Moderate	<p>Mitigation: Identify the location of construction site organizations in consultation with local authorities, NRA, EPI and environmental NGOs; avoid, where possible, the establishment of construction site organizations near settlements or water sources. Avoid felling trees and reduce vegetation clearance in line with national legislation and PRs'. Provide water and sanitation facilities for employees, in line with national legislation and PRs'. Control of solid waste and wastewater according to national and municipal regulations and EBRD PRs. The dumping, burying or burning of solid waste on and/or in the vicinity of the construction site is prohibited. The waste will be deposited at the nearest landfill or area that has the required permits. Guarantee by the Contractor that he will organize and maintain the system of waste sorting, collection and transport according to national and EBRD PR requirements. Ensure that all hazardous and non-hazardous, liquid and solid wastes are selected, collected and disposed of according to national regulations and requirements according to national and EBRD PR requirements. Upon completion of the project, remove all small materials and waste, as well as all temporary structures, including office buildings, shelters and restrooms. The Engineer will inspect and report that the site organization has been cleared and restored to pre-project conditions.</p> <p>Management Plan: Waste Management Plan Pollution Prevention and Control Plan, Worker Accommodation Plan (if camps are used), Community Health and Safety Management Plan (for proximity to settlements). Site Reinstatement Plan, Soil Management and Erosion Control Plan, Chemicals and Hazardous Substances Management Plan</p>	Contractor (Project manager)	Supervising Engineer, LPA, NRA, EPI, Public Health Centre	BoQ	Construction period

² Intensity: Low, Moderate, High;

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Atmospheric air including climate change						
Emissions of polluting substances associated with road traffic (construction activities)	Low	Mitigation: Maintain machinery regularly to reduce exhaust emissions; Avoid unnecessary engine idling and use low-sulphur fuels; Apply asphalt only in suitable weather conditions; Restore work areas progressively to reduce dust; Locate construction camps and asphalt plants away from settlements. Management Plans: Pollution Prevention and Control Plan; Air Quality Management Procedures; Traffic Management Plan; Asphalt Plant Environmental Control Procedures; Site Reinstatement Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan; Worker Accommodation Plan (when applicable).	Contractor (environmental specialist)	Supervising Engineer, EPI, Public Health Centre	Construction costs	Construction period
Dust emissions from construction activities	Moderate	Mitigation: Use of water sprayers during transportation and loading/unloading of sand, aggregates and all similar materials where there is a probability of creating dust. Cover trucks transporting soil, sand, or waste materials. Limit vehicle speed on unpaved roads Management Plan: Pollution Prevention and Control Plan; Air Quality / Dust Management Procedures; Traffic Management Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan.	Contractor (environmental specialist)	Supervising Engineer	Construction costs	Construction period
Soil and subsoil						
Accidental losses of fuel and lubricants	Moderate	Mitigation: Prohibit washing, maintenance, or repairs of machinery on site; Use sand beds to contain accidental leaks; Protect the territory from fuel and lubricant spills; Clean vehicle wheels before entering public roads. Management Plan: Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Waste Management Plan; Traffic Management Plan; Community Health and Safety Management Plan	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Non-compliant management of construction	Low	Mitigation: Manage construction waste according to Law no. 209/2016 and CP A.09.04.2014; Collect waste in designated areas and remove it periodically by	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
materials and waste		authorized services; Use only approved access routes and avoid uncontrolled disposal; Maintain site cleanliness and prevent soil contamination. Management Plan: Waste Management Plan; Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Soil Management and Erosion Control Plan; Traffic Management Plan; Community Health and Safety Management Plan				
Non-compliant management of construction materials and waste	Low	Mitigation: Collect waste in designated areas and remove it periodically by authorized services; Management Plan: Waste Management Plan; Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Soil Management and Erosion Control Plan; Traffic Management Plan; Community Health and Safety Management Plan	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Non-compliant management of construction materials and waste	Low	Mitigation: Use only approved access routes and avoid uncontrolled disposal; Maintain site cleanliness and prevent soil contamination. Management Plan: Waste Management Plan; Pollution Prevention and Control Plan; Soil Management and Erosion Control Plan; Traffic Management Plan	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Loss of fertile soil quality due to the organization of the construction site	Moderate	Mitigation: Identify and demarcate land for permanent and temporary use; Strip and store the fertile topsoil separately for later reuse; Use stored soil for recultivation and slope stabilization; Avoid unnecessary occupation of agricultural land. Management Plan: Soil Management and Erosion Control Plan; Site Reinstatement Plan; Pollution Prevention and Control Plan; Environmental Monitoring Plan; Community Health and Safety Management Plan	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Increased vulnerability to erosion due to excavation and creation of foundation	Moderate	Mitigation: Provide organized surface drainage in sloped areas; Limit excavation to project boundaries; Stabilize exposed slopes and gullies with vegetation or geotechnical measures; Reuse excavated materials to fill gullies and erosion pits. Management Plan: Soil Management and Erosion Control Plan;	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		Pollution Prevention and Control Plan; Site Reinstatement Plan; Community Health and Safety Management Plan				
Temporary loss of topsoil for the borrow pit and access road; risk of erosion; alteration of the local relief	Moderate	<p>Mitigation: Commencement of excavation works only after obtaining all the required permits. Stripping and separate storage of the topsoil layer; Protection of spoil heaps with drainage ditches; Reuse of topsoil for site rehabilitation; Construction of slopes with a maximum gradient of 1:3.</p> <p>Management Plan: Soil Management and Erosion Control Plan; Site Reinstatement Plan; Pollution Prevention and Control Plan; Environmental Monitoring Plan; Community Health and Safety Management Plan</p>	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Surface and groundwater						
Oil and fuel leaks due to the operation of machinery	Low	<p>Mitigation: Emergency prevention and pollution control plan; Periodic checking of the operating status of the machines in order to avoid possible malfunctions.</p> <p>Management Plan: Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Waste Management Plan; Traffic Management Plan; Community Health and Safety Management Plan</p>	Contractor (environmental specialist)	Supervising Engineer, LPA, EPI	Construction costs	Construction period
Water pollution due to improper management of waste and wastewater	Moderate	<p>Mitigation: Collect domestic and construction waste in designated areas, using separate containers. Remove waste regularly through authorized companies;</p> <p>Provide portable ecological toilets for site personnel;</p> <p>Store excavated soil and materials outside natural drainage areas to prevent erosion and runoff;</p> <p>Ensure proper site drainage to prevent ponding or uncontrolled runoff. Avoid discharge of concrete slurry, process water, or other pollutants into water bodies;</p> <p>Conduct baseline and periodic monitoring of nearby surface water and groundwater wells to detect potential contamination.</p> <p>Management Plan: Pollution Prevention and Control Plan; Waste Management Plan; Chemicals and Hazardous Substances Management Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan; Site Reinstatement Plan</p>	Contractor (environmental specialist)	Supervising Engineer, LPA, EPI	Construction costs	Construction period
Noise and vibration						

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Construction noise from machinery (excavators, bulldozers, compressors, vibrators, diesel trucks, asphalt milling machines)	Moderate	<p>Mitigation: Use work equipment/tools that generate as little noise as possible; Isolate construction equipment that generates excessive noise or vibration (acoustic barriers, enclosures).</p> <p>Carry out construction work only during daytime hours; Suspend construction activities during public holidays and outside working days; Constant monitoring of noise and vibration levels during works; Stop work if maximum permissible noise limits are exceeded; Periodically check machinery to ensure compliance with permissible noise levels.</p> <p>Management Plan: Noise Management Plan; Community Health and Safety Management Plan; Pollution Prevention and Control Plan; Traffic Management Plan; Worker Accommodation Plan (if applicable)</p>	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Temporary noise from material transport along haulage roads	Moderate	<p>Mitigation: Schedule deliveries of construction materials to avoid overcrowding; Establish a timetable for carrying out work to minimize noise peaks; Avoid residential areas as much as possible; Limit speed to a maximum of 40 km/h where transport passes through built-up areas; Monitor traffic noise during material transport to ensure compliance with limits.</p> <p>Management Plan: Traffic Management Plan; Noise Management Plan; Community Health and Safety Management Plan; Pollution Prevention and Control Plan.</p>	Contractor (environmental specialist)	Supervising Engineer, EPI	Construction costs	Construction period
Operational noise from vehicles using bypass road	Low	<p>Mitigation: Limit vehicle speed in sensitive areas. Schedule operational traffic to minimize overlap with sensitive periods (night/rest hours).</p> <p>Management Plan: Noise Management Plan (Operation Phase); Traffic Management Plan (Operation Phase); Community Health and Safety Management Plan</p>	Maintenance Contractor (environmental specialist)/ NRA (environmental specialist)	Supervising Engineer, EPI	Operation costs	Operation period
Landscape						
Temporary modification of the landscape and visual characteristics of the area of borrow pit	Moderate	<p>Mitigation: Restoration of the site upon completion of extraction activities; Shaping and levelling of disturbed areas to blend with the surrounding landscape; Reuse of stored topsoil for surface reinstatement and vegetation recovery; Implementation of erosion control measures (drainage channels, slope stabilization); Re-vegetation with native species to restore the natural appearance and prevent soil degradation; Regular monitoring of site rehabilitation progress and vegetation establishment.</p>	Contractor (environmental specialist)	Supervising Engineer, LPA, EPI	Construction costs	Construction period

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		Management Plan: Site Reinstatement Plan; Soil Management and Erosion Control Plan; Pollution Prevention and Control Plan; Environmental Monitoring Plan; Community Health and Safety Management Plan				
Cultural, archaeological, and historical resources						
Risk (very minor) to hitherto unknown cultural heritage sites from excavations along the road corridor.	Low	Mitigation: Avoidance of protection zones; dust/noise control; Formal Chance Finds Procedure; stop-work authority; Supplier screening; audits; child/forced labour prohibition; Training on artefact identification; monthly refreshers Management Plan: CHMP (Cultural Heritage Management Plan), Chance Finds Procedure (CFP); Supply Chain Management Plan (SCMP), Contractor Training Plan (CTP)	Contractor (social specialist)	Supervising Engineer	Construction cost	Construction phase
Biodiversity						
Emerald Sites and Natural protected areas	Moderate	Mitigation: Application of all measures for protection the habitats of flora species according to National legislation, EU Directives, International Treated and EBRD's PR6 requirements; Provide control of sites to detect potential contamination or pollution of habitats; It is not allowed to store construction materials and equipment in the Emerald sites and NPAs zones adjacent to the road; Training of the employed personnel prior to construction, by an environmental/biodiversity expert, hired by the Contractor, to explain the behaviour that must be in sensitive areas and about the importance of avoiding the risk on these areas; The contractor (environmental/biodiversity expert) will draw up incident response plans for sensitive areas, which must be taken into account during the construction period; Management Plan: Environmental Monitoring Plan (construction-phase wildlife and habitat monitoring); Pollution Prevention and Control Plan; Site Reinstatement Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan; Emergency Preparedness & Response Plan (Sensitive Areas Section)	Contractor (environmental/biodiversity expert)	Supervising Engineer, ME: Environmental Agency, "Moldsilva" Agency, EPI	Construction cost	Prior to construction Construction period, permanently
Flora and forest ecosystems	Moderate	Mitigation: Obtaining all the permissive documents for deforestation. it is not allowed to start tree cutting works and to control the execution of the works, without the consent / presence of the representatives of the responsible environmental institutions;	Contractor (environmental/biodiversity expert)	Supervising Engineer, ME: Environmental Agency,	Construction cost	Construction period, permanently

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		<p>The locations for replanting will be only inside the road area, as close as possible to the places where there have been tree losses, respecting the design and safety requirements;</p> <p>If possible, stretch a net along the forests, where the trees are closer than 3 m to the road, to avoid polluting them with dust. Daily spraying of these areas with water, when finishing construction works;</p> <p>It is not allowed to store construction materials and equipment in the forest areas adjacent to the road.</p> <p>Management Plan: Environmental Monitoring Plan; Pollution Prevention and Control Plan; Soil Management and Erosion Control Plan; Site Reinstatement Plan; Community Health and Safety Management Plan</p>		"Moldsilva" Agency, EPI,		
Fauna and their habitats	Moderate	<p>Mitigation: The monitoring and control the sensitive areas for wild animals, particularly the species included in EU Resolution 6 (including mammals, reptiles, birds, others), especially migratory species</p> <p>Stopping work in sensitive areas for animals and special monitoring the area along the road, in the period of breeding and nesting of wild animals (Spring and summer)</p> <p>Conduct long-term monitoring of wildlife mortality or injury during construction. Emergency reporting to environmental authorities about all cases of animal mortality and injury;</p> <p>Avoiding the storage of household solid waste, used water, toxic and chemicals substances, in areas adjacent to construction sites that can attract animals and endanger their life or health.</p> <p>Avoid noise and vibration, strong lighting in sensitive areas for animals, especially during the dark period.</p> <p>Management Plan: Environmental Monitoring Plan (construction-phase wildlife and habitat monitoring); Noise Management Plan; Pollution Prevention and Control Plan; Waste Management Plan; Community Health and Safety Management Plan; Emergency Preparedness & Response Plan (Wildlife Section)</p>	Contractor (environmental/biodiversity expert)	Supervising Engineer, ME: Environmental Agency, "Moldsilva" Agency, EPI,	Construction cost	Construction period, permanently
Socio-economic						

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Land Acquisition & Economic Displacement	Low to Moderate	<p>Mitigation: Implement Resettlement Action Plan (RAP); full replacement cost compensation; completion of cadastral works; Negotiated temporary land use agreements with compensation; reinstatement to pre-project condition; advance communication; temporary access routes; signage; timely reinstatement; Parcel-level consultation; redesign access routes where possible; livelihood restoration; Additional consultations with affected businesses and ensuring access to the business facilities during and after the Project implementation, where possible.</p> <p>Management Plan: Resettlement Action Plan (RAP); Stakeholder Engagement Plan; Community Health and Safety Management Plan; Traffic Management Plan; Site Reinstatement Plan; Labour Management Plan (if livelihood-related)</p>	NRA (land specialists)	Supervising Engineering	NRA costs	Preconstruction/Construction phase
Access & Severance Effects to Communities and Traffic Restrictions to Road Users	Moderate to High	<p>Mitigation: In the pre-construction phase, the detailed design will be revised and further refined to incorporate the recommendations of the Road Safety Audit (RSA) as well as the issues and concerns raised during stakeholder consultations, ensuring that the final design fully addresses identified safety risks and community needs along the M3 corridor. Implementation of Traffic Management Plan during construction to maintain vehicle and pedestrian access, safe passage of vehicles and pedestrians, and provide clear warning and instructions to vehicles.</p> <p>Maintain at least one access route; provide detours; temporary access ramps; visibility signage; directional boards; phased works to avoid full closures;</p> <p>Assurance of speed limits; flaggers; barriers; lighting; secure pedestrian routes;</p> <p>Consolidation of access points; deceleration lanes; grade-separated crossings;</p> <p>Consultations and engagement, to ensure that sufficient access to community, businesses and all personal assets is retained.</p> <p>Road Safety Awareness campaign.</p> <p>Management Plan: Traffic Management Plan; Community Health and Safety Management Plan; Stakeholder Engagement Plan; Resettlement Action Plan (if access restrictions cause economic displacement); Site Reinstatement Plan; Noise Management Plan (where applicable)</p>	NRA (ES Manager, Land Specialist) Contractor (Traffic Management Supervisor)	NRA, LPA	BoQ	Preconstruction/Construction phase

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Impacts on Community Health & Safety during Construction	Moderate to High	<p>Mitigation: Dust/Noise/Vibration: watering, covering trucks, day-only works, noise barriers, monitoring;</p> <p>Worker–Community Interaction: Code of Conduct; GBVH training; worker screening; no camps in settlement;</p> <p>Pedestrian Safety: safe crossing points; fencing; temporary footpaths; school route coordination;</p> <p>Vulnerable Groups: communication campaigns; targeted safety measures for schools/elderly;</p> <p>Health Infrastructure Pressure: emergency coordination; on-site first aid; hygiene protocols;</p> <p>Management Plans: Community Health and Safety Management Plan; Traffic Management Plan; Noise Management Plan; Pollution Prevention and Control Plan; Labour Management Plan (including Worker Code of Conduct & GBVH procedures); Worker Accommodation Plan (if applicable); Stakeholder Engagement Plan; Emergency Preparedness and Response Plan; Site Reinstatement Plan</p>	Contractor (Community Liaison Officer - CLO)	NRA/LPA/Supervising Engineer	Contractor cost	Construction Phase
Risks to Worker Health & Safety (PR4),	Moderate to High	<p>Mitigation: OHS legal/tender gaps (PR2/PR4): update FIDIC clauses to reference PR2/PR4; explicit labour and OHS rights clauses; requirement for contractors to comply with Project LMP and OHSP; alignment with ILO and ISO 45001;</p> <p>Contractor OHS Performance: prequalification, audits, KPIs, Job Hazard Analysis (JHAs), toolbox talks;</p> <p>Supply Chain Risks: supplier screening; audits; child/forced labour prohibition;</p> <p>OHS During Construction: safe work-zones; PPE provision and enforcement; task-specific JHAs and method statements; heat/cold stress protocols; noise/vibration control; near-miss reporting; behaviour-based safety.</p> <p>OHS During Operation (maintenance staff): maintenance-specific risk assessments; maintenance TMP; reflective PPE; shadow vehicles and signage for mobile works; training for night work and winter conditions.</p> <p>Management Plan: Occupational Health and Safety</p>	Contractor (Social/Labour officer, OHS officer)	NRA/Supervising Engineer/LSI – Labour State Inspectorate, Immigration Agency	BoQ	Construction Phase/Operation phase

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		Management Plan (OHSP); Labour Management Plan (LMP); Supply Chain Management Plan (SCMP); Traffic Management Plan (TMP); Emergency Preparedness and Response Plan (ERP); Pollution Prevention and Control Plan; Worker Accommodation Plan (if applicable); Contractor Management Plan / Contractor Oversight Procedures				
Labour and Working conditions (PR2)	Moderate to High	<p>Mitigation: Gaps in HR policies & Code of Conduct: develop PR2-compliant HR Policy and Code of Conduct; include provisions on child/forced labour, GBV/SEA, non-discrimination, working time, freedom of association, worker GM, supply chain obligations;</p> <p>Unclear working relationships / contracts: require written employment contracts or written terms for all workers (including non-standard contracts); ensure contracts are in a language understood by workers; induction on rights and obligations;</p> <p>Child labour / young workers in hazardous work: age verification procedure (ID checks, records); explicit prohibition of <18 in construction and hazardous work; monitoring of contractors and recruitment agencies.</p> <p>Forced labour / modern slavery (esp. migrant workers): zero-tolerance policy; prohibition of passport retention and recruitment fees; due diligence on recruitment agencies; confidential GM for migrant workers; regular audits.</p> <p>Non-discrimination & unequal opportunities: non-discrimination clauses in HR Policy and contracts; transparent recruitment and promotion criteria; monitoring of gender and vulnerable groups in workforce; corrective actions where inequities identified.</p> <p>Restriction of freedom of association & collective bargaining: Explicit commitment to respect workers' rights to organise; non-interference clauses in contracts; engagement with worker representatives/unions; access to GM for union issues.</p> <p>Excessive working hours / unpaid overtime: working time procedure consistent with Labour Code and PR2; timekeeping system; premium rates for overtime; regular monitoring and reporting; toolbox talks on fatigue.</p> <p>Inadequate wages & benefits: contractual requirement to meet</p>	Contractor (OHS officer, social/labour officer)	NRA/Supervising Engineer/LSI/Immigration Agency	BoQ	Construction phase

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		<p>at least national minimum wage and industry standards; periodic</p> <p>Weak protection of personal data & privacy data protection: protocol for HR; limited access to personnel files; clear rules for handling data in GM and investigations; staff training on data protection.</p> <p>Inadequate Worker Grievance Mechanism (GM): establish confidential, accessible Worker GM; multiple channels (boxes, hotline, email, worker reps); guaranteed non-retaliation; defined timelines; GM extended to contractor workers.</p> <p>Contractor labour management gaps: require contractor labour management plans; include PR2 clauses in contracts; pre-qualification based on labour performance; regular labour audits and reporting; corrective action plans.</p> <p>Supply chain labour risks (child/forced labour, poor conditions): supplier screening and pre-qualification; inclusion of PR2 clauses in purchase contracts; audits of high-risk suppliers (quarries, asphalt plants, etc.); termination clauses for non-compliance.</p> <p>Non-employee workers (subcontractors, agency workers): extend PR2 requirements to all non-employee workers via contracts; ensure access to Worker GM; monitoring of recruitment practices and working conditions; regular inspections.</p> <p>Worker accommodation – substandard camps: develop Worker Accommodation Plan aligned with IFC/EBRD 2009; minimum standards for space, WASH, fire/electrical safety; gender-sensitive facilities; regular inspections and corrective actions.</p> <p>GBV/SEA, harassment and bullying: GBV/SEA Action Plan; code of conduct with explicit GBV/SEA prohibitions; mandatory induction and refresher training; confidential reporting channels; survivor-centred response protocols; contractual zero-tolerance clauses.</p> <p>Security personnel abuses affecting workers (if required): Security Management Procedure aligned with Good International Practice; vetting of security providers; training on human rights and GBV/SEA; clear rules on use of force; GM to receive complaints about security staff.</p> <p>Ineffective communication of worker rights (language</p>				

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		<p>barriers): provide contracts, policies and key procedures in languages understood by workers (Romanian/ Russian/ English/ other as needed); use visual aids; toolbox talks; worker representatives to support communication.</p> <p>Weak monitoring and enforcement of PR2 requirements: integrate PR2 monitoring into ESMP and Owner's Engineer ToR; regular site audits; KPIs for labour and OHS; reporting to Client and EBRD; corrective action tracking.</p> <p>Retrenchment / collective dismissals (if applicable for O&M) Develop Retrenchment Plan aligned with ESR2; analyse alternatives; consult workers and unions; define compensation and support measures; integrate GM; clear communication plan.</p> <p>Management Plan: Labour Management Plan (LMP); Human Resources Policy and Code of Conduct (including GBV/SEA provisions); Occupational Health and Safety Management Plan (OHSP); Worker Grievance Mechanism Procedure; Worker Accommodation Plan (if applicable); Supply Chain Management Plan; Security Management Plan (if security personnel are deployed); Emergency Preparedness and Response Plan; Traffic Management Plan; Contractor Management and Oversight Procedures (PIU ESMS); GBV/SEA Action Plan; and Retrenchment Plan (if collective dismissals apply)</p>				
Atmospheric air including climate change						
Dust emissions associated with road traffic	Low	<p>Mitigation: Air quality along the road section to be monitored at locations near the closest residential buildings for an initial period during operation; Establishing speed limits in residential areas;</p> <p>Management Plan: Pollution Prevention and Control Plan; Air Quality Monitoring Plan; Traffic Management Plan (operation-phase speed limits); Community Health and Safety Management Plan</p>	NRA (environmental specialist)	EPI	Operation cost	Quarterly (as needed)
Air emissions generated during operational traffic flow	Moderate	<p>Mitigation: Installation of PM10, PM2.5, NO₂, CO monitoring stations in sensitive areas and periodic checks to assess compliance with national/EU standards. National promotion of low-emission vehicles; Establishing speed limits in residential areas.</p> <p>Management Plan: Air Quality Monitoring Plan; Pollution Prevention and Control Plan; Traffic Management Plan (operation-phase speed limits); Community Health and Safety Management Plan</p>	NRA/EPI (environment specialist)	EPI	Operation cost	Quarterly (as needed)

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Soil and subsoil						
Soil erosion caused by rainwater runoff	Low	Mitigation: Regular inspection and maintenance of drainage systems (ditches, culverts, channels) to ensure proper water flow; Construction of additional drainage structures in erosion-prone areas, if necessary; Stabilization of slopes and embankments using grass cover, vegetation, or geotextiles; Minimization of exposed soil areas by maintaining protective vegetation along embankments and road shoulders; Monitoring erosion-prone sections after heavy rainfall events and implementing corrective actions promptly. Management Plan: Soil Management and Erosion Control Plan; Site Reinstatement Plan; Pollution Prevention and Control Plan; Community Health and Safety Management Plan (for erosion risks near settlements); Environmental Monitoring Plan (for erosion inspections and post-rainfall checks)	NRA (environment specialist)	EPI	Operation cost	Quarterly (as needed)
Accidental losses of fuel and lubricants	Low	Mitigation: Regular inspection and maintenance of vehicles and equipment to prevent leaks; Immediate containment and clean-up of any accidental spills; Provision of spill kits at all maintenance and refuelling sites; Use of designated and impermeable areas for refuelling and minor maintenance; Training of staff in spill prevention and emergency response procedures; Monitoring of surrounding soil and drainage areas for contamination signs. Management Plan: Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Waste Management Plan (for contaminated materials); Emergency Preparedness and Response Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan (where spills may affect public areas)	NRA (environment specialist)	EPI	Operation cost	Quarterly (as needed)
Surface and groundwater						
Oil and fuel leaks from transport and maintenance equipment	Low	Mitigation: Good maintenance of drainage infrastructure; Emergency prevention and pollution control plan. Management Plan: Pollution Prevention and Control Plan; Chemicals and Hazardous Substances Management Plan; Emergency Preparedness and Response Plan; Soil Management and Erosion Control Plan; Waste Management Plan (for contaminated materials).	NRA (environment specialist)	EPI	Operation cost	Quarterly (as needed)

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Noise and vibration						
Noise levels from automobile transport is expected to be reduced due to improved road surface but increase is also possible due to traffic levels growth.	Moderate	Mitigation: Limit vehicle speed in sensitive areas; Noise levels must be measured at least at representative receivers (residential areas) on the side of the road every six months for a period of 2 years after construction; Performance evaluation of installed sound panels. Management Plan: Noise Management Plan (operation-phase); Traffic Management Plan (speed limits); Community Health and Safety Management Plan; Air & Noise Monitoring Plan (operation-phase monitoring of receptors); Site Reinstatement Plan (where noise barriers require maintenance or adjustment).	NRA (environment specialist)	EPI	Operation cost	Quarterly (as needed)
Biodiversity						
Emerald Sites and Natural protected area growth.	Low	Mitigation: Application of all monitoring measures for the habitats of flora species according to National legislation, EU Directives, International Treated and EBRD's PR6 requirements Maintenance actions of the road sector during the period of operation, in particular the cleaning of petroleum products and the collection of improperly stored household waste, especially around Emerald Sites, NPAs, forest ecosystems. Management Plan: Pollution Prevention and Control Plan; Waste Management Plan; Site Reinstatement and Vegetation Management Plan; Community Health and Safety Management Plan; Environmental Monitoring Plan (operation-phase habitat and species monitoring)	NRA ME: Environmental Agency, "Moldsilva" Agency, Scientific institutions of MSU	ME: EPI	Cost set by the national budget for monitoring activities	According to the periods established by the legal framework for these purposes
Flora and forest ecosystems	Low	Mitigation: Permanent monitoring of flora in sensitive areas (Emerald Sites, NPAs, forest ecosystems) according to national and international legal requirements (EU Directives, International Conventions; The planting of additional trees along the road will be executed according to the applicable technical regulations and with care according to the technical norms, by the NRA; Restricting the consumption of salts in road maintenance in winter. Use of calcium chloride as anti-slip salts, which have a less harmful impact on vegetation; Management Plan: Site Reinstatement and Vegetation Management Plan; Pollution Prevention and Control Plan; Soil Management and Erosion Control Plan; Community Health and Safety Management Plan; Environmental Monitoring Plan (operation-phase flora and habitat monitoring)	NRA ME: Environmental Agency, "Moldsilva" Agency, Scientific institutions of MSU	ME: EPI	Cost set by the national budget for monitoring actions (ME) and for road maintenance activities (NRA)	According to the periods established by the legal framework for these purposes

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
Fauna and their habitats.	Low	<p>Mitigation: Permanent monitoring of fauna habitats in sensitive areas (Emerald Sites, NPAs, forest ecosystems) according to national and international legal requirements (EU Directives, International Conventions;</p> <p>Installation of indicators (especially in forest areas of Lot 1), indicating dangerous areas for animals to cross the Road;</p> <p>Establishing of waste management, without the use of intermediate landfills, in biodiversity-sensitive areas for animals;</p> <p>Management Plan: Pollution Prevention and Control Plan; Waste Management Plan; Community Health and Safety Management Plan; Environmental Monitoring Plan (operation-phase wildlife and habitat monitoring); Site Reinstatement and Vegetation Management Plan.</p>	NRA ME: Environmental Agency, "Moldsilva" Agency, Scientific institutions of MSU	ME: EPI	Cost set by the national budget for monitoring actions (ME) and for road maintenance activities (NRA)	According to the periods established by the legal framework for these purposes
Socio-economic						
During operation of the Project, the management of socio-economic impacts shall be integrated into an Operations ESMS, using the Construction ESMS as a basis	Moderate	<p>Mitigation: Integrate the management of socio-economic impacts into the Operations ESMS, building on the Construction ESMS framework.</p> <p>Implement the Contractor's Operational ESMP (OESMP), including OHS procedures and emergency response, to ensure safe conditions for maintenance workers during planned and emergency works.</p> <p>Apply good workforce management practices, enforce the Worker Code of Conduct, and ensure access to health surveillance and occupational healthcare.</p> <p>Maintain and operate a confidential and accessible Worker Grievance Mechanism.</p> <p>Implement the Human Resources Management Plan to guide recruitment, working conditions, training, and worker-management relations.</p> <p>Ensure continuous stakeholder communication through the Stakeholder Engagement Plan and operate a Community Grievance Mechanism; disclose updates in an Annual E&S Performance Report.</p> <p>Apply the Traffic and Transport Management Plan to manage temporary traffic deviations or closures required for routine or emergency road maintenance.</p>	Maintenance Contractor	NRA/ Supervising Engineer/Labour State Inspectorate	Maintenance Contractor costs	Operation phase

Environmental and social impact(s)	Significance of Impact ²	Mitigation measures/ Management Plan	Responsibility		Costs included in	Timeframes
			Execution	Monitoring		
		Management Plan: Operational ESMP (OESMP); Occupational Health and Safety Management Plan; Emergency Response Plan; Human Resources Management Plan; Worker Code of Conduct; Worker Grievance Mechanism Procedure; Stakeholder Engagement Plan; Community Grievance Mechanism; Traffic and Transport Management Plan; Operations ESMS.				

Table 12-1: Environmental and Social Management Plan

ANNEX 1 Typical Outline / Structure of a Management Plan

1. Objective and Scope

2. Legal Requirements

- Applicable IFI Environmental and Social requirements / standards and procedures
- Regulatory framework of Moldova, standards and guidelines applicable

3. Roles and Responsibilities

- Responsible parties
- Organisation / key personnel, organisational chart
- Roles and responsibilities for implementation of the MP, for each key personnel
- Reporting lines and schedule
- Training programme

4. Key Receptors

- Sensitive receptors identified throughout Project planning (design and ESIA)

5. Key Sources of Risks

- Source of risks identified throughout Project planning (design and ESIA)

6. Management Actions / Mitigation Measures

- Detailed site-specific measures that will be implemented to mitigate the impacts / risks

7. Monitoring

- Inspection schedule and checklist
- Corrective action plan

Appendices, where necessary

Note: The above is a generic Management Plan structure. Each MP will include specific aspects for the topic considered.