**Republic of Moldova**

**Ministry of Infrastructure and Regional Development**

**Ministry of Finance**

**State Road Administration**

**Custom Service of the Republic of Moldova**

# Preliminary Environmental and Social Impact Assessment (ESIA)

**For**
**Component B: Facilitating trade and expanding Solidarity Lanes (Border Crossing Points)**

**Moldova Rural Connectivity Project (P180153)**

**December 2023**

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## ACRONYMS AND ABBREVIATIONS

| | | |
|---|---|---|
| BCP | - | Border cross point |
| CERC | - | Contingent Emergency Response Component. |
| ECA | - | Europe and Central Asia |
| ESF | - | Environmental and Social Framework |
| ESHS | - | Environmental, Social, Health and Safety |
| ESMP | - | Environmental and Social Management Plan |
| ESIA | - | Environmental and Social Impact Assessment |
| ESS | - | Environmental and Social Standard |
| EU | - | European Union |
| FS | - | Feasibility Study |
| GBV | - | Gender Based Violence |
| GN | - | Guidance Note to ESS2 |
| GRM | - | Grievance Redress Mechanism |
| IBRD | - | International Bank for Reconstruction and Development |
| LMP | - | Labor Management Procedure |
| MCS | - | Moldovan Custom Service |
| M&E | - | Monitoring & Evaluation |
| NGO | - | Non Governmental organization |
| NMT | - | Non-Motorized Transport |
| OHS | - | Occupational Health and Safety |
| OIP | - | Other interested party |
| PAP | - | Project affected Person |
| PDO | - | Project Development Objective |
| PIU | - | Project Implementation Unit |
| PPE | - | Personal protective equipment |
| RAP | - | Resettlement Action Plan |
| RPF | - | Resettlement Policy Framework |
| SEP | - | Stakeholder Engagement Plan |
| SRA | - | State Road Administration |
| WB | - | World Bank |

## EXECUTIVE SUMMARY

Moldova Rural Connectivity Project (The Project) is a common effort of the Government of Moldova through the SRA and MCS in order to facilitate the road and custom infrastructures development and connectivity in region with the financial support of the World Bank and EU grant facility – Connecting Europe Facility (CEF). This document is covering only the Component B of the Project.

The Project Development Objective is to improve road connectivity of selected local communities to the national road network; facilitate road transit through selected border crossings with the EU, and provide effective response in case of an eligible emergency.

This document is developed at the scoping stage, that's why it is called Preliminary ESIA and will represent a good basis to develop further a full ESIA for Component B during the project implementation.

The project is designed as an Investment Project Financing (IPF) for the WB financing and, as such, needs to comply with the WB's Environmental and Social Standards (ESS).

The actual ESIA was focused on main environmental and social aspects such as: physical environment (geology, geomorphology, soil, water, air, noise and vibration etc.), climate change, landscape and visual environment, biological environment including protected areas, and socio-economic environment.

The E&S Assessment is carried out only for the two road sections in Ungheni & Leuseni and three Border Crossing Points (BCPs) in Leuseni, Ungheni (Zagarancea) and Giurgiulesti.

It is understood that the Project may be subject to local environmental impact assessment (EIA) with associated public consultation and public disclosure in accordance with local/national legal and permitting requirements.

The preliminary ESIA is to be carried out in accordance with:

1. Applicable local, national and regional requirements, including those related with environmental and social impact assessments;
2. The WB ESF and ESS 1, and relevant European Union (EU) requirements (including, but not limited to, the EU EIA Directive); and,
3. Relevant international conventions and protocols relating to environmental and social issues, as transposed into national legislation.

The objective of the Assessment is to identify and assess the potentially significant existing and future adverse environmental and social impacts associated with the Client's current operations and the proposed Project, assess compliance with applicable laws and the WB ESS, determine the measures needed to prevent or minimise and mitigate the adverse impacts, and identify potential environmental and social opportunities, including those that would improve the environmental and social sustainability of the Project and/or the associated current operations.

*Ungheni BCP:* The impact of the project is local in order of area that is situated. All the activities will be on the state or private land or linked with Zagarancea mayoralty. The estimation of impacted land will be maximum 10 ha = 0,1 km2 and maximum area of influence including noise and dust maximum 1 km2. Agricultural lands and business may be affected.

*Leuseni BCP:* The impact of the project is local in the area that is situated. All the activities will be on the state or private land or linked with Leuseni mayoralty. The estimation of impacted land will be maximum 10 ha = 0,1 km2 and maximum area of influence including noise and dust maximum 1 km2. Agricultural lands and business may be affected.

*Giurgiulesti platform and BCP:* The impact of the project is local in the area that is situated. All the activities will be on the exiting lands of CS. No additional land acquisition is expected. The estimation of impacted land will be maximum 5 ha = 0,01 km2 and maximum area of influence including noise and dust maximum 1 km2 – most affected Giurgiulesti village. Agricultural lands and business will not be affected.

International cross border impact is not expected during the Project implementation.

# 1. INTRODUCTION AND BACKGROUND

***Moldova's road network is strategically vital and is a critical component of the Solidarity Lanes intended to support Ukraine during and after the conflict.*** The national road network in Moldova is 2,598 km in length. The secondary and local road network is over 7,000 km. About 80% of the transport of goods from the Republic of Moldova are transported by road. Relative to its territorial size, Moldova has a comparatively dense network of transport infrastructure. However, the Soviet-era stock of assets has suffered from underinvestment in renewal, modernization, and maintenance since transition. In 2020, 46.8% of Moldova's road network was assessed to be in poor condition. Investment gaps are clear when comparing Moldova to international peers. According to the 2019 Global Competitiveness Report, the quality of Moldova's road infrastructure is the worst in the entire ECA region and one of worst in the world and was ranked 126 out of 140 countries considered. Russia's invasion of Ukraine has significantly impacted Moldova's transport sector, due to the high number of refugees fleeing the country, the re-routing of freight transport as a result of the closure/destruction of specific routes on the territory of Ukraine and disruptions to Black Sea ports. Additionally, the Danube Solidarity Lane is currently used as an option for facilitating the export of Ukrainian grain aside from fully restoring Black Sea access, thus Moldova's transport network is likely to remain strategic. Romanian and Republic of Moldova borders continue to experience significant pressure. For example, land routes to transport grain out of Ukraine operate through border crossing points in the two countries, resulting in lorry queues of up to 20 kilometers. Despite severe capacity constraints, Moldova's road Border Crossing Points have managed to increase throughput capacity during 2022 but will require additional investment to continue expanding support to Solidarity Lanes.

The proposed Project's design consists of four components: (i) Component A will finance physical works needed to link local communities with public services and economic opportunities, building on the previous support to the Government's upgrade of a prioritized network of local and regional roads ; (ii) Component B will facilitate trade and expand Solidarity Lanes, by increasing capacities and modernizing the Ungheni, Leuseni and Giurgiulesti border crossing points (BCPs) and the access roads connecting them; (iii) Component C will finance interventions aimed at enhancing delivery capacity and supporting essential project management functions; and (iv) Component D will provide a standby Contingent Emergency Response capability should the need arise.

# 2. PROJECT DESCRIPTION

The Project is a common effort of SRA and BCP in order to facilitate the infrastructures development and connectivity in region. This document is covering just Component B of the Project.

Specific details for each component are provided below.

The proposed Project's design consists of four components: (i) Component A will finance physical works needed to link local communities with public services and economic opportunities, building on the previous support to the Government's upgrade of a prioritized network of local and regional roads ; (ii) Component B will facilitate trade and expand Solidarity Lanes, by increasing capacities and modernizing the Ungheni, Leuseni and Giurgiulesti border crossing points (BCPs) and the access roads connecting them; (iii) Component C will finance interventions aimed at enhancing delivery capacity and supporting essential project management functions; and (iv) Component D will provide a standby Contingent Emergency Response capability should the need arise. Specific details for each component are provided below.

***Component A: Linking local communities with economic opportunities***

A.1: Upgrading local road links (IBRD US$ 69.49 million; US$ IDA 5.98 million): This subcomponent will finance the rehabilitation and upgrading of approximately 100 km of three priority local roads, to improve connectivity to markets, schools, health and other social and economic centers, and enhance climate resilience. An important part of the subcomponent is road safety works in the proximity of schools

and on road sections within communities. All roads financed by the project will be maintained under maintenance contracts to ensure that investments made are sustained over time.

A.2: Community inclusion & accessibility: This subcomponent will finance: (i) interventions complementary to the road works in (A.1) including those requested by communities along the roads; and (ii) Non-Motorized Transport (NMT) infrastructure along and adjacent to Project Roads[1].

A.3: Safer roads for Moldova: This subcomponent will provide funding for two main purposes: (i) Remediation of road safety "black spots" at up to 6 priority locations. The aim is to pilot remediation of known risks of road safety “blackspots” as per best international practices tailored to the specific conditions. (ii) Road safety educational and informational campaigns. These campaigns will aim to raise awareness and educate the public about road safety measures and practices. The campaigns will be designed to target specific audiences and address key road safety issues relevant to the Moldovan context.

***Component B: Facilitating trade and expanding Solidarity Lanes***

The aim of this subcomponent is to enhance capacity and improve the functionality of the Border Crossing Points (BCPs) between Republic of Moldova and Romania. The works include a range of interventions at both the infrastructure level of the BCPs, coupled with equipment acquisition needed to enhance their functionality. These interventions are designed to increase the capacity, interoperability, and efficiency of the border crossing services in accordance with the existing regulations. Investments made under this Component will be matched by an EU grant facility - Connecting Europe Facility (CEF).

Investments on the Moldova side of the border will be complemented by simultaneous modernization investments on the Romania side. These investments on the Romania side will be implemented by the Romanian Government and co-financed by the CEF. Preparation/implementation on the Romanian side has advanced. A High-level working group and technical group between Moldova and Romanian Government have been set-up to coordinate the respective investments. The High-level working group consists of senior officials from both countries who are responsible for overseeing and guiding the overall progress of the modernization project. The technical group, on the other hand, comprises experts and specialists who work together to address technical aspects and ensure the smooth implementation of the investments.

B.1: Road access and modernization of Leuseni/Albita BCP: This subcomponent will finance the upgrade of the BCP at Leuseni and expansion of the access road to the BCP.

B.1.1 Modernization and upgrade of BCP at Leuseni: The BCP upgrade will be carried out in two stages to ensure adequate capacity, optimized traffic flow and custom processing are maintained: Stage 1 - full refurbishment of the existing freight entry facility and the passenger car exit facility that require urgent improvement; Stage 2 – construction of a new freight exit facility. The procurement of fixed and mobile customs equipment is included in this sub-component. The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services.

B.1.2 Access Road to Leuseni BCP: The works involve upgrading the 1 km access road to the Leuseni BCP. The current 2-lane road will be expanded to 4 lanes, aligning it with the standards of a similar access road on the Romanian side. This upgrade is also in line with Romania's plan to replace the existing bridge over the Prut River at the Moldova/Romania border with a 4-lane standard bridge. The access road connects the BCP to the national road M1 (Leușeni – Chisinau – Dubasari - MD/UA boarder). The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services.

B.2. Solidarity Lane customs facilitation & BCP upgrades (Giurgiulesti): This subcomponent will encompass the following activities: (i) traffic organization and implementation of an electronic queuing system at the Moldovan side of Giurgiulesti BCP. This will help streamline and improve the efficiency of border crossing procedures, reducing waiting times and congestion. Traffic congestion often leads to idling

[1] The approach to consider community requested works will be linked to the Project’s citizen engagement activities and Stakeholder Engagement Plan. Examples of community requested works could include: Additional sidewalks and others as will be indicated in the Project Operation Manual

vehicles, which consume fuel inefficiently and produce more emissions. By reducing congestion and allowing smoother traffic flow, vehicles can operate more efficiently, consuming less fuel and emitting fewer greenhouse gases. (ii) Expansion of the capacity of the existing parking/waiting facility in Giurgiulesti area, along with the provision of basic services such as toilets and water supply points for truckers. This will enhance the facilities available to truck drivers, ensuring their comfort and convenience during waiting periods. (iii) Procurement and installation of scanning equipment and software at the BCP facility. This will enable efficient and effective scanning of goods and vehicles passing through the border, enhancing security measures and facilitating smoother border control processes. (iv)Supervision services are also included under this subcomponent, to ensure proper oversight and monitoring of the implementation of the activities.

B.3. Construction and Road access to BCPs (Ungheni): A new road BCP will be developed at Ungheni with modern customs processing, weighing facilities and truck terminal. The BCP will be connected through a 0.5 km access to the national road network, for which feasibility study is already available[2]. The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services**.**

***Component C: Building sustainability, delivery capacity and project management support (IBRD US$ 4.5 million)***

C.1. Project audit and supervision (US$2.00 million): This subcomponent will finance: (i) annual project audits; and (ii) Monitoring consultants for the OPBRC contracts as well as Supervision Engineers for overseeing all civil works under Component A.1.

C.2: Output and Performance Based Roads Contracting (OPBRC) system; and Road Asset Management System (RAMS) (US$1.00 million): This subcomponent will finance consultancy services to support the development and implementation of OPBRC on a selected road under Component A.1. Specific activities to be financed include: (i) An assessment of political, legal, regulatory, and institutional constraints to adopting OPBRC in the road sector. This assessment will help identify any barriers or challenges that need to be addressed. Based on the assessment, a strategy and implementation plan will be developed to guide the adoption of OPBRC. (ii) Providing technical assistance to develop appropriate legal instruments, such as a draft bill and regulations, that are necessary for the implementation of OPBRC. It will also involve preparing or adopting standard OPBRC bidding documents, training, and institutional capacity building activities to ensure that relevant stakeholders are equipped with the necessary knowledge and skills to implement OPBRC effectively. Hands-on support will also be provided to the Government of Moldova (GoM) during the launch of OPBRC pilot contracts, which may be financed under the Project or other sources. The subcomponent also supports the full operationalization of the Road Asset Management System (RAMS), which includes technical assistance: (i) to complete the missing functionalities/modules in both the federal and regional versions of the current RAMS, (ii) to rolling out the RAMS to all rayons, (iii) training and capacity building of SRA and rayons in the full operationalization of the RAMS. The RAMS will include climate resilience and road safety parameters and shall be interlinked with other state digital systems such as the one for meteorological data. This will enhance climate resilience through evidence-based understanding of vulnerabilities of the road network which leads to risk-based climate-informed road maintenance planning and prioritization.

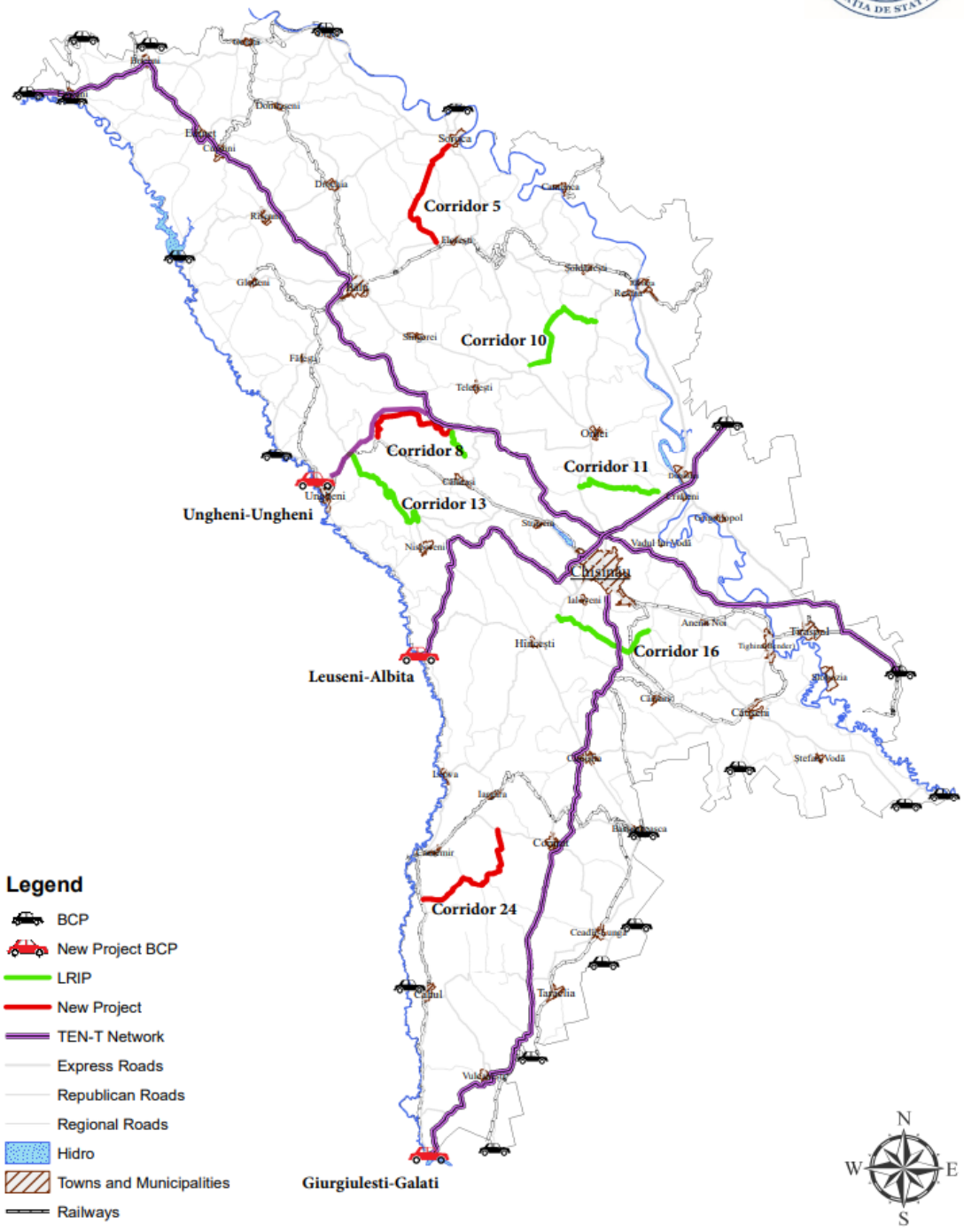
C.3. Design and implement a female internship program (US$0.20 million). This Sub-component will help promote women's employment in the transport sector, where they are underrepresented. The project will design and implement a female internship program will finance activities related to (i) setting up a collaboration (Memorandum of Understanding) between the line ministry and the Technical University of Moldova, (ii) designing the internship program (orientation, interns' tasks, expected outcomes, and end of the program evaluation), and (iii) providing onboarding training to 25 female interns with opportunity of full-time employment upon graduation.

[2] Simultaneously, Romania will construct a bridge across the Prut River with a new BCP and 0.5 km access road of the same standard as the Moldovan side access road to the BCP.

C.4. Incremental operating costs, project management, staff development (US$1.30 million): This subcomponent will include: (i) consultancy support to each PIU and (ii) incremental operating costs for each PIU; and (iii) consultancy support for enabling SRA's transition to a corporatized entity that operates under commercial principles (iv) the cost of female student's internship program in the transport sector.

***Component D: Contingent emergency response.***

Given the inherent uncertainty created by the Russia's invasion of Ukraine, this zero-dollar component is designed to provide swift response in the event of an emerging crisis or emergency. The Government of Moldova would be able to request the World Bank to reallocate Project funds to address an eligible crisis or emergency needs that may materialize. The activities financed by the CERC will be demand- and event-driven and will be detailed in a GoM Action Plan of Activities, which together with an official declaration of a specific emergency by the GOM represent the two obligatory conditions for triggering the component. The definition of an eligible emergency and a positive list of activities will be included in the project's legal documents, and the mechanics of the decision-making process and implementation of the will be reflected in the CERC Operational Manual, part of the overall POM.




***Beneficiaries:*** Component B of the project ("Solidarity Lanes") is expected to directly benefit between 350,000 and 400,000 heavy goods shipments per year. Benefits will primarily accrue to shippers in Moldova, Ukraine, and Romania whose goods are transiting into, out of, or through Moldova's road BCPs. Component A of the project ("linking local communities") is expected to benefit approximately 41,938 people, 133 businesses, 27 health facilities, and 84 schools located along rural road corridors selected for rehabilitation and upgrading. A household survey instrument and forthcoming data collection initiative (supported by the IBRD-financed LRIP) is expected to further define the characteristics of beneficiary

households under the project. This instrument includes gender disaggregated data collection for travel behaviors and employment related variables.

**ESIA purpose, approach and methodology**

This document is developed at the scoping stage, that's why it is called Preliminary ESIA and will represent a good basis to develop further a full ESIA for Component B during in the future, when implementing the full ESIA project for these components the project implementation.

The actual ESIA was focused on main environmental and social aspects such as: physical environment (geology, geomorphology, soil, water, air, noise and vibration etc.), climate change, landscape and visual environment, biological environment including protected areas, and socio-economic environment.

The E&S Assessment is carried out only for the two road sections in Unghni & Leuseni and three BCPs in Leuseni, Ungheni (Zagarancea) and Giurgiulesti.

It is understood that the Project may be subject to local environmental impact assessment (EIA) with associated public consultation and public disclosure in accordance with local/national legal and permitting requirements.

The E&S Assessment (ESIA&ESMP) is to be carried out in accordance with:

4. Applicable local, national and regional requirements, including those related with environmental and social impact assessments;
5. The WB ESF and ESS 1, and relevant European Union (EU) requirements (including, but not limited to, the EU EIA Directive); and,
6. Relevant international conventions and protocols relating to environmental and social issues, as transposed into national legislation.

The objective of the Assessment is to identify and assess the potentially significant existing and future adverse environmental and social impacts associated with the Client's current operations and the proposed Project, assess compliance with applicable laws and the WB ESS, determine the measures needed to prevent or minimise and mitigate the adverse impacts, and identify potential environmental and social opportunities, including those that would improve the environmental and social sustainability of the Project and/or the associated current operations.
The E&S assessment process is commensurate with, and proportional to, the potential impacts and issues of the Project and the Client's existing operations. The E&S assessment covers, in an integrated way, all relevant direct and indirect environmental and social impacts and issues of the Client's operations, the Project and the relevant stages of the project cycle (e.g. pre-construction, construction, operation, and decommissioning or closure and reinstatement). Before Feasibility Study (FS) and Detailed Design (DD) it is difficult to identify the entire range of impact but this will be a good orientation for full ESIA during the design stage for connection road and BCP related facilities.

The method used for identification of potential significant impacts of the project during the scoping stage were:

**Site visits:**

The visits of each location were twice to document the actual situation and assess the possible impacts to the environment and social risk. During these visits were met the SRA and BCP employees. Also, separate discussions with LPA in the area of impact held.

A meeting with Environmental Agency was organized in SRA in order to clarify the EIA Law requirements related to road projects especially when the preliminary data is limited.

A specific meeting with SRA was organized for clarification of land acquisitions issues on Ungheni BCP.

A dedicated meeting on SEP and public consultation process also was organized.

**Reviewing of existing reports and information:**

A number of information received from Project partners and other authorities were reviewed:

- Feasibility Study (FS) and design for access road in Ungheni to bridge
- Preliminary report on land acquisition for access road to Ungheni BCP
- Preliminary data and maps related with associated facilities (bridge over Prut and BCP) in Ungheni, including ESIA developed by Romania and received the Environmental Permit.
- Set of data and preliminary environmental assessment for bridge rehabilitated in Leuseni by SRA
- Detailed Design and concept for extension of parking area near Giurgiulesti
- FS and DD for R34 road in Giurgiulesti, including bypass of Giurgiulesti concept (associated facilities)
- List of accepted investments by EU and WB for BCP upgrade/construction and equipment.
- The Project Concept Note (PCN)
- Etc.

**The screening criteria for risk assessment used at this stage of project's Component B pre-feasibility stage. Impact Assessment – Short Methodology Note**

The method proposed for the present preliminary Environmental and Social Impact Assessment determines the **significance of an impact** on an environmental / social component (the impact receptor) according to three (3) criteria:

1. intensity (determined according to the value/vulnerability of the impact receptor and the magnitude of the effect),
2. duration (the temporal aspect); and
3. extent (spatial aspect).

The significance of an impact is decided by evaluating its intensity, duration, extent, and the likelihood of an impact occurring within the certain context (geographic scope and scale).

The decision about the significance of impact is proposed to be taken by using the following approach:

**Significance of impact** = Intensity of impact + Duration (temporal aspect) + Extent (spatial aspect),

*where:*

**Intensity of impact** = Magnitude of effect + Receptor value,

*Where:*

***Magnitude of effect***: the magnitude of effect assesses the extent to which the structural and functional characteristics of the component are adversely affected

- *Very High*: where the effect results in the loss or modification of the whole or the main characteristics of the receptor, to the extent that it risks losing its identity: for example, destruction of fertile layer of soil, irremediably eroded (washed away) by devastatingly powerful runoff;
- *Moderate:* when the effect results in the loss or modification of certain characteristics of the affected component, thus reducing its qualities though without compromising its identity: for example, wind erosion of soil;
- *Low:* when the effect does not significantly alter the characteristics of the affected element, so it retains its identity and its qualities are not excessively degraded: for example, dust being deposited on plants affecting its photosynthetic function until the first rain which will re-establish totally this function.

***Receptor value***: environmental/social value expresses the relative importance of an impact receptor. It is determined by considering the environmental and/or social value of the receptor as established by the regulations or the judgement of the assessor or other specialists.

***Duration***: This indicates the temporal aspect of the impact. It assesses, in relative terms, how long the impact will interact with the receiving environment. The terms "long-", "medium-" and "short-term" are used to describe this period of time.

***Extent*** - Extent refers to the spatial aspect of the impact. For practical reasons, as with duration (the temporal aspect), this dimension needs to be categorized. Three levels of extent are thus defined: Regional, Local and Limited.

Table 1 presents the semi-quantitative method of assessment for ***impact significance***.

*Table 1: Determining the significance of impact (for certain, probable and possible impacts)*

| Duration | Extent | Intensity | | |
|---|---|---|---|---|
| | | High | Moderate | Low |
| Long-term | Regional | **H** | **H** | **M** |
| Long-term | Local | **H** | **M** | **M** |
| 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** |

Yellow = Low (L), Orange = Moderate (M), Red = High (H)

The intensity, duration and extent will determine the significance of the impact. The latter is then categorized in three classes: high, moderate or low, according to the grid set out in Table 1 above.

- The full site-specific ESIA/ESMP will be prepared at the detailed design stage for each investment during the implementation stage.

- The ESIA is considered to be a "living" document that will be updated at the detailed design stage by taking into consideration specific data from DD process, social aspects, resettlement risks, OHS risks etc. and the Site Specific ESIA/ESMP developed at the DD stage shall be used for construction, operation, and decommissioning of the project as needed to ensure compliance with the applicable standards by the Contractor and the Beneficiary (Operator).

In the table no. 2 can be seen the significant increasing of traffic in 2022 thru proposed BCP to be extended / constructed. These are most used BCP for connection to Romania/EU and also transit for Ukraine. Construction of a new BCP in Ungheni will decrease the traffic in Sculeni BCP, partially from Leuseni. Leuseni BCP is the most crossed terrestrial point in Moldova and definitely need an extension and improving the safety and sanitation facilities.

The Giurgiulesti actual platform (parking truck area) is impossible to cover all the needs of trucks in that area as hundreds of cars is still waiting on the road shoulders every day.

*Table 2-2: Traffic on the Project BCP for the last 5 years*[3]

| Name of customs post | Transport units | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|

[3] Custom Service provided information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Leuseni** | Cars | 613805 | 708802 | 754471 | 285568 | 524134 | 762501 |
| | Trucks | 211227 | 212425 | 217547 | 205061 | 213362 | 296647 |
| | Buses | 37502 | 41558 | 42823 | 20011 | 29896 | 45596 |
| | Passenger | 2968390 | 3434849 | 3572820 | 1371698 | 2288811 | 3746416 |
| **Sculeni** | Cars | 573592 | 586284 | 623926 | 189559 | 393181 | 646261 |
| | Trucks | 107471 | 89724 | 79490 | 65950 | 86500 | 104420 |
| | Buses | 21778 | 22039 | 24376 | 13043 | 15969 | 26860 |
| | Passenger | 2051635 | 2029044 | 2117636 | 682073 | 1199886 | 2222054 |
| **Giurgiulesti - Galati** | Cars | 452334 | 517354 | 537938 | 210645 | 265146 | 382307 |
| | Trucks | 64561 | 68334 | 73239 | 83500 | 63731 | 99272 |
| | Buses | 4119 | 4937 | 5743 | 4233 | 2026 | 4041 |
| | Passenger | 1353602 | 1518294 | 1641688 | 713767 | 699237 | 1094199 |
| **Giurgiulesti - Reni** | Cars | 68430 | 88381 | 108821 | 32291 | 36256 | 57511 |
| | Trucks | 59283 | 73752 | 79676 | 57883 | 66652 | 78353 |
| | Buses | 1283 | 2284 | 3519 | 1099 | 1604 | 3409 |
| | Passenger | 270894 | 388289 | 517249 | 176309 | 207421 | 308002 |

## 3.1. New Ungheni BCP

The WB is supported in the new Ungheni BCP procurement and installation of equipment and especially the X-ray scanning systems for non-destructive customs control of cargo and Video Control system automated vehicle plate readers. This is a co-finance to an EU project.

The Ungheni-Ungheni customs post is to be designed to correspond to the prospective road traffic.
Its approximate length is to be about 500 m and the width should correspond to at least seven lanes for each direction of traffic. It will have a parking area and scales for freight vehicles, car parks, administrative building. It is impossible to know at the moment how many PAPs will be as no DD or FS done, but an estimation of 17 PAPs are for access road. The probability of up to 25 PAPs may be possible depending of the size of land necessary and additional facilities needed. Partially, public lands will be also affected.

Access to / from the country will be made on seven lanes for each direction of traffic (two lanes for bus/coach/minibus with a width of 5 m each, three lanes for cars with a width of 3.50 m each and two lanes for trucks with a width of 5 m each).

***The direction of Moldova - Romania***

Before the border crossing checkpoint, parking lots are to be designed as follows:

- Parking for administrative buildings (32.50 m x 15.50 m) – 23 spaces for cars (size 2.50 x 5.00m)
- Car and truck parking:
- 10 seats for large vehicles (size 4.00 m x 16.50m);
- 13 seats for cars (size 3.00 m x 5.50 m)

Before the border crossing checkpoint, a truck scale with dimensions (27.00 m x 4.50 m) will be installed. After passing through the checkpoint, there will be a closed space for detailed customs control of cars with 3 parking spaces (with dimensions of 3.00 m x 5.00 m) and a space for unloading goods and detailed customs control of trucks with 4 parking spaces (with dimensions of 4.00 m x 16.50 m, with the possibility of storage).

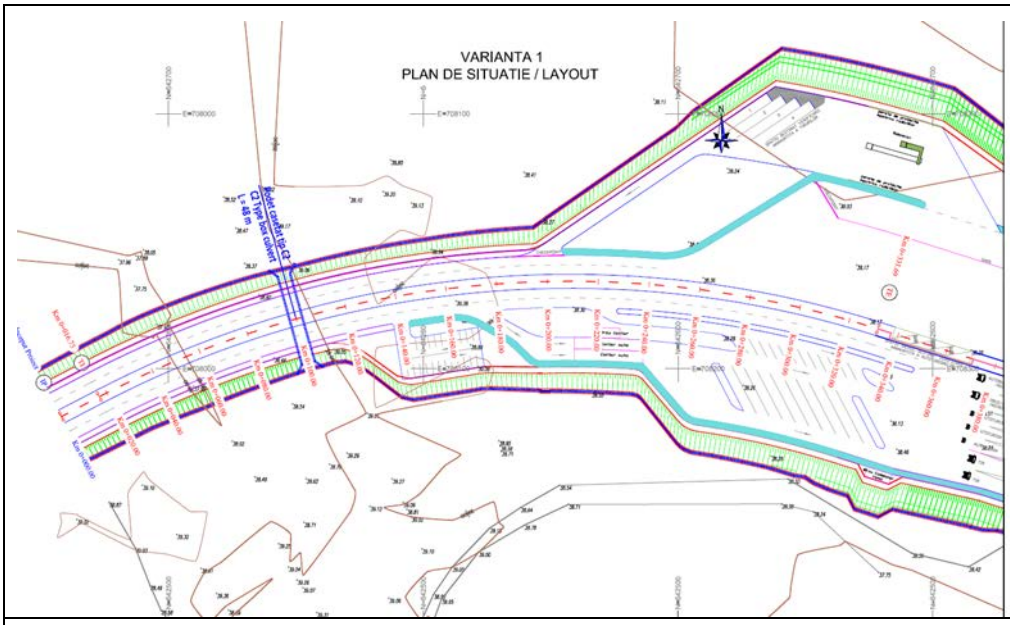
The directions of travel are separated by a New Jersey parapet and a mesh fence, and after passing the customs post, a turning space of 20.00 m in length is provided.
For pedestrian transit through the customs post, a pedestrian pavement with a width of 2.50 m is designed.

***The direction of Romania – Moldova***

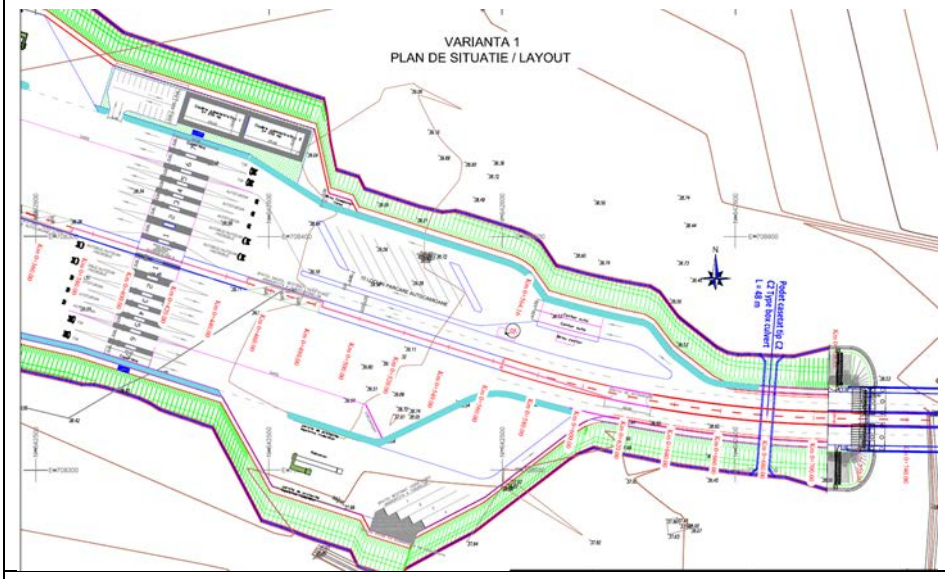
Before the border crossing checkpoint, parking lots are to be designed as follows:

- truck parking – 10 places for large vehicles (size 4.00 m x 16.50 m)
- Parking for the administrative building (32.50 m x 15.50 m) – 20 spaces for cars (size 2.50 m x 5.00 m)

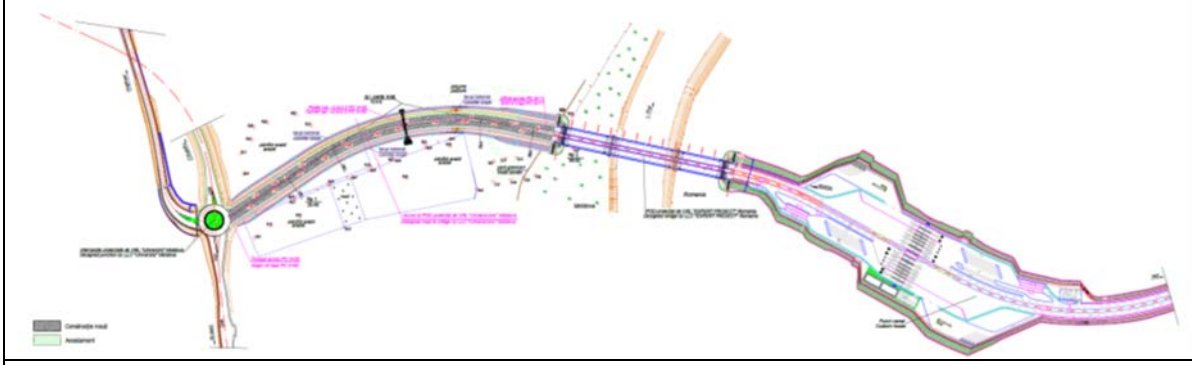
Before the border crossing checkpoint, a truck scale with dimensions 27.00 m x 4.50 m will be installed.
After passing through the control point, a closed space is to be designed, intended for detailed customs control of cars with 3 parking spaces (with dimensions of 3.00 m x 5.00 m) and a space for unloading goods and detailed customs control of trucks with 4 parking spaces (with dimensions of 4.00 m x 16.50 m), with storage capability) and space for scanning trucks (X-ray scanner).
The directions of travel are separated by a concrete parapet type H2 and a mesh fence, and after crossing the border crossing point, a turning space of 20.00 m is provided.
For pedestrian transit through the border customs post, a pedestrian pavement with a width of 2.50 m is designed.



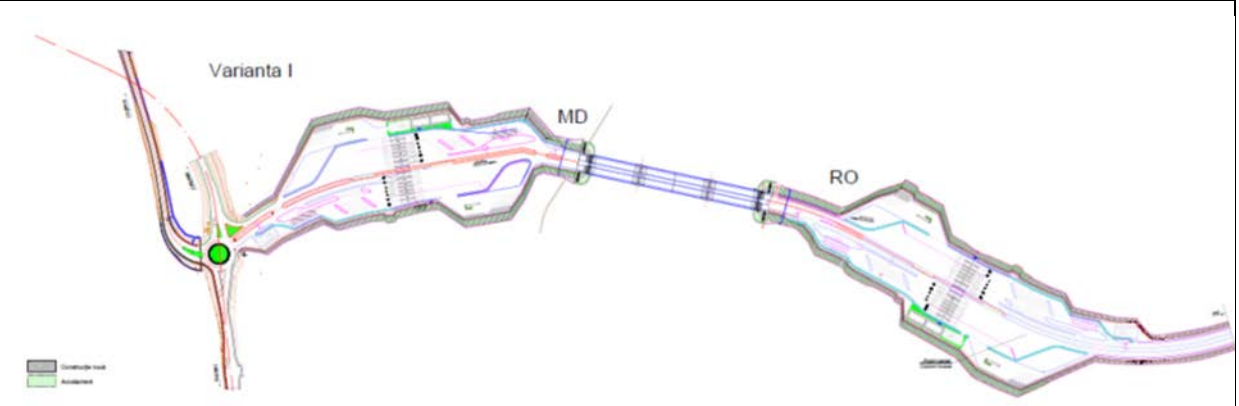

*The design layout of BCP*

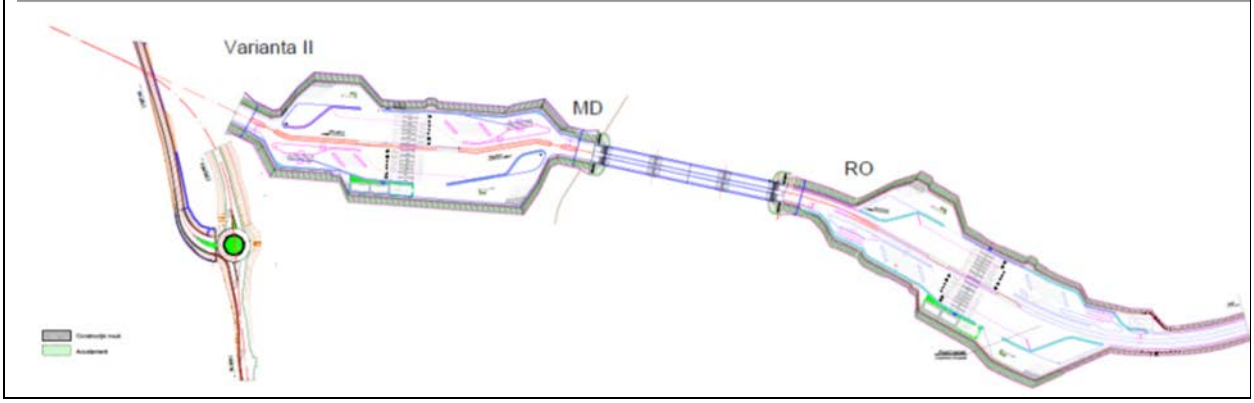



BCP. the general plan layout

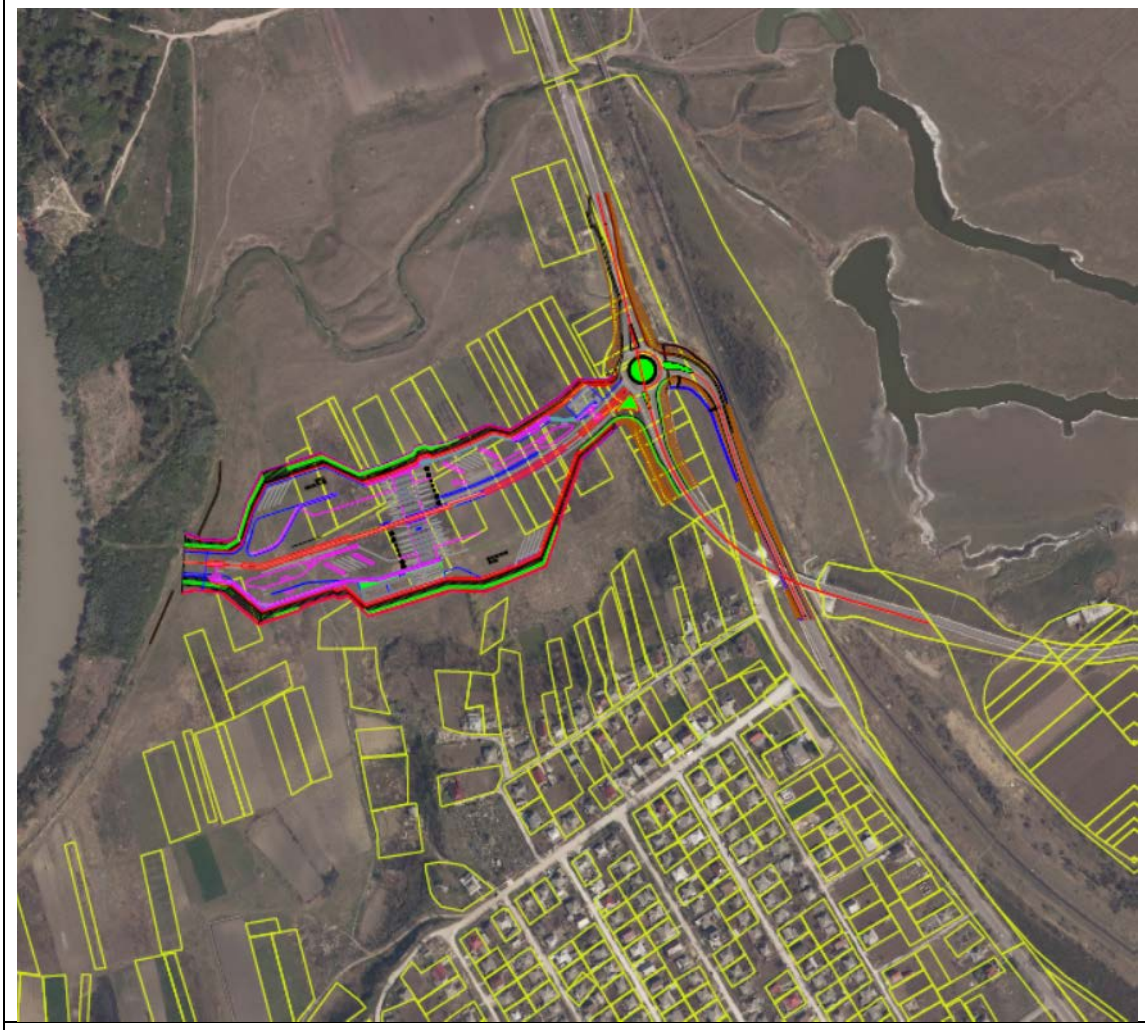


The proposed general plan according to FS from Romania and Moldova



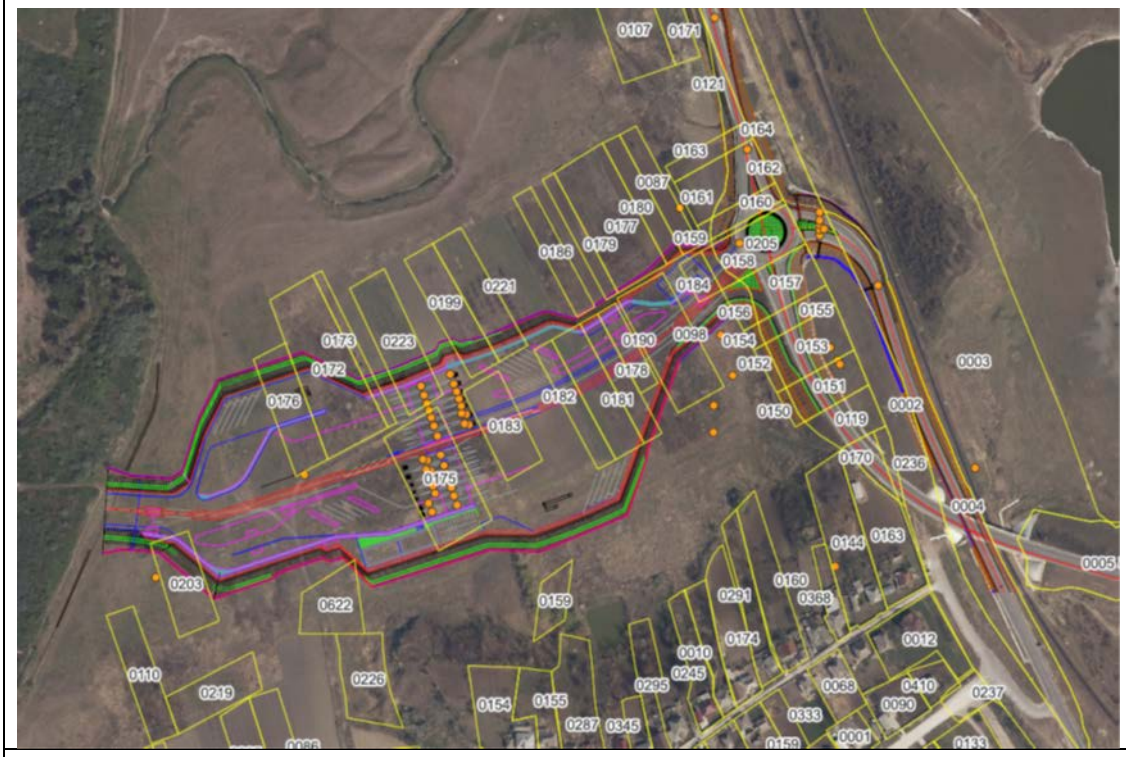



Two options for BCP to be arranged in Moldova. Option 1 was selected.



Option 1 and connection to R1 road and roundabout

Option 2 and connection to R1 road and avoiding roundabout intersection




Land plots possible affected by proposed infrastructure (BCP and connection road)

The main note is that at that stage of project the BCP was not projected on Moldova side as BCP was supposed to be operated in common with Romania on Romanian territory.

The Feasibility Study and detailed design of the connection road was developed by Universcons SRL from Moldova for SRA in 2017.

### *3.1.1. Border crossing and customs control point Ungheni, estimates, needs*

Even if at the moment it is not known the exact dimensions and location of BCP on the Moldova side and the estimates and information is only about the road and BCP on the Romanian side, it is assumed that BCP will be reflected as mirror infrastructure and hence the following estimates:

- Land approx. 2-7 ha (SF will show the exact needs and exact location) will be needed to be expropriated.
- Connection to the water network (Zagarancea, managed by Apa-Canal Ungheni)
- New sewerage network and own WWTP
- Electricity networks, fiber optics, etc.

The functional equipment of the border post shall contain the following:
Construction:

- Administrative buildings 2 x 250 sqm, necessary for the activity of the Customs Service and Border Police;
- Space for detailed control of passengers - only those entering the Republic of Moldova;
- Space for detailed customs control of cars – 2 x 160 sqm;
- Check-rooms, border crossing points;
- Administrative containers, intended for customs brokers, truck weighing office;
- Toilets.

Platform and equipment work:

- The pavement afferent to the control booths of the border crossing points;
- Canopies necessary for the control area of border crossing points, and truck scales;
- Radiation protection wall (in the scanner area);
- Truck scales – 2 pieces;
- Ramp and channel detailed customs control trucks – 2 pieces;

- Automatic barriers – 18 pieces;
- Automated road signal system;
- Electric generators – 1 piece;
- Intelligent transport system – 1 piece.

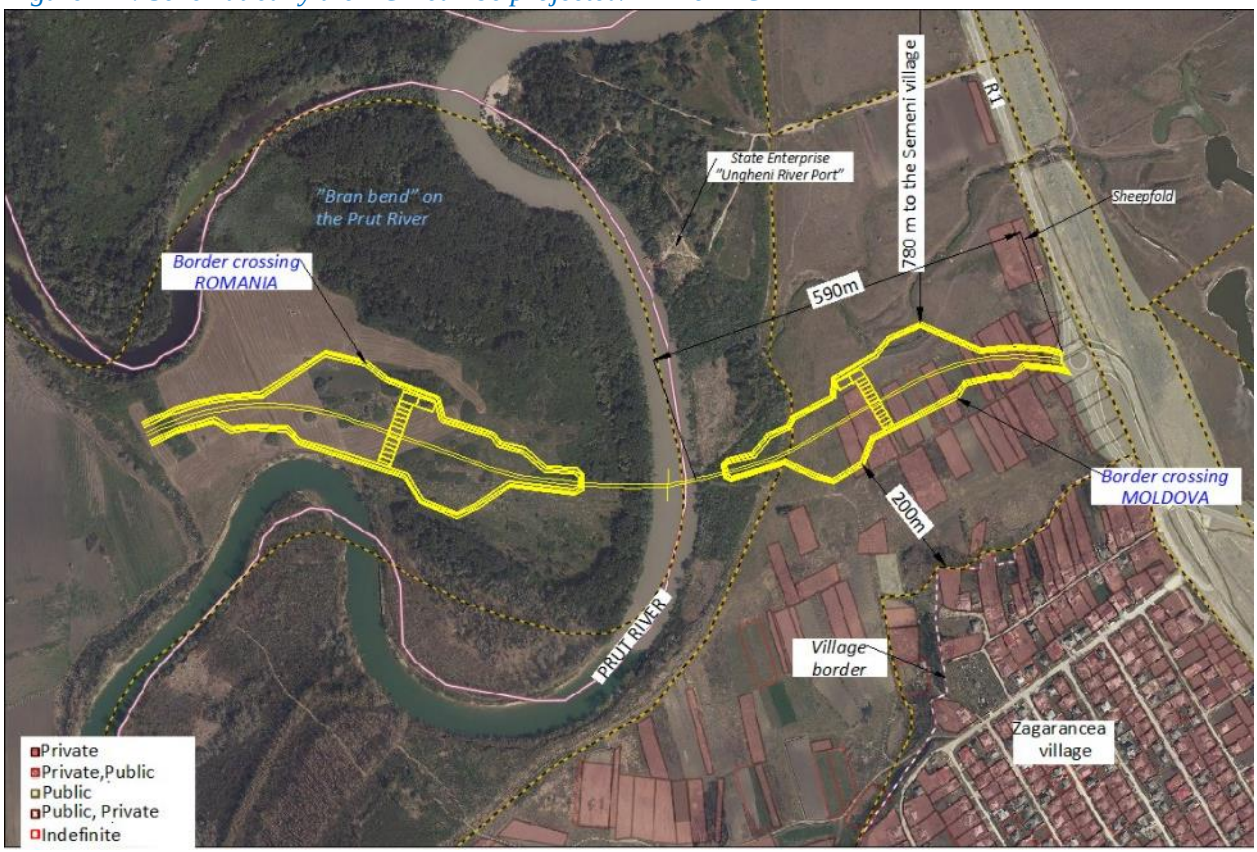
The connection of basic utilities – electrical supply, heating, water supply, wastewater discharge, waste storage/management etc. will be solved according to technical conditions that will be obtained during detailed design from respective utilities in the area. The water supply and electricity area available in the immediate vicinity of the site in Zagarancea commune.

The estimated cost of the project is 9 million euros.[4]

The WB is supported in the new Ungheni BCP, procurement and installation of equipment and especially the X-ray scanning systems for non-destructive customs control of cargo and Video Control system automated vehicle plate readers. This is a co-finance to an EU project with 50%.

Schematically the BCP can be projected / estimated as follow:

*Figure 4-1: Schematically the BCP can be projected/ Mirror BCP*

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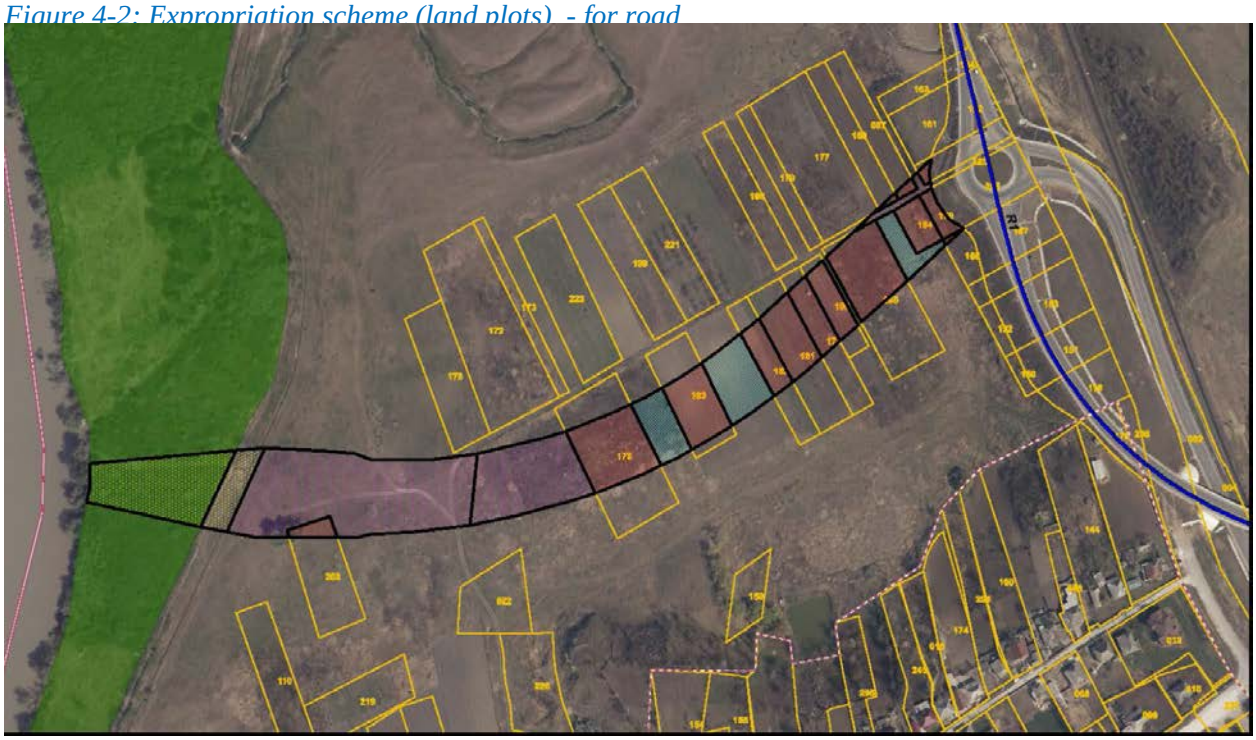
[4] According to CS provided information

*Figure 4-2: Expropriation scheme (land plots) - for road*



*At the moment, it is unknown the land needed for BCP. The estimation can be 4 to 6 ha of land additionally to the land for road construction.*

***The SRA Plan of land allocations/expropriations*** for the construction of the road R1 Chisinau-Ungheni-border with Romania, km 103-104 (access road to the bridge over the Prut river "Ungheni-Ungheni"). According to SRA the construction works of the access road from the national road R1 *Chisinau-Ungheni-border with Romania (km 103-104)* to the bridge over the Prut river "Ungheni-Ungheni" were declared of public utility of national interest by Law nr. 136 of 16.07.2020 on the declaration of public utility of national interest of the works of rehabilitation, modernization and extension of some national roads.

By Government Decision nr. 238 of 13.10.2022, the Ministry of Infrastructure and Regional Development, through the State Enterprise State Roads Administration, was empowered to organize the process of concluding sale-purchase contracts with the owners of land included in the construction project, to bear the expenses arising from the real estate formation procedure and to submit actions to the court, related to the expropriation of real estate (land and constructions) private property.

Expropriation of privately owned land located on the site of the construction work are carried out in accordance with the Law *expropriation in the public interest* No. 488/1999. As a result of the contradiction of the data from the technical project with the graphic information of the Central Data Bank of the Real Estate Cadastre, it was found that on the site of the access road construction works, there are located 15 (fifteen) plots of land privately owned, the mode of use-gardens, the right over which are registered in the Real Estate Register:

- Business entities – **1** (4 plots of land)
- Individuals – **8** (11 plots of land)

Will not be a case of physical resentments as is mostly agricultural lands and pasture. Also, livelihoods impacts are minimal as half of the lands are not used actively in agriculture and 3 of theme is not registered in cadaster.

| Picture of Zagarancea land plots (proposed access road and possible BCP) |
|---|

*Table 4-3: List of privately owned land, located within the borders of Zagarancea ATU, Ungheni rayon affected by connection road needs*

| N/O | Cadastral number | How to use | Surface | Area of land required for expropriation |
|---|---|---|---|---|
| **1.** | 9277104087 | Garden | 0,1400 | 0,0089 |
| **2.** | 9277104098 | Garden | 0,3700 | 0,1825 |
| **3.** | 9277104156 | Garden | 0,0535 | 0,0034 |
| **4.** | 9277104158 | Garden | 0,2300 | 0,0323 |
| **5.** | 9277104159 | Garden | 0,0108 | 0,0077 |
| **6.** | 9277104175 | Garden | 0,4200 | 0,1991 |
| **7.** | 9277104177 | Garden | 0,4200 | 0,0004 |
| **8.** | 9277104178 | Garden | 0,1500 | 0,0708 |
| **9.** | 9277104180 | Garden | 0,1400 | 0,0040 |
| **10.** | 9277104181 | Garden | 0,2400 | 0,1121 |
| **11.** | 9277104182 | Garden | 0,1500 | 0,0691 |
| **12.** | 9277104183 | Garden | 0,2200 | 0,1328 |
| **13.** | 9277104184 | Garden | 0,0600 | 0,0600 |
| **14.** | 9277104190 | Garden | 0,1000 | 0,0710 |
| **15.** | 9277104203 | Garden | 0,2181 | 0,0285 |
| **Total area** | | | | **0.9826 ha** |

***Stages of realization*** of the plan for privately owned land:

I – Adoption of the Law on declaration of public utility - **16.07.2020**

II – Approval of the Government Decision on the powers of the State Administration of Roads to organize the process of concluding sale-purchase contracts - **13.10.2021**

III – Organization of the contest of offers on the acquisition of cadastral services for the formation of real estate – **01.11.2022 - 31.12.2022**

IV – Selection of the winner and signing of the contract for cadastral services **– 01.01.2023 – 23.01.2023**

V – Execution of cadastral works contract term **23.01.2023-31.12.2024,** inclusive

- identification stage – **23.03.2023**
- Training Possibility Study – **31.05.2023**
- Land valuation at market price – **2024**

VI – Notification (information) to owners of the application of the trading ban – **23.03.2023**

VII – Submission of proposals (tenders) for expropriation – **will follow**

VIII – Acceptance of expropriation offers

XI – Completion of the procurements procedure

X – Registration of cadastre projects

XI - Conclusion of sale-purchase contracts

XII – Registration of state property rights

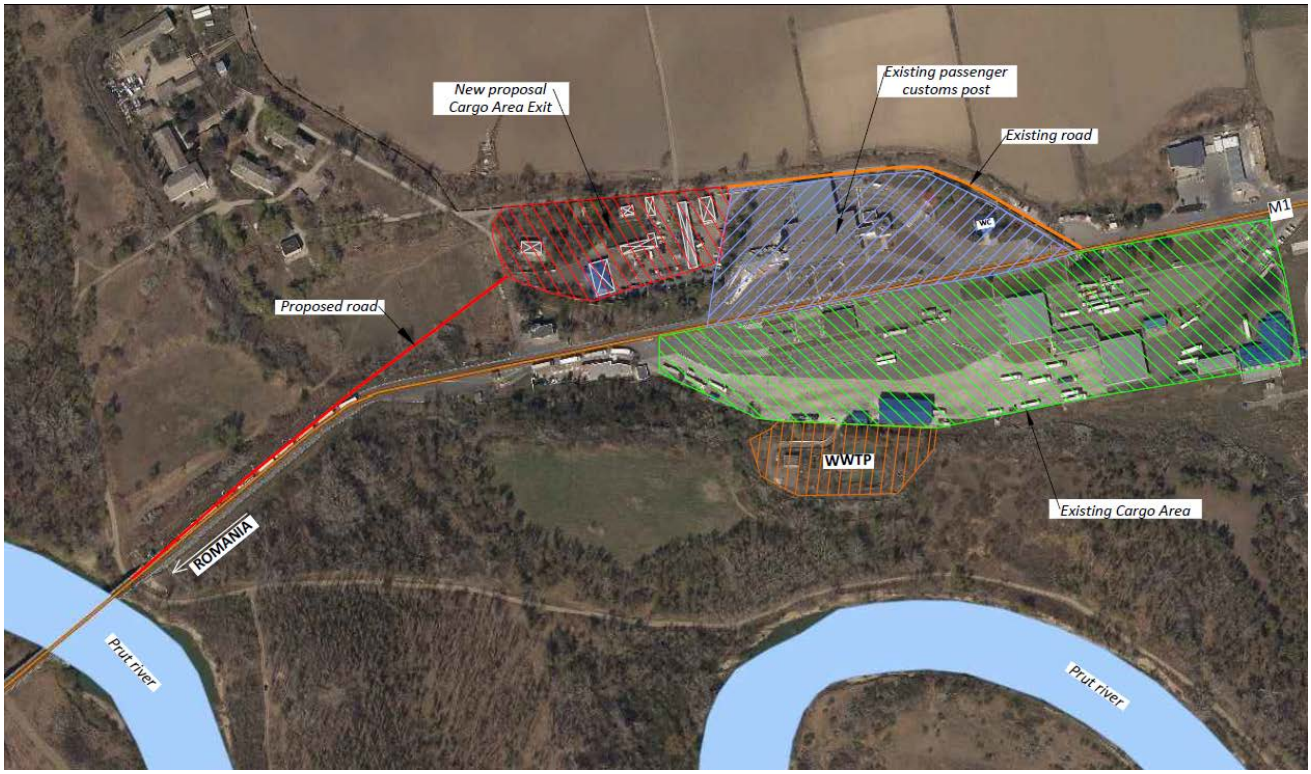
The future BCP are situated in the vicinity of Zagarancea village (south) and Semeni (north), Prut river - Vest, R1 road – east. The entire infrastructure is in the r. Prut protection zone.

## 3.2. Leuseni BCP

The works to expand and improve access to BCP Leuseni are very important because BCP Leuseni is currently the most transited point in Moldova.

The infrastructure works envisaged include the extension of BCP's territory to meet the needs of passage, especially increased truck traffic. The final needs and construction elements will be determined more precisely in a feasibility study. Until then, we will consider the following necessary improvements identified on site but also from the discussion with SRA and MCS:

- Separation of truck flow in the direction of entry and exit by developing a new area on the right side of BCP (exit direction -Moldova)
- Installation of necessary equipment
- Reconstruction and expansion of sanitation infrastructure for workers and visitors (food, showers, toilets, washbasins)
- Wastewater treatment. WWTP rehabilitation/reconstruction.
- Construction of access roads on a length of 1 km from the bridge over the Prut River (approximately till the end of BCP infrastructure).




### *3.2.1. Estimated needs for Customs Point Leuseni*

The Leuseni customs post (BCP road) is located in the western area of Hancesti district, being close to several important economic centers for Moldova: Hancesti - about 45 km, mun. Chisinau - about 95 km, mun. Iasi - about 75 km, at the same time it is located on the route connecting mun. Chisinau (MD) with mun. Bucharest (RO), for this reason, freight carriers select the crossing of the Leuseni customs post (PVFI, road) from economic aspects (the shortest distance to the point of unloading), from the aspect of convenience (roads located outside localities).

With the outbreak of the war situation in neighboring Ukraine, most economic transactions that went to countries located in Eastern Europe, transited Ukraine, are now forced to avoid this region, so most carriers request exit from Moldova through the western border (Leuseni). The goods arriving in Moldova from the port of Odessa, Ukraine, are currently directed through the port of Constanta, a large part of which enters through the customs post Leuseni.

Thus, the Leuseni customs post has managed to process up to 900 trucks in 24 hours in both directions, compared to approximately 400-450 transport units perfected in the similar period of last year, although it has only 4 lanes per direction for the completion of freight transport units.

Given the increased flow of trucks, there are often queues at the exit of up to 300 trucks that create traffic problems, dissatisfaction from the locals of Leuseni village, blockages on the route due to their parking on the verge, the access road having only one lane in each direction.

A major problem is the exit of trucks from the Leuseni customs, namely the existence of only one lane, intended for exit from the customs post, which intersects with the lane reserved for the exit of cars, minibuses and coaches, having the effect of periodically blocking the exit from the post, thus making it difficult to streamline traffic. For this reason, and taking into account the fact that the new bridge over the Prut River will have 2 lanes of traffic in each direction, it is necessary to reconfigure the Leuseni customs, namely the construction of a new sector for goods at the exit from the Republic of Moldova with at least 4 control tracks.

Therefore, it is proposed to modernize the Leuseni customs in 2 stages:

***Stage 1*** - capital repair of the goods entry sector and the exit of cars / passengers that require stringent improvement, as well as the provision of customs control equipment, according to *Table 4-4*., with a cost total estimate of about € 386,800, estimated deadline being Q2, 2024.

***Stage 2*** - construction of a new exit sector, according to *Table 4-5*, with an estimated total cost of approx. 4,035,200 €, the estimated deadline being Q2, 2025.

*Table 4-6: Building the output sector*

| **No.** | **Works/facilities** |
|---|---|
| 1. | -Extension of the territory by 2-4 ha,<br>- access road |
| 2. | Drainage and asphalting of the territory |
| 3. | Approximate metal fence (1 km) |
| 4. | Barriers |
| 5. | Construction:<br>Awning<br>Counters<br>Tracks |
| | Warehouse for control tracks with 4 ramps |
| 6. | Street lighting and under the awning |
| 7. | Equipping counters with furniture<br>*Massage*<br>*Chair*<br>*Spc*<br>*Printers* |
| 8. | Static/dynamic scale |
| 9. | X-ray Scanner |

The following investments will be financed preliminary from WB loan (Project) in 50% contribution as co-finance to EU grant

*Table 4-7: Building the output sector*

| **Category** | **Investment items** |
|---|---|
| Modernisation of the Albița Leușeni Border Crossing Point-MD | Elaboration of the feasability study<br><br>Elaboration of the technical design<br><br>Works execution<br><br>Supervision Services |

| | |
|---|---|
| Procurement and installation of equipment in–Leușeni BCP (MD) | Weighting equipment for heavy vehicles<br><br>X-ray scanning systems for non-destructive customs control of cargo (fixed) |

In order to achieve the proposed, a detailed feasibility study is needed to know exactly how much land is needed for the expansion of BCP Leuseni, and what estimated budget is expected in order to be able to make further tenders for design and then construction services.

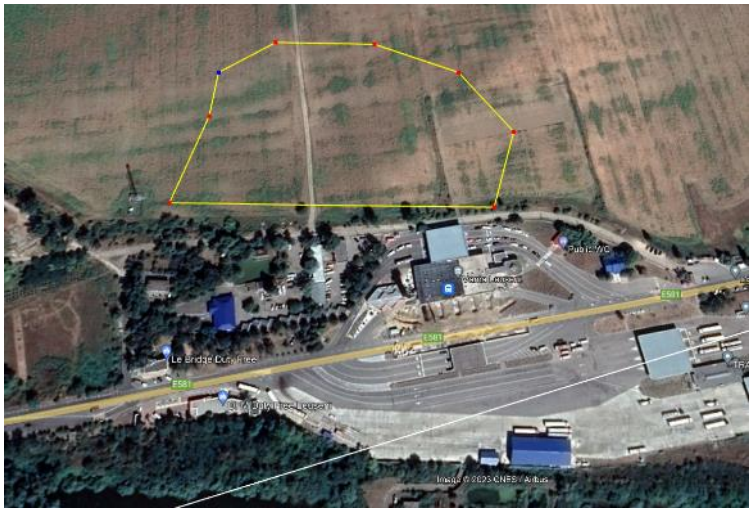
At this stage we can only mention the following strictly necessary actions:

1. Creation of exit area for trucks based on demolition of degraded or unused buildings (area marked in red):

| | |
|---|---|
|  |  |
| Parking area and old building (storage area) | Parking area |
|  |  |
| Parking area | Old building, unused |

| | |
|---|---|
|  |  |
| Old building, unused | Parking area & Old building, unused |
|  |  |
| Former Center for training. Actually, unused as training center is in Chisinau | Small stadium. Limited used. |
|  |  |
| Old building, unused. Former hosting forMCS employees. | Green area, and storage area. |

- The new area of 2-4 ha may be needed by extension from adjacent agricultural lands (near exiting BCP area in the scheme). All these lands are agricultural and private.



The BCP is surrounded by agricultural lands at north, r. Prut and Border Police buildings at west, M1 road and Petrol station at east and agricultural land and Prut river at south.

### *3.2.2. Wastewater Treatment Plant*

The existing water supply consist of a modern intake from Prut River, pumping station, water treatment plant and water supply.

The worse situation is related with sanitation. The old WWTP is not working.

The wastewater treatment plant is located in the southern part of BCP in close proximity to the r. Prut, in the riparian area. Distance in a straight line to the riverbed to the Prut River is approx. 70 m. The station does not work properly. Wastewater comes gravitationally to the station which currently represents:

- An administrative building with pumping station requiring capital repair
- 4 equalization / settling basins
- 3 biological storage and treatment basins
- Communication networks with each other
- Manholes
- Access routes
- Bordering with fence.

Wastewater treatment occurs naturally through accumulation in biological ponds and treatment by biota under the influence of sunlight and ambient temperature.

The discharge of untreated water occurs directly into the Prut River without effluent control and without disinfection as required by legislation.

The estimated volume of daily discharges is approx. 200 m3 of wastewater. **We consider this to be the biggest / serious environmental problem that needs to be solved urgently at BCP Leuseni**. This is especially in the context that the volume of passengers and trucks is constantly increasing and BCP is going to be expanded. Downstream r. Prut is an important source of drinking water for approx. half a million of the population, for irrigation, replenishment, recreation, is a cross-border river and flows into the Danube and then into the Black Sea.

| | |
|---|---|
|  |  |
| Pumping station | Primary treatment basins, equalization tanks |
|  |  |
| Accumulation basins/ponds, acting as constructed wetlands. | Accumulation basins/ponds, acting as constructed wetlands. The green algae show that the eutrophication of water is very high (loading with biological materials, especially phosphorus and nitrogen). |
|  |  |
| Accumulation basins/ponds, acting as constructed wetlands. | Manholes |

An approximate estimate of budget required for the rehabilitation / decommissioning and / or construction of a new treatment plant is approx. 300-500 thousand EUR. This estimate is made based on projects with similar capacity in other localities. We believe that the Feasibility Study and a detailed design will show

the best method and necessary technical solutions as well as the budget for a modern treatment plant to prevent the discharge of wastewater into the natural environment, the spread of unpleasant odors, eliminate the source of contamination including with dangerous bacteria and viruses.

## 3.3. Giurgiulesti BCP & Custom Service control Platform

## 3.4. Custom Service control Platform near Giurgiulesti

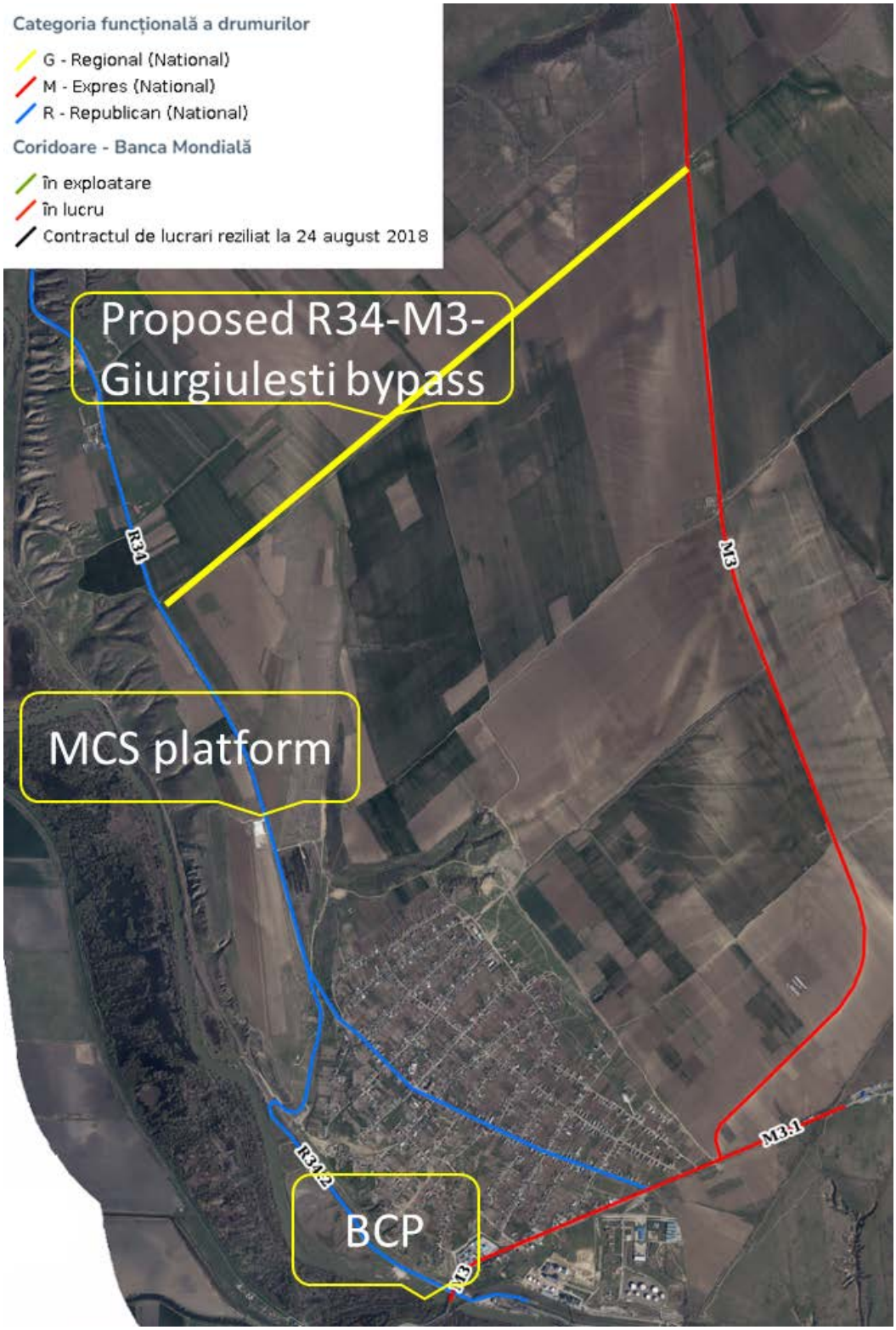
Following the Russian aggression on Ukraine, the situation has become very complicated because the Ukrainian ports are not working at full capacity or at all and most goods travel by road. Thus, the mentioned platform is currently too small for all cumulative traffic from Moldova and Ukraine. Thus, at the time of the site visit, the platform was full and many heavy vehicles were still stationed along the road. The situation was also complicated on the Reni-Giurgiulesti border crossing point where dozens of cars were stationed.

The construction of the M3 road, which is more than 50% completed and is expected to be delayed next year, will remove some of the traffic from the village, but will not solve the transit problem from Cahul.

From this direction come most of the heavy vehicles that reach the area, but they have a road to bypass the village near the river. Prut and railway directly in the cargo port.

The main object of the included Project is to extend the existing platform for intercepting the flow of trucks (TIRs) coming from Cahul direction and stationed here to pass customs procedures and then they are called to pass through customs at the border without other procedures and almost without stationary. The need for this platform came in response to multiple complaints of the population of the border village Giurgiulesti, who before the construction of this platform, all heavy vehicles were stationed along the village (the main road R34 passes right through the middle of the village).


Heliport
Giurgiulesti
M3
Google




This created traffic safety problems, blocked access to property, noise, derailment, household waste, engine oil pollution, exhaust pollution, etc.

The platform was originally provided with an area of 1,2 ha approximately, but at that time financial means were found only for half of the surface that is covered with concrete, the other half is on the perimeter equipped with fence and lighting, access way.

The platform is not equipped with the necessary modern sanitary facility. A suitable toilet, showers, public supply facility, water supply, waste water treatment plant, etc. are required.

| | |
|---|---|
|  |  |
| Custom service control platform entrance | Custom service control platform entrance |
|  |  |
| Custom service control platform. Full parking area | Custom service control platform. Fence, lighting, pluvial water collection |
|  | |
| Helicopter planform situated in the vicinity | |

| | |
|---|---|
|  |  |
| Offices for employees for custom formalities | Concrete paved platform |
|  |  |
| The area of platform needed to be covered by concrete – extension | The area of platform needed to be covered by concrete – wastewater pit |
|  |  |
| Sanitary facility – not working. | The area of platform needed to be covered by concrete – extension |

| | |
|---|---|
|  |  |
| Waste collection containers | Firefighting equipment. |

The area of Custom service control platform is surrounded by agricultural land, pasture, National Road R34. No sensitive areas or protected zones are in the vicinity. The Prut River is at the distance of 470 m. The hill situates between serve as a relief barrier. Also, forest parcel is close to the location. Distance from the first house in Giurgiulesti is 780m and will not be affected directly.

It can have several indirect consequences on nearby homes and the Giurgiulesti community. Here's how houses and the environment may be affected:

Truck parking lot can generate significant noise, especially during maneuvers and using the road for other activities. The noise can impact the quality of life for nearby residents. Additionally, trucks may emit air pollutants, contributing to air pollution in the area. Also, may increase traffic in the area, especially if it is frequently accessed by heavy vehicles. This can lead to traffic congestion and an elevated risk of accidents, directly affecting road users and nearby residents. A large truck parking lot can alter the visual landscape, potentially affecting the aesthetics of the area. This can influence the property values of nearby residences.

The extension of MCS truck parking lot (platform) can have social and economic consequences, concerns may arise regarding public health impact and potential security risks associated with activities in the parking lot (STD/HIV, TIP etc.).

**The MCS discussions:** According to the information provided and discussions in the MCS the expansion / refurbishment needs of the Giurgiulesti parking lot (with the status of Customs Control Zone):

1. The Customs Service has initiated works to build a new platform (with the status of customs control zone) for the parking of trucks with goods that are to cross the customs posts Giurgiulesti – Galati (RO) or Giurgiulesti – Reni (UA) with goods exported from the Republic of Moldova or transiting its territory.
2. In this respect, by Government Decision nr. 395/2018 was awarded to the Customs Service the land with an area of 1.2793 hectares (cadastral number 9420101066), located outside the built-up area of Giurgiulesti administrative-territorial unit, Cahul district, for the construction and arrangement of several infrastructure elements necessary for carrying out an operative customs control, while maintaining all the rigors of control and security.
3. According to the initial project, the area was to have a parking lot for about 60 trucks, a warehouse, a room for physical checks, space for non-intrusive inspection, and a room for criminal bodies. However,

due to lack of financial means, the project was modified, so that at the moment the customs control area has an area of 0.54 hectares, which allows parking for about 30 trucks.

4. The platform is located about 3 km from the border, on the route Cahul – Giurgiulesti, and contributes to the fluidization of cross-border traffic in the southern region of the country, offering economic agents and carriers better conditions in customs clearance procedures. At the same time, for the inhabitants of Giurgiulesti commune, this means eliminating the inconveniences created by parking trucks in the locality (exhaust emissions, noise, garbage, etc.).

All customs procedures are carried out in this customs control area, and at the crossing point only the registration of the crossing and the authorization of the passage of goods across the customs border are carried out, which maximally streamlines the movement of goods at the border.

In the context of the situation in Ukraine, which generated an increase in the flow of trucks with goods at all border customs posts, in order to exclude the parking on the side of the road of trucks waiting to cross the state border in the southern region at Giugiulesti, as a temporary option, the Customs Service aims to extend the parking platform on the entire allocated area (approximately 1.27 hectares), purchase of certain customs control equipment and its provision of sanitary ware for drivers.

This requires works, the cost of which is approximately € 854 000, as follows:

- Concreting of the surface of 0.65 acres – approximate suit being – 600 000 €
- Purchase of two containers with toilet and showers for drivers – 24 000 €
- Reconstruction of the toilet station following the installation of WC containers – 5 000 €
- Purchase of a truck scale – €30,000
- Construction of an artesian well for water supply – 15 000 €
- Construction of river water drainage – 100 000 €
- Landscaping around the station – 10 000 €
- Road marking with corresponding signs – 5 000 €
- Restoration of the lighting system, purchase of a generator – 15 000 €
- Endowment with electronic information panels and creation of electronic queue software – 50 000 €.

The State Road Administration intends to rehabilitate and improve the R34 road passing near the parking/customs control area near Giurgiulesti village. Additionally, the construction of the M3 bypass road (Slobozia Mare-Giurgiulesti) is already underway. A connecting road between R34 and M3 is necessary to ensure that the majority of heavy trucks coming to the customs control area from Cahul do not pass through the Giurgiulesti village (bypass).

This infrastructure development plan has several potential benefits:

- ✓ The new connecting (bypass) road can help in redirecting heavy truck traffic away from Giurgiulesti village. This can alleviate congestion, reduce traffic-related disruptions, and enhance overall traffic management especially if electronic queue will be implemented.
- ✓ By rerouting heavy truck traffic, this associate infrastructure may minimize the impact on the local community in Giurgiulesti village, reducing noise, pollution, and potential safety concerns associated with heavy vehicles passing through residential areas.
- ✓ The connectivity between R34 and M3 can streamline transportation logistics, facilitating smoother movement of goods to and from the customs control area. This can contribute to improved efficiency and reduced transit times for freight transport.
- ✓ A well-designed connecting road can contribute to enhanced road safety by providing a dedicated route for heavy trucks, minimizing the risk of accidents and improving overall transportation safety in the region.
- ✓ Improved transportation infrastructure can stimulate economic development by facilitating the movement of goods and people, potentially attracting more business activities to the area.

It's important for the GoM (SRA&MCS) to engage with local communities, consider environmental impact assessments, and ensure that the construction adheres to relevant regulations. This approach can help address concerns, promote transparency, and ensure the project's success.

## 3.5. Giurgiulesti Customs Point

The Giurgiulesti-Galati border crossing point is located on a plot of approx. 5.5 ha in the southern extremity of Giurgiulesti village, near the Prut River. It is separated from the river by the railway and the access road to the port. It is equipped with passenger area and cargo area.

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Car/passenger entrance area</td><td>Cargo/trucks entrance area</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Mobile scanner</td><td>Detailed control (boxes) area</td></tr>
</table>

| | |
|---|---|
|  | |
| Exit passengers control area | |
|  |  |
| Road to Reni BCP. View from Giurgiulesti direction. | Road to Giurgiulesti. View from Custom Service registration platform |

### *3.5.1. Required equipment*

From discussions with the head of the customs office in Giurgiulesti, a modern scanner is needed to be installed, to extend the cargo area by modifying the tread. There is the possibility of demolishing little-used hangars and changing routes. Truck possibility to cross borders can be doubled using the current surface area of BCP. Of course, if the platform will be extended up to Giurgiulesti.

The WB Project will finance the following items as a co-finance for EU Project:

| No | Work package | Items GIURGIULESTI | Quantities |
|---|---|---|---|
| WP 2 | Concept/Study - Development of an | | |
| | | Electronic registration of HGV vehicles | |
| | | Prioritisation of HGV vehicles | |

| | | | | |
|---|---|---|---|---|
| | BCP traffic organization and management system on the MD side for Galati/Giurgiulesti/Reni BCP | Optimization of the path of HGV through the BCP and between the separate parking area and the BCP | | |
| | | Automatic guiding system | | |
| | | Application for the drivers | | |
| | | Interface to the electronic systems of the relevant authorities | | |
| | | Interface to the electronic system of the relevant authorities on the Romanian side | | |
| | | **Total** | | 1 |
| WP 3 | Works for the extension/upgrade of existing parking facility in Giurgiulesti – (MD) | Review and up-date of existing studies and development of technical design to provide for the extension of the parking facility Elaboration of the technical documents | | |
| | | Construction of extended concrete platform – 0.65 hectares | | 1 |
| | | Works for associated utilities construction/ reinstatement | Purchase of two containers with toilets and showers for drivers | 2 |
| | | | Reconstruction of the toilets facilities following the installation of the toilets containers | 1 |
| | | | Construction of an artesian well for water supply (System for water supply) | 1 |
| | | | Construction of a rainwater drainage | 1 |
| | | | | |
| | | | Restoration of the lighting system, procurement of an electric generator | 1 |
| | | Marking and signaling of the facility | | 1 |
| | | Supervision Services | | |
| | | **Total** | | |
| WP-4 | Procurement and installation of equipment in– Giurgiulesti (MD) | Weighting equipment for heavy vehicles | | 1 |
| | | X-ray scanning systems for non-destructive customs control of cargo (including work platform and radiological protection wall for the scanning system | | 1 |
| | | Easy loading conveyor and large tunnel for X-ray screening of large baggage and small cargo | | 1 |
| | | | | |
| | | | | |
| | | | | |

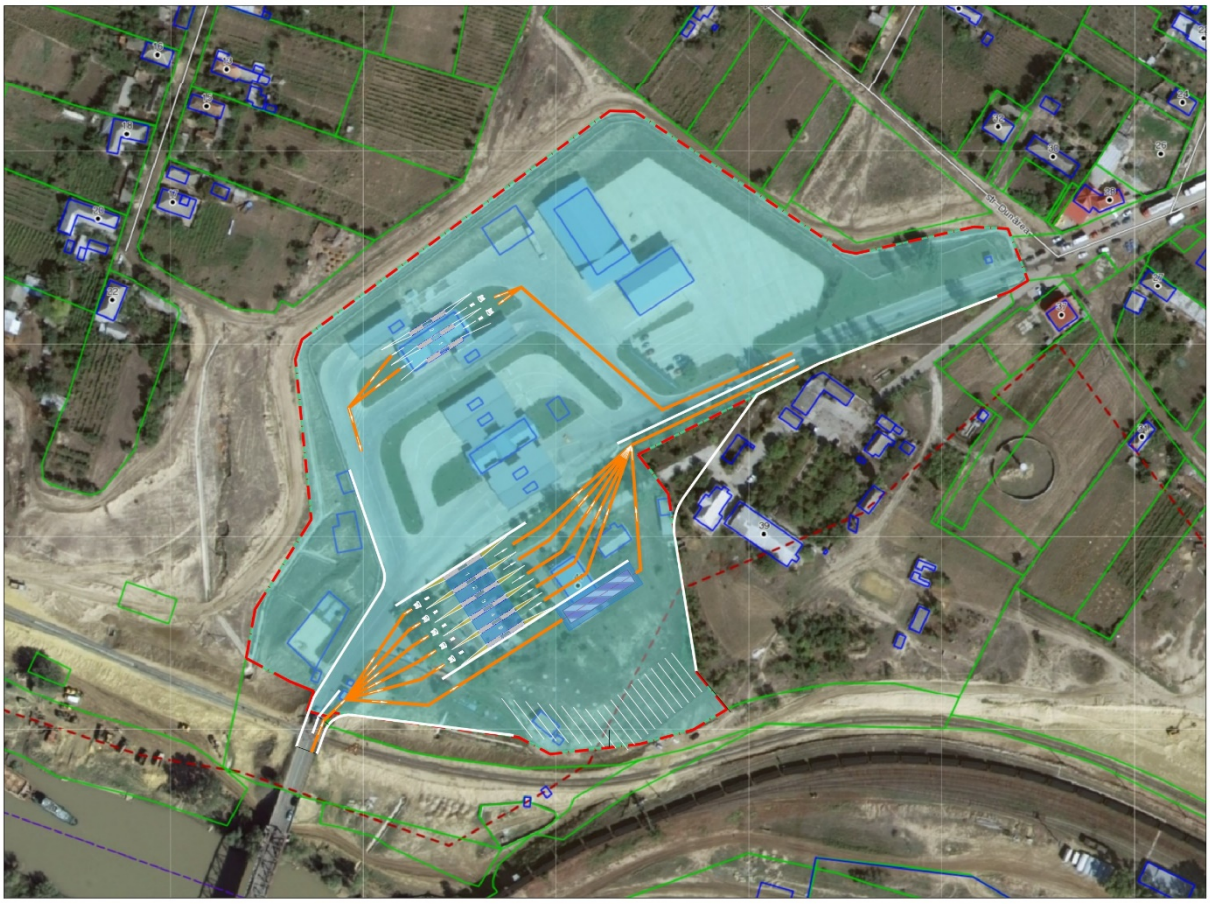
| | | | |
|---|---|---|---|
| | | Electronic information panels | 13 |
| | | Equipment for loading/unloading freight | 1 |
| | | **Total** | |
| | | | |

*3.5.2. The planned extension of BCP.*

The MCS start elaboration of the Feasibility Study for the "Rehabilitation and modernization of the infrastructure of the Giurgiulesti customs post, cargo section, with the installation of stationary scanning equipment:

Component 1 – Rehabilitation and modernization of the freight sector on the entry/exit direction. This component will focus on the reconstruction of existing infrastructure, with possible demolitions and expansions.

Component 2 – The location of the stationary truck scanning equipment, on the way into the country, based on the proposed scenarios. Regarding this component, it is to be made independently of component 1, with the assurance of its functionality, without depending on component 1, but which later, is to be included as a complex system.



The FS will propose several solution for BCP necessities. Also, will incorporate the E&S aspects and will develop them in the document. The expected impacts on social and environment are similar with BCP in Leuseni as are the same type of activities.

# 3. LEGAL AND REGULATORY FRAMEWORK

## 3.6. General environmental legislation related to roads and BCP

| Name of Act | Last Amended | Description |
|---|---|---|
| Law No. 1515/1993 on environmental protection | 11 Jan. 2023 | The basic legal framework for the development of special regulatory acts and instructions of special issues, covering the field of environmental protection. |
| Law no. 86/2014 on environmental impact assessment | 05 Sept. 2022[5] | Partially transposes Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment. |
| Law No. 98/2022 on atmospheric air quality | 08 June 2023 | This strengthens the institutional capacities for monitoring and assessing atmospheric air quality; to identify and implement effective measures to reduce air pollutant emissions to levels that minimise the harmful effects on human health and the environment. This partially transposes Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe. |
| Law No. 227/2022 on industrial emissions | In force with effect from 21 Oct. 2024 | The establishment of the regulatory framework regarding the prevention of pollution caused by industrial and economic activities, in order to reduce emissions to air, water and soil, including the generation of waste, as well as environmental control, the promotion and application of the best available techniques to achieve a high level of environmental protection. Partially transposes Directive 2010/75/EU of the European Parliament and of the Council of 24/11/2010 on industrial emissions. |
| Law No. 78/2017 for the ratification of the Paris Agreement | - | This agreement, contributing to the implementation of the convention, including its objective, aims to strengthen the global response to the threat posed by climate change, in the context of sustainable development and efforts to eradicate poverty. |
| Government Decision no. 1470/ 2016 regarding the approval of the Low Emission Development Strategy of the Republic of Moldova until 2030 and the Action Plan for its implementation | 18 Dec. 2021 | To ensure the implementation of the provisions of the United Nations Framework Convention on Climate Change, of the mechanisms and provisions of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, to which the Republic of Moldova acceded through Law no. 29/2003, with subsequent amendments, as well as the Association Agreement between the Republic of Moldova, on the one hand, and the European Union and the European Atomic Energy Community and their member states. |

[5] On 21st October 2023 the changes approved in Law 226/2022 entered into force in order to harmonize with Directive 2011/92/EU of the European Parliament and of the Council of 13th December 2011 on the assessment of the effects of certain public and private projects on the environment and the provisions of art. 6 para. (3) and (4) of Council Directive 92/43/EEC of 21st May 1992 on the conservation of natural habitats and of wild fauna and flora.

| Name of Act | Last Amended | Description |
|---|---|---|
| Law No. 272/2011 on Water | 22 Oct. 2022 | Creation of a regulatory framework for the monitoring, assessment, management, protection and efficient use of surface water and underground water. The law is partially harmonised with directives no. 91/271/EEC, no. 91/676 EEC, no. 2000/60/EC, no. 2006/7/EC, no. 2007/60/EC and no. 2008/105/EC. |
| Law No. 1536/1998 on hydrometeor-ological activity | 31 Jan. 2022 | Regulates the hydrometeorological activity in the territory of the Republic of Moldova. It aims to provide hydrometeorological information concerning the needs of the population, economy and national defence, as well as of the public authorities. |
| Law No. 1102/1997 on natural resources | 05 Sept. 2022 | Regulates the relations in the field of use, protection and reproduction of the natural resources, in order to ensure the ecological security and sustainable development of the country. |
| Law No. 440/1995 on river and lake water protection areas and strips | 04 June 2023 | Regulates the way water protection areas and riparian water protection strips of rivers and water basins are created; and the regime for the use and protection activity thereof. All legal entities and individuals, including foreign ones, are covered by it. |
| Forest Code no. 887/1996 | 27 Oct. 2017 | Regulates the sustainable management of the forest fund through rational use, regeneration, guarding and protection of forests, maintaining, preserving and improving forest biological diversity, ensuring with forest resources the current and future needs of society based on their multi-functionality. |
| Law No. 239/2007 on vegetal kingdom | 11 Jan. 2023 | Establishes the legal framework in the field of conservation, protection, restoration and use of objects of the plant kingdom, as well as the competences of public authorities at all levels and of scientific institutions in the field. |
| Law No. 1538/1998 on the fund of natural areas protected by the state | 01 July 2022 | Establishes the legal bases for the creation and operation of the funding for natural areas protected by the state; principles, mechanism and method of conservation thereof; as well as the attributions of central and local public authorities, non-governmental organisations and citizens in this field. |
| Law no. 591/1999 on green spaces in urban and rural communities | 04 June 2023 | Regulates relations in the field of development and protection of green spaces of urban and rural localities in order to ensure the right of every person to a healthy and aesthetically pleasing environment. |
| Law no. 439/1995 on the animal kingdom | 24 Mar. 2023 | Regulates relations in the field of protection and use of wild animals, which live naturally on land, in water, in the atmosphere or in the soil , permanently or temporarily populating the territory of the republic. |
| Law no. 325/2005 on the Red Book of the Republic of Moldova | 25 Apr. 2022 | Restoration of extinct, critically endangered, endangered, vulnerable, rare and undetermined species of plants and animals, included in the Red Book of the Republic of |

| Name of Act | Last Amended | Description |
|---|---|---|
| | | Moldova, in order to prevent their disappearance and ensure the conservation of their genetic background, establishes the legal bases for keeping the Red Book, the attributions of public authorities at all levels and of scientific institutions in the field. |
| Law No. 209/2016 on waste | 07 June 2023 | It establishes the legal basis, the state policy and the necessary measures for the protection of the environment and the health of the population by preventing or reducing the adverse effects determined by the generation and management of waste and by reducing the general effects of the use of resources and increasing the efficiency of their use. |
| Law No. 10/2009 on state surveillance of public health | 02 July 2023 | Regulates the organisation of the state surveillance of public health, establishing general public health requirements, rights and obligations of natural and legal persons and way of organisation of the state surveillance system of public health. |
| Law no. 91/ 2007 on delimitation of public property | 26 Dec. 2022 | Consolidates the legal framework in order to delimit public property, ensure the right of ownership and the efficient use of the public property of the state, of the public property of the administrative-territorial units of the first and second level |

**Biodiversity Legislation**

- Forest Code no. 887/1996
- Law no. 1515/1993 on environment protection
- Law on the animal kingdom no. 439/1995
- Law no. 1102/1997 on natural resources
- Law no. 1538/1998 on the funding of state protected natural areas
- Law no. 591/1999 on green spaces in urban and rural communities
- Law no. 1041/2000 on improving degraded lands by afforestation
- Law no. 325/2005 on the Red Book of the Republic of Moldova
- Law on vegetal kingdom no. 239/2007
- Law no. 94/2007 on the ecological network
- Law no. 91/ 2007 on land which is public property and its delimitation.

The **main strategic documents on biological diversity** are:

1. Environmental Strategy for 2014-2023 and the Action Plan to enforce it, approved by the Decree of the Government no. 301/2014;
2. National Forest Extension and Rehabilitation Programme for the period 2023-2032 and the Action Plan for its implementation for the period 2023-2027, approved by GD no. 55/2023;
3. National Strategy for Agricultural and Rural Development for the years 2023-2030, approved by GD no. 56/2023; and
4. Strategy for the sustainable development of the forestry in the Republic of Moldova, approved by the Decision of the Parliament no.350/2001.

The **National Forest Extension and Rehabilitation Program for the period 2023-2032**[6] could reach this figure and contribute to reducing emissions of pollutants in the atmosphere and greenhouse gases requested by the international community. The future vision is to create or rehabilitate forests in such a way as not to diminish the established indicators. Through the implementation of this Programme, it aims to obtain diversified forests, respecting the balance between the specific composition/structure and edaphic/climatic conditions, which will achieve favourable production indices (optimal biodiversity).

At **sustainable national policy level,** the following key documents are relevant.
The water and sanitation policy is formulated in the **Water supply and sanitation strategy (2014 - 2030),** approved by Government Decision no. 199 of March 20, 2014 (with respective addendums). The general objective of the Strategy is to ensure the gradual access to safe water and adequate sanitation for all localities and population of the Republic of Moldova, contributing to the improvement of health, dignity and quality of life and economic development of the country. Based on the general objective, three specific objectives are formulated: a) improving the management of public water supply and sanitation services; b) planning and development of public water supply and sewerage systems in order to increase the level of population access to high quality services; c) harmonization of national legislation in the field of water supply and sanitation in accordance with EU standards and international commitments.
Water and health policy measures are provided by the **National Program for the implementation of the Protocol on Water and Health in the Republic of Moldova for the years 2016-2025,** that was approved by Governmental Decision no. 1063 of 16.09.2016. The overall objective of this Program is to improve the quality of life of the population and access to safe drinking water and improved sanitation by planning the necessary measures to ensure the achievement of the target indicators of the Water and Health Protocol. The specific objectives of the Program are the following: 1) ensuring by 2025 the distribution of safe drinking water in 100% institutions for children and reducing up to 20% of drinking water samples that do not comply with the basic chemical parameters and 5% with the microbiological parameters; 2) reduction by 20% by 2025 of the number of epidemic outbreaks of infectious diseases and the incidence of water-borne diseases; 3) ensuring the access to sustainable drinking water systems in 100% institutions for children and the access of the general population to aqueduct systems up to 75% by 2025; 4) ensuring by 2025 in proportion of 100% the population's access to improved sanitation systems, including up to 50% to sewerage systems; 5) increasing the performance levels of collective water supply, sanitation and other systems; 6) increasing the degree of application of recognized good practices in the field of integrated water management and water supply and sanitation; 7) reduction by 50% of discharges of untreated wastewater, as well as reduction of discharge of untreated rainwater into natural receptors; 8) improving the management of sludge and the quality of treated wastewater from centralized sewerage systems or other sanitation systems; 9) ensuring adequate management to improve the quality of water used as drinking water sources; 10) improving the closed water management generally available for bathing; 11) increasing the degree of identification and remediation of highly contaminated lands; 12) increasing up to 80% of the share of the population that possesses relevant knowledge on drinking water safety, hygiene and health.

The key policy document within the healthcare sector regulation is the **National Public Health Strategy for 2014-2020** (approved by the Government Decision no. 1032 from December 20, 2013) which is based on various international and national documents. The Framework Policy of the World Health Organization "Health 2020". with the purpose of supporting the interactions of the Government and the society in order to significantly improve the health and well-being of the population, reduction of inequalities in the field of health, consolidation of public health. As a priority, the Strategy will pursue the implementation of the Post-2014 Action Program of the International Conference on Population and Development and the post-2015 Agenda for Sustainable Development.

[6] GD no. 55/2023: https://gov.md/sites/default/files/document/attachments/subiect-02-nu-1012-mm-2022_1.pdf

**National Environmental Strategy for 2014-2023** (GD no. 301of 24.04.2014) is the main document of long-term strategic planning which establishes the strategic framework on the environment protection, including protection of human health and the environment from adverse effects caused by pollutants. A new draft of Environmental strategy is ready for period 2023-2030 and soon will be adopted by GoM.

**National Waste Management Strategy 2013-2027** (GD no 248 of 10.04.2013) establishes the strategic vision of waste management until 2027 as an integrated system, economically efficient and ensuring protection of human health and environment. Inter alia, the Strategy aims to promote separate waste collection and treatment for each type of waste, particularly toxic and hazardous waste. The strategy provides general information regarding with construction and demolishing waste and conditions of its management.

**Development Strategy with reduced emissions of the Republic of Moldova until 2030** (Government Decision no. 1470 as of December 30, 2016) is a strategic document that allows the Republic of Moldova to orient towards a low carbon economy and to achieve the targets mentioned the document "Intentional determined national contribution" through green sustainable development, based on the socio-economic priorities of the country's development.
Also, this Strategy supports the achievement of sustainable development objectives, providing a national strategic context to the mitigation efforts for which the country receives international support. The specific objective 1 of the Strategy is to reduce, until 2030, the GHG emissions from the energy sector by 74% (unconditional) and up to 82% (conditioned) compared to 1990 level.

**National Strategy on Energy Efficiency** until 2030 (GD no. 102 din 05.02.2013) and **National Energy Efficiency Program** for 2011-2020 (GD no. 833 of 10.11.2011) are key policy documents that look at measures that country will take regarding these future CO2 emission limits. It is expected, that in the next decade, 2021-2030, carbon capture and storage technology will have to prove economically viable in order to be allowed to actively enter the market, thus substantially altering the structure, values, prices and costs, of fuel for the latest technologies. Between 2021-2030, smart grid technologies and equipment will clearly prove to be economically viable and will become a de facto standard for the electricity industry. This type of structuring of the energy system will greatly change the existing approaches of the topologies, balancing, measurement, monitoring and energy mix of the system. All these changes will act in favor of the assimilation of increasing quotas of electricity from renewable sources.

Under the social and equal opportunities agenda, the Government developed the **National Strategy on Gender Equality 2017-2021** (GD no. 259 of 28.04.2017) **and a Strategy on Violence Against Women and in family 2018-2023** (GD no. 281 of 03.04.2018). The aim is to response to gender-based violence through improving quality of services for survivors and prevention of the violence.
In mean time, Government approved a **National Youth Development Strategy 2020 and a Youth Gap Index** tool for mainstreaming youth priorities, although there remain gaps in data and weaknesses in monitoring youth policies.

**Prut River basin management**

Latest legal development of importance for RBMP Republic of Moldova, as an EU associated country, has the responsibility to harmonize the water legislation according to the EU WFD. The main aim of the EU WFD consists of reaching the good status of all waters through prevention of deterioration and ensuring long-term sustainability of water uses. At the same time, WFD further provides an innovative approach in terms of water resources management approach based on river basins, taking into account the natural boundaries of the watershed. At the national level, adaptation and harmonization of the EU WFD is reflected in the Water Law of the Republic of Moldova that has been adopted on 23.12.2011 and enforced in 26.10.2013. Thus, the objectives of both the WFD and the Water Law of the Republic of Moldova lie on the RBMP development and implementation.

RBMP -Prut-Black Sea was coordinated by the District Committee at its April 4, 2018 meeting. The first cycle of the RBMP (for the period 2018-2023) for the DPBS RBD was approved through the Government Decision Nr. 955 on October 3, 2018. Now the new RBM Plan is prepared for next period.

### *Protection of waters: Prut River.*

The LAW No. 440 from 04-27-1995 regarding areas and protection sheets of the waters of rivers and water basins with the last changes in force in 6.09.2023 stipulates that:

- ✓ The width of the water protection zones of the Dniester, Prut and Danube rivers is at least 1000 meters.
- ✓ In the respective protection zones, it is allowed to set up temporary quays for the purpose of mooring ships, embarking and disembarking people, loading, unloading and storing goods, carrying out economic activities and performing customs clearance operations.
- ✓ In the water protection areas of the Dniester, Prut and Danube rivers, the construction and development of roads that ensure the connection between the temporary quays and public roads is allowed.
- ✓ The width of the riparian sheets for water protection is established, depending on the length of the rivers, for Prut river is at least 100 meters.
- ✓ The placement and construction of objectives of any purpose within the perimeter of the riparian sheets for water protection will be allowed only after establishing the dimensions of the sheets and determining the manner of their arrangement.

In the water protection zones it is prohibited:

a) applying pesticides on strips with a width of 300 meters from the edge of the riparian slope of the bed;

b) location of farms and livestock complexes;

c) the construction, location and operation of warehouses for the storage of mineral fertilizers and pesticides, objects for the preparation of pesticide solutions and the supply of these solutions, secondary processing enterprises of paper and pulp, chemical enterprises, tanneries (including enterprises for the primary processing of raw hides ), waste water collectors from farms and livestock complexes;

d) distribution of land for the storage of household and production waste;

e) cutting of trees and shrubs (with the exception of cutting for care, hygiene, ensuring safe navigation and/or the visibility of terrestrial navigable signals, conservation and ecological reconstruction on parquets with an area of up to 1.0 ha, if the joining deadline is respected and ecological conditions favorable to the regeneration of basic species are created);

In the water protection zones, it is prohibited, without written coordination with the central authority authorized with the management of natural resources and the protection of the environment and with the central authority for health, carried out on the basis of the positive opinion of the state ecological expertise of the documentation regarding the evaluation environmental impact and project documentation:

a) the construction, location and operation of oil product warehouses and petrochemical enterprises of national interest, fueling stations, boiler rooms, technical service points and washing of equipment and means of transport;

b) construction of sewage collectors and waste water treatment facilities. In cases where their location outside the water protection zones is impossible (due to the construction conditions, the configuration of the land or for other reasons), their construction is allowed as an exception, provided that measures are taken to prevent the pollution of rivers and water basins;

c) carrying out the works of plugging the lakes in the meadow and the abandoned arms, carrying out the works to regularize the course of the river (with the exception of the works to maintain the navigable channel), the installation of communications, the execution of other works that negatively influence the quality of the water and the state of the aquatic objectives.

**EU integration:**

The Association Agreement between the European Union and the European Atomic Energy Community and their Member States and the Republic of Moldova was signed on June 27, 2014. The Agreement was ratified by the Parliament of the Republic of Moldova on July 2, 2014 and by the European Parliament on November 13, 2014.

Republic of Moldova signed the EU accession application on March 3, 2022 and it was approved by EU Council on June 23, 2022.

In November 2023, the European Commission issued a recommendation to open accession negotiations with Moldova. In December 2023, EU leaders decided to open accession negotiations with Moldova and invited the Council to adopt the negotiation framework once the relevant steps set out in the Commission's report were taken. In December 2023, EU leaders (Council) decided to open accession negotiations.

**International environmental treaties to which the Republic of Moldova is a Party**:

1. Convention on long-range transboundary air pollution (Geneva, November 13, 1979)
2. Convention for the Protection of the Ozone Layer (Vienna, March 22, 1985):
3. Convention regarding environmental impact assessment in a transboundary context (Espoo, February 25, 1991);
• Protocol on strategic environmental assessment (Kiev, May 21, 2003)
4. Convention on the Transboundary Effects of Industrial Accidents (Helsinki, March 17, 1992):
5. Convention on access to information, justice and public participation in environmental decision-making (Aarhus, June 25, 1998):
6. Basel Convention on the Control of Transboundary Transport of Hazardous Wastes and their Disposal (Basel, March 22, 1989)
7. Convention on Biological Diversity (Rio de Janeiro, June 5, 1992):
8. Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, March 3, 1973)
9. Convention on the Conservation of Migratory Species of Wild Animals (Bonn, June 23, 1979)
• Agreement on the Conservation of African-Eurasian Migratory Water birds (The Hague, 16 June 1995)
10. Convention to Combat Desertification in Countries Severely Affected by Drought and/or Desertification (Paris, June 17, 1994)
11. Convention on the Prior Informed Consent Procedure Applicable to Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam, September 10, 1998)
12. Convention on Persistent Organic Pollutants (Stockholm, May 22, 2001)
13. Framework Convention on Climate Change (New York, May 9, 1992)
• Kyoto Protocol (December 11, 1997)
• The Paris Agreement (April 22, 2016)
14. Convention on the Conservation of Wild Life and Natural Habitats in Europe (Bern, September 19, 1979)
15. Convention on the European landscape (Florence, October 20, 2000)
16. Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, February 2, 1971)

**International and regional human rights treaties ratified by the Republic of Moldova**:

• Universal Declaration of Human Rights (adopted in 1948)
• International Covenant on Civil and Political Rights (adopted in 1966, ratified by the Republic of Moldova in 1990)

• International Covenant on Economic, Social and Cultural Rights (adopted in 1976, ratified by the Republic of Moldova in 1990)
• International Convention on the Elimination of All Forms of Racial Discrimination (adopted in 1965, ratified by the Republic of Moldova in 1993)
• Convention on the elimination of all forms of discrimination against women (adopted in 1979, ratified by the Republic of Moldova in 1994)
• Convention on the Rights of the Child (adopted in 1989, ratified by the Republic of Moldova in 1993)
• UN Convention Against Torture (adopted in 1984, ratified by the Republic of Moldova in 1995)
• European Convention for the Protection of Human Rights and Fundamental Freedoms (adopted in 1950, ratified by the Republic of Moldova in 1997)
• Revised European Social Charter (adopted in 1966)
• Convention on the Rights of Persons with Disabilities (adopted in 2006, ratified by the Republic of Moldova in 2010)

## 3.7. ESIA process - National Requirements

It is important to mention that Article 37 of the Constitution of the Republic of Moldova guarantees the right to a healthy environment. The current legislation contains a series of regulations governing water supply and sewerage services.

The most relevant national legal requirements for this project relate to the following aspects:

- Environmental impact assessment and environmental protection
- Access to information and public participation;
- Social, health and safety legislation and regulation;
- Land acquisition; and
- Permission (permits) for construction.

The basic legal framework for the development of specific legislation and instructions in the field of environmental protection is provided in the Law No. 1515 of 16.06.1993 on environmental protection.

Law No. 86 (2014) on Environmental Impact Assessments EIA transposes Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment. The objective of this law is to define the procedures and methods to be applied in the environmental impact assessment process on certain types of public and private planned activities, that may have a significant impact on the environment in the Republic of Moldova or in other states.

Revisions to this Law in 2022 come into force in November 2023. These mainly address changes and restrictions to cover all the parts of the economy, ensuring that biodiversity is protected. In addition, this Law comes in effect, and the Law of ecological expertise is abrogated.

In Moldova the procedures for issuing an Environmental permit and the Environmental Impact Assessment (EIA), procedure are stipulated by following acts:

⇒ Law on environmental impact assessment no. 86 of 29-05-2014.

⇒ Other relevant implementation bylaws.

Following to the applied environmental appraisal practice, all projects/planned activities can be conventionally divided into 3 categories:

⇒ **1st category** - projects which will have significant impacts on the environment. They are specified in Annex 1 of the Law No. 86/2014 – EIA mandatory (is applicable to complex and potentially

dangerous for environment projects/ planned activities which could result in significant impacts and aims to prevent and mitigate impacts even on the projects' design stage).

⇒ **2nd category** - projects which will have less significant impact on environment as compared to the 1st category of the projects. These projects are listed in the i) Annex 2 to the law on EIA, yet, decision that full EIA is not needed is made by the Environmental Agency, is presented in Annex 2 to the law on EIA. In case, If Environmental Agency decides that for the activities specified in Annex 2, EIA is not required

⇒ **3rd category** - the project that is not in Anne1&2 and is not a subject of EIA Law but need an environmental chapter in the FS and/or DD.

This category of the projects requires ecological justification of project activities to be presented in so called the Environmental Protection chapter of the project design documentation, and which have to contain information on potentially affected environment as well as outline main potential environmental impacts and mitigation measures.

The decision on necessity of conducting EIA is made by the Environmental Agency on the basis of evaluation of the Statement on the planned activity submitted by the initiator (Preliminary EIA). The initiator, which is planning to implement activities specified in Annexes 1 or 2 to the law on EIA shall submit a written Statement to the Environmental Agency. Statement shall be submitted after carrying out the feasibility study of the planned activity and shall contain information on the planned activities and at least two alternative decisions regarding the location and type of technologies used, indicating the possible environmental, social and economic impacts. Within 5 days from the date of the Statement submission, Environmental Agency shall publish information on it on its official webpage. On the basis of Statement, the Environmental Agency carries out a preliminary assessment which to be made within 30 working days. Based on the results of the preliminary assessment, the Environmental Agency makes one of the following decisions: (a) the proposed activity is subject to an environmental impact assessment in a transboundary context; (b) the proposed activity is subject to an environmental impact assessment at the national level; and (c) no environmental impact assessment is required. Developed EIA is examined by the Environmental Agency, and once its structure and content fully correspond to the established EIA principles and requirements, it issues the environmental permit. The scheme of EIA procedure is presented in the figure 11 below.

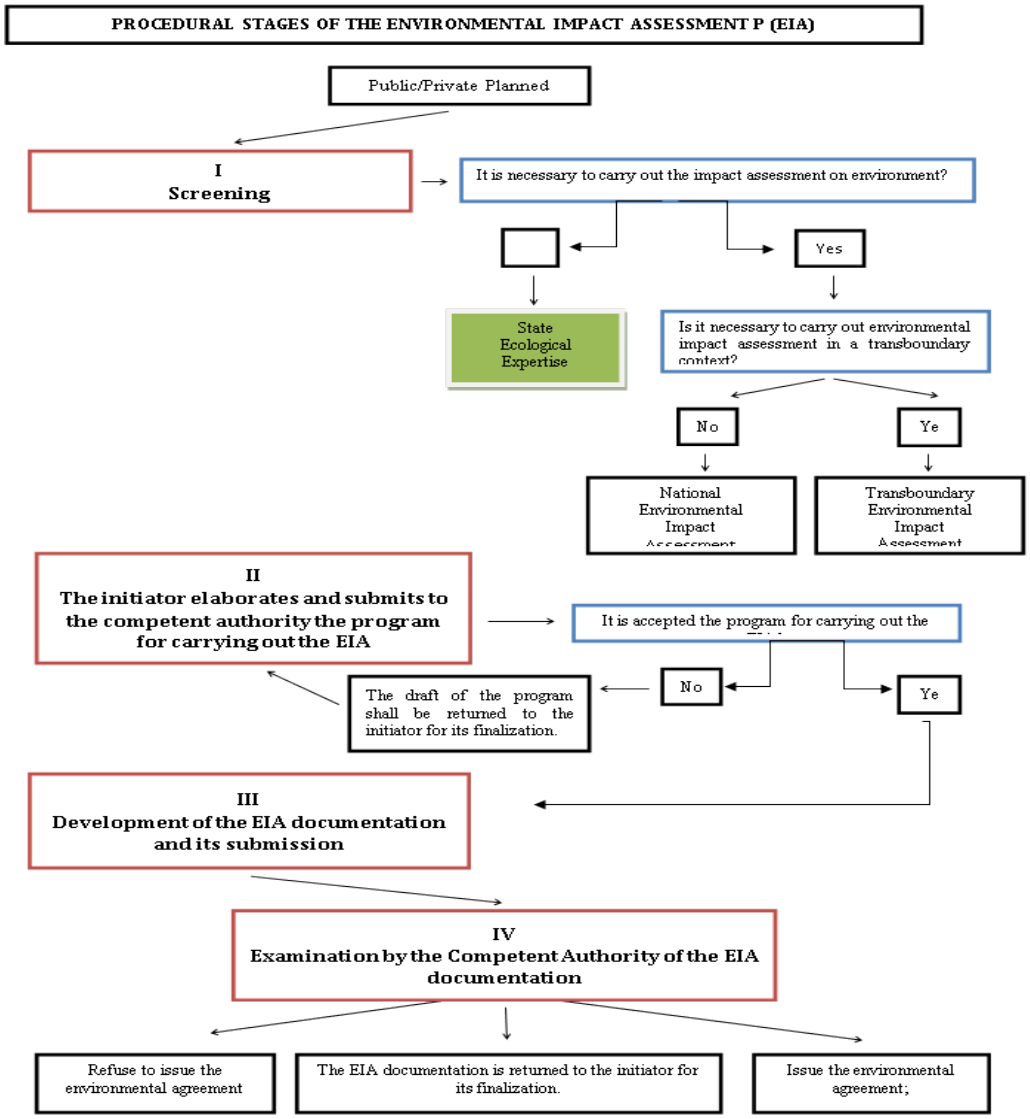



*Figure 3: Scheme of EIA procedure according MD Law on EIA nr. 86 / 2014*

## 3.8. WB and international legislation

The Environmental and Social Framework (ESF) was approved by the Board of Executive Directors on August 4, 2016. It consists of a Vision for Sustainable Development; ten Environmental and Social Standards (ESSs), which set out the requirements that apply to Borrowers; an Environmental and Social Policy for Investment Project Financing (IPF), which sets out the requirements that apply to the Bank; and an Environmental and Social Directive/Procedure for Investment Project Financing (IPF) and a Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups. It applies to all IPF projects initiated on or after October 1, 2018.

The ESF supports green, resilient and inclusive development by strengthening protections for people and the environment and making important advances in areas such as labor, inclusion and non-discrimination, gender, climate change, biodiversity, community health and safety, and stakeholder engagement. It uses a risk-based and proportionate approach that applies increased oversight and resources to complex projects and allows for greater responsiveness to changes in project circumstances through adaptive risk

management and stakeholder engagement. It promotes integrated environmental and social risk management.

The ESF places an emphasis on strengthening national environmental and social management systems and institutions, and supporting Borrower capacity building. It promotes enhanced transparency and stakeholder engagement through timely information disclosure, meaningful and ongoing consultations throughout the project life cycle, and responsive grievance mechanisms to facilitate resolution of concerns and grievances of project-affected parties.

Out of ten ESS, only **seven apply to the Moldova Rural Connectivity Project** and establish the conditions that the Borrower and the project will meet throughout the project life cycle.

| ESS | | Relevance to the MRCP |
|---|---|---|
| ESS1 | Assessment and Management of E&S Risks and Impacts | The environmental and social assessment will be based on current information, including a description and delineation of the project and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures. The assessment will evaluate the project's potential environmental and social risks and impacts, with a particular attention to those that may fall disproportionally on disadvantaged and/or vulnerable social groups; examine project alternatives; identify ways of improving project selection, sitting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project using EFS instruments – screening checklist, ESMP, SEP, LMP, RPP, etc. |
| ESS2 | Labor and Working Conditions | This standard guides the creation of sound worker-management relationships. The primary labor risk is the risk of informal work. The risks of unpaid and underpaid work, work overload, poor terms and conditions of engagement, lack of occupational health and safety measures, and denied access to social security, pension or health insurance are associated with informal work. Labor Screening and Compliance Checklist, and Monitoring and Evaluation procedures have been developed to be included as mandatory in the tender documentation providing compliance of third parties i.e. different contractors to the ESS2 requirements. |
| ESS3 | Resource Efficiency and Pollution Prevention and Management | This standard sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle. Considering that most of the activities involve construction works, the major risk is that Contractors will not be aware of best practices to avoid or minimize pollution from project activities or avoid or minimize adverse impacts on human health and the environment. The site-specific ESMP will guide contractors to implement adequate pollution prevention and management measures. |
| ESS4 | Community Health and Safety | This ESS sets out the requirements to avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials and to have in place effective measure to address emergency events. The works anticipated in this project will be carried out mostly in remote or publicly restricted areas and will not employ use or generation of hazardous substances and waste. The main risk associated with the project is related to workers health and safety that is addressed by ESS2. |
| ESS5 | Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | ESS5 requirements cover the preparation and implementation of a resettlement framework or plan which will be developed and will set ground for: (i) general requirements such as eligibility classification, project design, compensation and benefits for affected persons, community engagement, grievance mechanism, planning and implementation; (ii) physical and economic displacement; (iii) collaboration with other responsible agencies or subnational jurisdictions; and (iv) technical and financial assistance. |
| ESS6 | Biodiversity Conservation and Sustainable Management of Living Natural Resources | The objectives of ESS6 is to: (i) protect and conserve biodiversity and habitats; (ii) apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity; (iii) promote the sustainable management of living natural resources; and (iv) support livelihoods of local communities through the adoption of practices that integrate conservation needs and development priorities. The applicability of ESS6 depends on the environmental and social assessment described in ESS1. |

| ESS | | Relevance to the MRCP |
|---|---|---|
| | | ESS6 requirements cover: (i) general requirements including assessment of risks and impacts, conservation of biodiversity and habitats (modified, natural, and critical habitats), legally protected and internationally recognized areas of high biodiversity value, invasive alien species, and sustainable management of living natural resources; and (ii) primary suppliers.<br>Preliminary ESIA will ensure that no activities with potential negative impacts are eligible for funding in natural or critical habitats. In case of activities to be funded by the project and to be implemented in modified habitats, the project-level will present requirements to avoid or minimize the respective impacts on biodiversity and implement mitigation measures as appropriate. |
| ESS10 | Stakeholder Engagement and Information Disclosure | This ESS guides the inclusion of relevant stakeholders in the project lifecycle. In line with the requirements of this ESS, a Stakeholder Engagement Plan including a Grievance Mechanism has been developed for this project. The main risk is associated with appropriate implementation of SEP. |

**The WB project risks assessment and categories**:

The World Bank, in its project management practices, assesses risks comprehensively to ensure successful implementation. While specific methodologies and categorizations might vary based on project types and contexts, the World Bank approaches risk assessment.

**Risk Assessment Methodologies**:

- Comprehensive Risk Identification: The World Bank conducts in-depth analysis and engages stakeholders to identify risks comprehensively at various project stages.

- Probabilistic and Impact Analysis: Use both qualitative and quantitative methods to assess risks, considering their likelihood of occurrence and the potential impact on the project's objectives.

- Sensitivity Analysis: Identifying how changes in certain variables or factors might affect the project's outcomes.

The different methods and tools used by the Borrower to carry out the environmental and social assessment and to document the results of such assessment, including the mitigation measures to be implemented, will reflect the nature and scale of the project
Risk Mitigation Strategies:
The World Bank typically develops tailored strategies to address identified risks.

By systematically assessing risks across these categories, the World Bank aims to mitigate potential threats and enhance the likelihood of successful project outcomes. WB continuously monitor and reassess risks throughout the project lifecycle to adapt their strategies as needed.

Under the ESS implementation this risk is mitigated.

### ESS 1 - Assessment and Management of Environmental and Social Risks and Impacts

ESS1 sets out the Client's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs).

The environmental and social assessment will be based on current information, including a description and delineation of the project and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures. The assessment will evaluate the project's potential environmental and social risks and impacts, with a particular attention to those that may fall disproportionally on disadvantaged and/or vulnerable social groups; examine project alternatives; identify ways of improving project selection, sitting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project.
Within ESS1, the Borrower is obliged to:

- Conduct an E&S assessment of the propose subproject, including stakeholder engagement,
- Based on the E&S assessment, prepare site-specific ESMPs for each subproject financed under the Project.
- Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10,
- Develop an Environmental and Social Commitment Plan (ESCP) and implement all measures and actions set out in the legal agreement including the ESCP,
- Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs.

According to ESS1 the Client will manage environmental and social risks and impacts of the project throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts.

### ESS 2 – Labor and Working Conditions

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to **project workers** including fulltime, part-time, temporary, seasonal and migrant workers.
The term "project worker" is related to:

a) people employed or engaged directly by the Borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the project (direct workers);
b) people employed or engaged through third parties to perform work related to core functions of the project, regardless of location (contracted workers);
c) people employed or engaged by the Borrower's primary suppliers (primary supply workers); and
d) people employed or engaged in providing community labor (community workers).

ESS2 objectives are:

- To promote safety and health at work.
- To promote the fair treatment, nondiscrimination and equal opportunity of project workers.
- To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers.
- To prevent the use of all forms of forced labor and child labor.
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.
- To provide project workers with accessible means to raise workplace concerns.

The Borrower developed and will implement written labor management procedures (LMP) applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures will address the way in which this ESS will apply to different categories of project workers including direct workers, and the way in which the

Borrower will require third parties (contracted workers) to manage in accordance with ESS2. In addition, a Grievance Redress Mechanism for workers will be developed.

### ESS 3 – Recourse and Efficiency, Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle.
ESS3 objectives are:

- To promote the sustainable use of resources, including energy, water and raw material.
- To avoid or minimize adverse impact on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short and long-lived climate pollutants.
- To avoid or minimize generation of hazardous and non-hazardous waste.
- To minimize and manage the risks and impacts associated with pesticide use.

Besides, the Borrower will avoid the release of pollutants or, when avoidance is not feasible, minimize and control the concentration and mass flow of their release using the performance levels and measures specified in national law or the World Bank Group Environmental, Health and Safety Guidelines[7], whichever is most stringent. This applies to the release of pollutants to air, water and land due to routine, non-routine, and accidental circumstances, and with the potential for local, regional, and transboundary impacts. Pollution prevention and management includes management of:

- Air pollution
- Hazardous and non-hazardous waste
- Chemicals and hazardous material
- Pesticides

The Assessment of risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste are included within scope of the Preliminary E&S assessment, and ESMPs as relevant.

### ESS 4 – Community Health and Safety

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities. ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.
Objectives of ESS4 are the following:

- To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and non-routine circumstances.
- To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams.
- To avoid or minimize community exposure to project-related traffic and road safety risks, dis-eases and hazardous materials.

[7] World Bank Group Environmental, Health and Safety Guidelines (EHSG), available at: https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/EHS-Guidelines/

- To have in place effective measures to address emergency events.
- To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.

### ESS 5 – Land Acquisition, Restriction on Land Use and Involuntary Resettlement

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.
The objectives of ESS5 are:
• To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.
• To avoid forced eviction.
• To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
• To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure. • To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.
• To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

ESS5 requirements cover the preparation and implementation of a resettlement framework or plan which will set ground for:

⇒ general requirements such as eligibility classification, project design, compensation and benefits for affected persons, community engagement, grievance mechanism, planning and implementation;
⇒ physical and economic displacement;
⇒ collaboration with other responsible agencies or subnational jurisdictions; and
⇒ technical and financial assistance.

### ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is applicable to all projects that potentially affect biodiversity or habitats, either positively or negatively, directly or indirectly, or that depend upon biodiversity for their success.
The objectives of ESS6 is to:

⇒ protect and conserve biodiversity and habitats;
⇒ apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity;
⇒ promote the sustainable management of living natural resources; and
⇒ support livelihoods of local communities through the adoption of practices that integrate conservation needs and development priorities.
⇒ avoid or minimize generation of hazardous and non-hazardous waste

The applicability of ESS6 depends on the environmental and social assessment described in ESS1.

The Borrower is obliged to avoid adverse impacts on bio-diversity and habitats. When avoidance of adverse impacts is not possible, the Borrower will implement measures to minimize adverse impacts and restore biodiversity in accordance with the mitigation hierarchy provided in ESS1 and with the requirements of this ESS. Where significant risks and adverse impacts on biodiversity have been identified, the Borrower will develop and implement a Biodiversity Management Plan[8]. A Biodiversity Management Plan (BMP) includes key biodiversity objectives, activities to achieve the objectives, an implementation schedule, institutional and gender-inclusive responsibilities, cost and resourcing estimates.

### ESS 10 Stakeholder Engagement and Information Disclosure

This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

The client will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts.

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks.

Stakeholder engagement is most effective when initiated at an early stage of the project development process and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts. In consultation with the Bank, the Borrower has developed a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts of the ESS triggered for this Project.

## 3.9. A gap analyses WB vs national legislation:

| Social an stakeholder risk | WB requirements | National legislation | Description | GAP in national legislation |
|---|---|---|---|---|
| a. Traffic flow disruption during construction | To develop measures in the TMP, ESMP. MAFP | Law No. 131 from 07-06-2007 On road safety | The TMP has to be coordinated with road police (National Public Security Inspectorate) | The focus is on scheme of diversion roads and installing the road temporary signs. There are no provisions related with pedestrian protection, public consultations, compensation procedures, etc. |
| b. Traffic accidents | To develop measures in the TMP, ESMP. MAFP, OHSP, ESIRT report (annex 7) | Law No. 131 from 07-06-2007 On road safety. Prosecutor Code Administrative Code | The TMP has to be coordinated with road police (National Public Security Inspectorate). | The prevention measures related with pedestrians are weakly described. |

[8] Depending on the nature and the scale of the risks and impacts, to address biodiversity conservation as an integral aspect of sustainable development within the project, the Biodiversity Management Plan may be a stand-alone document or it may be included as part of the Environmental and Social Commitment Plan prepared under ESS1.

| Social an stakeholder risk | WB requirements | National legislation | Description | GAP in national legislation |
|---|---|---|---|---|
| c. Disturbance to existing properties frontage, or public utilities | ESMP, MAFP | Law no. 163 of 09.07.2010 on authorization of construction works,<br>Law 303, On Water supply services | As part of the construction of a water supply or sewerage project, there are likely to be impacts on existing property frontages or on public utilities such as electricity supplies. This types of impacts involve costs, whether to individuals or to the community. | Usually, the people have to informed about disturbance in advance and for the period of absence of services. Many time this is done just formally and there a delay in reconnections. |
| d. Resettlement | RPF, RAP according to ESS5 requirements | The Law on Expropriation for Reasons of Public Use No. 488 of 7 August 1999 or Eminent Domain,<br>Land Code No. 828-XII, 1991 with amendments | The basic principles of the Moldovan civil legislation are: recognition of equality among the parties to relationships regulated by it, inviolability of ownership, freedom of contract, prohibition to interfere with private affairs, free exercise of civil rights, guaranteed remedy of violated rights and judicial protection of the same | If the PAPs do not agree with the procedures and/or compensation packages the court procedures can take years till the final decision will be apply. |

# 4. ENVIRONMENTAL & SOCIAL BASELINE INFORMATION

### *4.1.1. Ungheni BCP area*

***Social and community interaction aspects***
The closest locality to the future bridge and BCP Ungheni-Ungheni is Zagarancea commune.

***Zagarancea***
The commune of Zagarancea (Elizavetovca, Semeni and Zagarancea localities) is situated at a distance of about 4 km from Ungheni and 117 km from Chisinau, bordering Petresti, Todirești, Manoileşti and Ungheni. The village of Zagarancea has an area of approximately 12.17 km$^2$ and a perimeter of 19.31 km. The village of Semeni has an area of 3.88 km$^2$ and a perimeter of 18.4 km.
According to the 2014 census, the population of the commune is 3,299 inhabitants. Direct distance to the Ungheni city is 6 km away. Direct distance to the Chisinau city is 124 km away.

*Table 5-1: Number of populations with usual residence, by sex, at the level of territorial administrative unit of the first level (village/commune, city/municipality), at the beginning of 2023, people*[9]

| Municipality/district | Village/municipality | Both sexes | of which: | |
|---|---|---|---|---|
| | | | Men | Women |
| UNGHENI district | ZAGARANCEA | 2743 | 1352 | 1391 |

Most of the inhabitants of the commune, work in the Ungheni town., which is a rational center and an important city in the sphere of industry and services in Moldova. The inhabitants of the locality deal with agriculture or some of them are away to work abroad seasonally/temporarily.

***Ungheni***

The city of Ungheni is one of the most active cities in Moldova and attracts financial resources from international projects, grants and investments in economic development and infrastructure. The city is located on international transit routes to central Europe, having excellent conditions for the development of various businesses and for environmentally friendly agriculture. The main obstacle to the development of the region is the lack of qualified personnel needed for the new market economy. Currently, about 1,250 companies are registered in Ungheni, most of them in the sphere of trade - 179, but also in other branches of the local economy such as: industry - 38, agriculture - 29, construction – 16

**Water supply system:** Currently, in the city of Ungheni, 30,269 inhabitants (connection rate to water supply services is 79%) and Zagarancea village 1,614 inhabitants (connection rate 83%) are connected to the existing water supply system, managed by JV "ApaCanal Ungheni"

**Sewerage networks:** The municipality of Ungheni is covered with sewerage networks in proportion to 56%. In recent years, more than 12 km of new networks have been built with European money. In 2022, one of the largest projects was completed, with more than 8 km of sewerage networks built in a very compact sector of Dănuteni. More than 55 million lei were invested. Currently, one year after the commissioning of the respective sewerage networks, those who have connected constitute about 25% of the total number of potential consumers.

**Wastewater treatment plant:** The WWTP was built about 60 years ago, at a distance of 13 km from the municipality of Ungheni, in Valea Mare. It is already outdated and does not meet the new standards and requirements. Another station is needed. In this sense, pre-feasibility and feasibility studies were developed. The City Hall constantly has that subject in its sights. He raised this issue including with the Government,

[9] NBS www.statistica.md

he is trying to identify funding sources. It must be known that enormous resources are required. ÎM "Apa Canal" does its best to keep all the equipment of this station in operation.

**About the investments of the last years:** Thanks to the EU4 Program Moldova: Key Regions, in the last 2-3 years it was possible to carry out several projects, which would improve the situation regarding the provision of water and sewage in Ungheni. A new main aqueduct was built on Națională street, the old one being very worn, so disturbances were recorded almost daily. The main artery that provides water supply to the Dănuțeni, Ungheni Deal, Ungheni Vale neighborhoods was also built. In addition, water losses have been significantly reduced. Thanks to the same Program, new sewer networks were built on 8 streets in the center and Berești-Vasilica. A new water reservoir was also built, with a capacity of 1000 cubic meters, which allows maximum security in terms of providing drinking water to the population of Ungheni. A pilot project was also implemented regarding the installation of 1000 water meters with remote reading in the Danuțeni sector, which is currently in the testing period.

**LPA consultation:** In September there was a conversation with the mayor of the locality, Gaviuc Vasile, regarding BCP and the access road. He mentioned that the population agrees and can't wait for BCP and the access road to be built to move faster in Romania, but also to have jobs and additional income. Regarding the affecting of citizens by purchasing land, he mentioned that a large part of them are not processed, others are managed by an economic agent, others are not registered. He knows the situation and the inhabitants also know the procedures directly or indirectly because some of the villagers were expropriated when the Ungheni bypass road was built, which passes through the territory of Zagarancea commune. The public consultations are scheduled when the draft document will be approved.

***Environmental baseline:***

**Relief , Geology and climatic conditions**

The relief is specific for the Central Plateau area of Moldova and is characterized by areas with gentle hills, wide valleys and the meadow of the river Prut. The average altitude is 65 meters above sea level. The main soils are chernozems, gray soils, forest soils and limestone. Cernozium predominates 75-80%. The quality of agricultural soils according to soil structure is 61 points. The reserve of humus in the soil layer reaches 1 meter. Raw materials for construction such as clay, sand, gravel extracted from open quarries are extracted from Ungheni district. The hydrological network totals 2,706 hectares with the Prut river being the main constituent. It flows along the entire length of the district and has a course of 80.3 km, with 9 tributaries and 132 ponds. For rural areas, groundwater is the main source of water and is extracted from approximately 6,170 wells (including 70 artesian) and 67 springs. The climate of Ungheni district is temperate-continental. Summer is hot and long, and the winter is mild, with an average annual temperature of 8-9°C. Precipitation varies between 500 and 650 mm. Zagarancea commune is situated in Garla Mare subbasin.

The town of Ungheni is located on the left slope of the middle sector of the Prut river valley, in the contact zone of the southern limit of the Middle Prut Plain with the Codrilor Plateau. That's why on relatively small distance in the transverse direction of the valley, the absolute altitudes vary from approx. 30 m in approaches the bed up to more than 300 m on the interfluve in the central-western Codrii. The river valley has evolved within a platform structural unit – the central-eastern part of the Moldavian Platform and it began to be carved with the retreat of the sea from the end of the Middle Sarmatian and the beginning Upper Sarmatian, about 10 million years ago. Immediately the valley was fragmented into the formation of marine sediments (Middle Sarmatian), made up of a complex of clayey rocks and marls with intercalations of sand, known in specialized literature as "clays of Anoint". The newest warehouses that appear on the territory of the city and in its surroundings are those of terraces, consisting of sands and gravels at the base, clays and loessoid clays at the top, where the alluvium from the Prut meadow is added. The terraces on which the city extends are part of the group the young terraces - I and II, which were formed in the Upper Quaternary, starting about 125 thousand years ago. In the Holocene, about 10 thousand years ago, the alluvium began to accumulate form the current meadow and soils.

The relief in the radius of the city and Zagarancea commune is slightly uneven with absolute altitudes between 40-55 m. Energy relief reaches low values between 10-15 m, a situation that does not favor the intense manifestation of processes of erosion and landslides.
From a seismic point of view, the city of Ungheni is influenced by earthquakes generated by the Vrancea outbreak, located in the Carpathian bend area. Taking into account this, as well as the composition of the geological substratum of the city territory, constructions and technical-building installations must fall within some special regulations provided for seismic areas.
As a result of recent climate changes, the southern part of the country is increasingly vulnerable to the phenomenon of desertification. It increased the frequency and intensity of climatic phenomena unfavorable: droughts, heat waves, hail, storms, etc., leading to considerable losses in agriculture.

The waters of the aquifer complex of Lower Sarmatian – Middle Sarmatian, stored in sands and marlish limestone, are exploited or have exploitation potential. But the water quality is unsatisfactory, especially in the compartment of fluoride concentration, which exceeds the allowable norms. In the context of water resources valorization, a major environmental problem persists related to the poor state of the wastewater treatment plant.

**Biodiversity - flora, fauna and protected areas**

The Zagarancea and Ungheni falls within the forest-steppe zone, which from a floristic point of view is part of the Pontic-Sarmatic province, at its contact with the Central European province. But since the city is located in the valley of the r. Prut vegetation has an azonal character. Along the riverbed dominate willow thickets and black poplar plantations. The meadow being capitalized is practically devoid of spontaneous vegetation. Green spaces in the city occupy 32.6 ha and 86.6 ha are part of the State Forest Fund. Very representative is the central park in the city with an area of 10 ha. In the past it was a nursery. Here are found practically all tree species representing spontaneous forest vegetation on the territory of the Republic of Moldova, including acclimatized species. Tree species are after a certain symmetry, forming separate rows or plots. The soil cover is part of the subregion of typical low-humiferous and carbonate chernozems of the steppe of the Middle Prut terraces. Alluvial, pond and meadow soils are developed in the meadow. They are suitable for practicing agriculture. Arable land owns most of the agricultural land. Risk factors: • illegal logging and poaching; • soil erosion/degradation; • climate change and increased desertification; • Epidemics.
The closest protected area on the Moldova is situated downstream at approximative 15 km - landscape reservation “Valea Mare” 373 ha.

**Forests**
The forest vegetation near the location is represented especially by spontaneous vegetation of shrubs and trees such as: willow, poplar, beech, rosehip, hawthorn, etc.
There are no portions of valuable forest in the project area that could be affected.
.
**The air quality and climate change aspects.**
The main contribution to background pollution is due to traffic, heating, dust and industrial pollution from Ungheni town. There is not important polluters in the area. Main traffic pollutant are coming from R1 road and vehicle from Ungheni town. Also, heating of houses and municipal buildings are the main source during the winter period.

According to FS several calculation and descriptions were made:

**Natural and climatic conditions**

The projected road belongs to the third climatic zone. The climate of the site area is moderate continental, the average annual rainfall for this area is 480-525 mm. The dominant wind directions are from the northwest, from the south predominantly in the summer period, and in winter from the north. The average annual temperature is 9°C, the maximum reaching the absolute value of +39°C, and the minimum of -

32.0°C - 34.0°C. . The maximum freezing depth of the earth in the most frosty winters is 80-85cm, the average 40-45cm. The highest decadal thickness of snow cover of 5% insurance, on open areas, is 15-20 cm, and on back areas 30-33 cm.

Geomorphologically, the road is located in the meadow of the Prut River, the left bank, the adjacent slope is a terrace of the Prut. The relief on the route of the road practically presents a flat area with a very small inclination towards the Prut river. Seismicity in this area – 7 degrees, Richter scale.

**Hydrological and hydraulic**

The hydrological study on the Prut River, in its hydrographic basin up to Ungheni, was carried out by Romanian specialists and coordinated with the Agency "Apele Moldovei". The drainage regime of the Prut River in this section was determined, the quota of the calculation water level, for the probability of exceeding 1%, is 40.32m, Baltic System. The hydraulic study that determined the hydraulic dimensioning of the bridge and the related hydrotechnical works was also carried out by Romanian specialists. The calculation water level of 40.32m is one of the reference data, which was used by Universcons SRL to determine the parameters and design the embankment of the access road to the bridge. The access road does not have related hydrographic basins, which would have required hydrological, hydraulic calculations, respectively the construction of works of art for rainwater drainage. The direction of drainage of all atmospheric precipitation is parallel to the axis of the road, their discharge is in the Prut.

**Detailed geotechnical study**

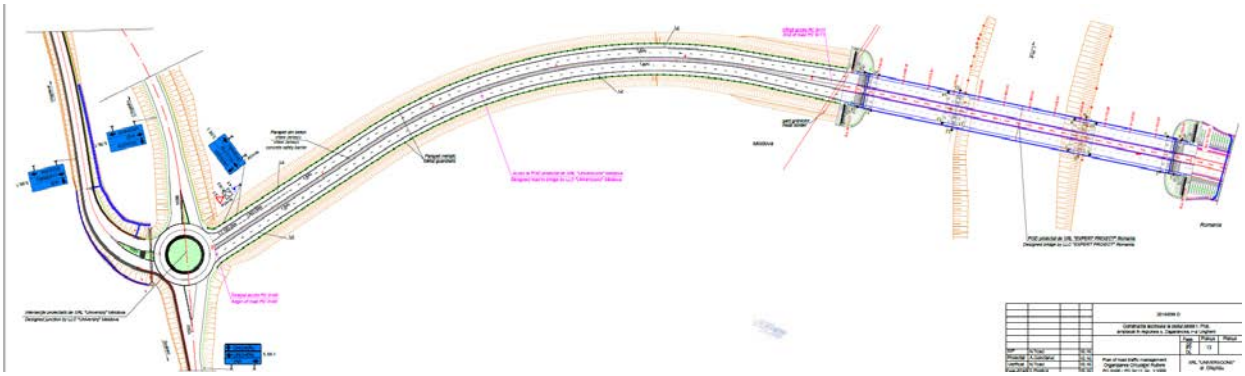
The detailed geotechnical study for the access road to the bridge was carried out by specialists SRL Universcons. In order to determine the lithology of the lands in the area of the access road location, 2 geotechnical surveys with depths of up to 3.0m above the land level were executed through drilling. At the same time, there were studied and analyzed the materials of the surveys executed by Romanian specialists for the connection of the bridge on the territory of the Republic of Moldova.

Drillings for the loan pit have not been executed, given that for the construction of the embankment of the access road to the bridge, lands from the borrow pit on the territory of the Todiresti administrative unit will be used, the project of which and these studies were elaborated within the project of the bypass road of the city. Ungheni.

The study was based on geological and geotechnical data obtained through direct field and laboratory investigations. The structure of the land on the site of the access road consists of soils, represented by dusty, lumpy clays, semi-hard consistency with carbonate inclusions. Groundwater was not detected at depths drilled by Universcons LLC specialists, but according to surveys conducted by Romanian specialists, they were intercepted at depths of 5.6-6.0m.

**Detailed topographic survey**

The detailed topographic study for the access road to the bridge was carried out by specialists SRL Universcons. The study includes the area between the location of the bridge on the territory of the Republic of Moldova and the place of intersection of the bypass road of the city. Ungheni with national road R1 sector Ungheni-Sculeni. The length and width of the area of topographic surveys is sufficient for the design of the works and allows highlighting the location and surfaces on which the proposed works will be carried out.



The absolute elevations, on the area of the lifts performed, vary from 37.5m to 41.8m. During the topographic works, it was verified and no existing public utility networks and installations were identified in the area where the execution works of the access road will be carried out

**Land cover study**

Within this study, the area of occupied land was calculated, assessing their cost within the limit of the expropriation corridor of the access road.

According to calculations, the area of occupied land is 2.33ha. The Design Institute for Territorial Organization (IPOT), according to the regulations in force, selectively determined the thicknesses and creditworthiness of the vegetation layer on the occupied lands, which served as a reference to the calculation of quantities and the estimation of the costs of landworks, also the calculation of the amount of compensation of landowners according to the area subject to expropriation for the cause of public utility and the unit value of compensation, in accordance with Laws No. 1308-XIII of 25.07.1997 and No. 488-XIV of 08.07.1999.

### *4.1.2. Leuseni area*

***Leuseni mayoralty***

It is composed of 2 villages: Leuşeni and Feteasca. The village is 44 km away from Nisporeni and 76 km away from Chisinau. The commune is bordered to the north by the village Cotul Morii, to the west by Romania and to the south by the village Calmaţui.

Leuseni commune can be divided into three parts: old village, new village and Feteasca village.

Landslides in 1998 destroyed part of the old village. This catastrophe led to the creation of a new village on the opposite side of the M1 road. Currently, the new village and the old village are inhabited.

Leușeni is located on two hills on the banks of the Prut river and is crossed by the Nîrnova stream. It is the first locality upon entering the Republic of Moldova at the Leușeni- Albița border crossing point .

The customs point, serves as a workplace for many villagers also the connection infrastructure as petrol stations and other public infrastructure. The agricultural land is that people use predominately for their income (where grain and grape crops predominate).

The number of populations with usual residence, by sex, at the level of territorial administrative unit of the first level (village/commune, city/municipality), at the beginning of 2023[10]

*People*

| Municipality/district | Village/municipality | Both sexes | of which: | |
|---|---|---|---|---|
| | | | Men | Women |

[10] Statistica.md

| | | | | |
|---|---|---|---|---|
| R-UL HINCESTI | LEUSENI | 1305 | 653 | 652 |

| General data about the locality | |
|---|---|
| *Total area* | 2839,37 ha |
| *Built-up area* | 240.67 ha |
| *including: - Leuseni* | 200.67 ha |
| - *Feteasca* | 40 ha |
| *Length of streets* | 25.6 km |

| Demographic and socio-economic data | | | |
|---|---|---|---|
| | *2004* | *2014* | *2020* |
| *Total population,* | 2323 | 2046 | 2006 |
| *including: - Leuseni* | 2166 | - | 1943 |
| - *Feteasca* | 157 | - | 63 |
| *Total households* | | | 624 (incl. 44 in Feteasca) |

| Social objects | | |
|---|---|---|
| | ***Secondary school*** | ***Kindergarten*** |
| *Number of children* | 203 | 98 |
| *Nr. of employees* | 34 | 20 |
| *Water source* | Fountain/probe | |
| *Indoor water network* | yes | |
| *Sewerage network int.* | yes | |
| *WWTP local* | yes | |
| *Cesspit* | - | |

| | ***City hall*** | ***Health center*** |
|---|---|---|
| *Number d employees* | *15* | *4* |
| *Water source* | Fountain/probe | |
| *Indoor water network* | yes | yes |
| *Indoor sewer network* | yes | yes |
| *Treatment plant* | yes | yes |
| *Cesspit* | - | - |

Centralized sewerage infrastructure is in process of construction. Also, the improvement of WWTP with a capacity of 200 m3 per day.

The kindergarten has an internal sewage system, including indoor toilets (4 sanitary points).

There is a waste water treatment plant built in 2017-2018 for wastewater from gymnasium, kindergarten, town hall and health center.

***Environmental baseline:***

**Relief , Geology and climatic conditions**

The relief is specific for the Central Plateau area of Moldova and is characterized by areas with gentle hills, wide valleys and the meadow of the river Prut. The average altitude is 35 meters above sea level. The main soils are chernozems, gray soils, forest soils and limestone. Cernozium predominates 75-80%. The quality of agricultural soils according to soil structure is 61 points.

The climate of Hancesti district is temperate-continental. Summer is hot and long, and the winter is mild, with an average annual temperature of 8-9°C. Precipitation varies between 500 and 550 mm. Leuseni commune is situated in Nirnova river subbasin.

The Leuseni area is located on the left slope of the middle sector of the Prut river valley, in the Codrilor Plateau. That's why on relatively small distance in the transverse direction of the valley, the absolute altitudes vary from approx. 30 m in approaches the bed up to more than 300 m on the interfluve in the central-western Codrii.

From a seismic point of view, the territory is influenced by earthquakes generated by the Vrancea outbreak, located in the Carpathian bend area. Taking into account this, as well as the composition of the geological

substratum of the city territory, constructions and technical-building installations must fall within some special regulations provided for seismic areas.

As a result of recent climate changes, the central part of the country is increasingly vulnerable to the phenomenon of desertification. It increased the frequency and intensity of climatic phenomena unfavorable: droughts, heat waves, hail, storms, etc., leading to considerable losses in agriculture.

The waters of the aquifer complex of Lower Sarmatian – Middle Sarmatian, stored in sands and marlish limestone, are exploited or have exploitation potential. But the water quality is unsatisfactory, especially in the compartment of fluoride concentration, which exceeds the allowable norms. In the context of water resources valorization, a major environmental problem persists related to the poor state of the wastewater treatment plant.

**Biodiversity - flora, fauna and protected areas**

The Leuseni falls within the forest-steppe zone, which from a floristic point of view is part of the Pontic-Sarmatic province, at its contact with the Central European province. But since the city is located in the valley of the r. Prut vegetation has an azonal character. Along the riverbed dominate willow thickets and black poplar plantations. The meadow being capitalized is practically devoid of spontaneous vegetation. Here are found practically all tree species representing spontaneous forest vegetation on the territory of the Republic of Moldova. Tree species are after a certain symmetry, forming separate rows or plots. The soil cover is part of the subregion of typical low-humiferous and carbonate chernozems of the steppe of the Middle Prut terraces. Alluvial, pond and meadow soils are developed in the meadow. They are suitable for practicing agriculture. Arable land owns most of the agricultural land.

The closest protected area is situated downstream at approximative 3 km - The "Dancu" Forest Reserve is a natural area protected by the state. It covers an area of 131 ha, near the village of Dancu, Hînceşti district, Cărpineni forest bypass.

**Forests**

The forest vegetation near the location is represented especially by spontaneous vegetation of shrubs and trees such as: willow, poplar, beech, rosehip, hawthorn, etc. There are no sectors of valuable forest in the project area that could be affected.

**Fauna**

The fauna of the Republic of Moldova includes about 14,800 species of animals, among which:

- Vertebrates: 461 species (mammals 70 species, birds 281 species, reptiles 14 species, amphibians 14 species, and fish 82 species).
- Invertebrates: 14,339 species, including insects (approx. 12,000 species).

The analysis of scientific data on populations of fauna species protected in the territory of the Republic of Moldova, as compared to the IUCN, AEWA, CMS, BERNE data.

Due to geographic positioning and the presence of diverse habitats on the territory of the RM, optimal conditions area ensured for a big number of species of birds, many of them being critically endangered, endangered, and vulnerable not only on the territory of the RM, but also at the European and global level. Moreover, many characteristic species of birds are at the limit of their areal, being much more vulnerable and endangered than other populations of these species from the RM neighbouring states.

The status of birds' species in the RM, registered at the international level in the Red List of IUCN, sets forth 3 Endangered species, 7 Vulnerable species and 5 Near Threatened species.

Wild animals being migratory species, can be present in any season and part of the day (day, night) around road construction and operation. In this sense, at the construction stage it is important to carry out the monitoring of fauna species (especially small mammals and birds).

**The air quality and climate change aspects.**

The main contribution to background pollution is due to traffic, heating, dust and trasbordary pollution. There is not important polluters in the area. Main traffic pollutant are coming from and to BCP M1 road and vehicle from Romania.

### *4.1.3. Giurgiulesti area*

**Giurgiulesti village**

The population according to the last census in 2014 is 2,866 inhabitants

According to information updated by the National Bureau of Statistics, in 2023 the number of populations is decreasing. Number of populations with usual residence, by sex, at the level of territorial administrative unit of the first level (village/commune, city/municipality), at the beginning of 2023[11]

*People*

| Municipality/district | Village/municipality | Both sexes | of which: | |
|---|---|---|---|---|
| | | | Men | Women |
| R-UL CAHUL | GIURGIULESTI | 1970 | 929 | 1041 |

The ethnic structure of the population within the locality looks like this[12]:

2. Moldovans — 2,434;
3. Romanians — 382 (these are not citizens of Romania, but citizens of the Republic of Moldova who declared themselves "Romanians" in the census);
4. Ukrainians — 15;
5. Gagauz — 7;
6. Russians — 7;
7. other / undeclared — 21.

Giurgiulesti Village consists of Cahul District, located at latitude 45.4816, longitude 28.1972 and altitude of 49 meters above sea level. Direct distance to the city. Cahul is 42 km away. Direct distance to the city. Chisinau is 167 km away.

Giurgiulesti is a living village, equipped with natural gas networks and drinking water supply system from 6 artesian wells with a depth of 125-135 m, sewerage project under implementation, fixed and mobile telephony networks, fiber optic internet. The attractiveness of the village is confirmed, first of all, by the successful location with border crossings to Galati, Romania and Reni, Ukraine, but also by the opportunities to get employed. An important source of employment is GIFP - Giurgiulesti International Free Port, where more than 40 economic agents operate. The Oil Factory of Trans Oil Group in 2021 opens its activity. In Giurgiulesti there are other job opportunities: the Railway Station, the Border Police, the Customs Service, the Fire Unit, education, etc., some people from Giugiulesti are even employed in Galati, Romania.

More investments in the region were implemented or are planned:

- The bridge connecting Galati to Giurgiulesti village in Moldova was built in 1949 and was rehabilitated at the end of 2021.

[11] www.statistica.md

[12] According to 2014 census

- In 2022, the broad-gauge railway line connecting Galati port to Giurgiulesti was reopened, after a CFR Infrastructure project whose purpose was for freight trains coming from Ukraine with grain to unload directly at Galati port, without needing transshipment at the border.
- Investments have also been made in the area near the border crossing point lately. Following a project of Galati County Council and the Romanian National Road Company, a modern road will be built that will connect Giurgiulesti customs to the bridge over the Danube in Brăila.
- Extension of Giurgiulesti cargo port is planned soon. An ESIA was developed and are in the process of approvals at transborder level.
- The construction works of the M3 Chisinau-Giurgiulesti national road, made with the help of the European Bank for Reconstruction and Development, are expected to be completed (Slobozia Mare-Giurgiulesti bypass).

**Social institutions:**

- The Theoretical Sports High School "M. Sadoveanu" is attended by about 300 students. Even if the institution is managed by local authorities of level II, during the last years Giurgiulesti City Hall has invested considerably in the material base of the school: repairing the block of primary classes, the high school canteen, but also the three levels (over 4 million lei), creating adequate conditions for the functioning of the institution.
- The capital repair of the kindergarten "Albinuța". The 115 children benefit from very good conditions of activity in the institution: adequate sanitary nodes, spacious, bright spaces, quality food subsidized from local budget sources.
- The Giurgiulesti Health Center was repaired, furnished and equipped with state-of-the-art laboratory equipment.
- House of Culture - the cultural center of the village, where over 60 children and three model ensembles, with love for the nation and folklore, dance and song.
- The famous Village Museum "Culture and Civilization at Gura Prutului" is the business card of the locality, a building dating from 1936 was built by the Romanian authorities in Gura Prutului County. Galati, with destination School.

**Interaction with LPA:** An online discussion held in August 2023 with Tatiana Gălăţeanu, mayor of Giurgiuleşti to discuss the local problems: traffic, environmental & social issues related with the Road, BCP, GFIP etc. A number of documents were shared related with grievances received and redirected to the Ministry/ SRA/ Governmental level. The main issues of complain of population is related with heavy traffic going thru locality and parking of trucks in the vicinity and associated environmental & social risk with that: noise, vibration, household wastes, blocking the entrances, limited access, etc.

**Site visit on Giurgiulesti area (Mayoralty, MCS platform, BCP, Roads):** August 8, 2023. Meeting with Head of MCS head office in Ghiurgiulesti. TheMCSexplained the situation of the BCP, the needed investments included in the Project and necessity of extensions.

***Environmental baseline:***

**Relief , Geology and climatic conditions**

The relief is specific for the soth area of Moldova and is characterized by areas with gentle hills, wide valleys and the meadow of the river Prut. The average altitude is 25 meters above sea level. The main soils are chernozems, gray soils, forest soils and limestone.

The climate of Cahul district is temperate-continental. Summer is hot and long, and the winter is mild, with an average annual temperature of 8-9°C. Precipitation varies between 450 and 500 mm. Giurgiulesti village is the sothen locality of Moldova situated at the confluence of Prut and Danube. Giurgiulesti is the only locality of the country with acces to Danube. Also, only locality neighboring in the same time with Romania and Ukraine.

The Giurgiulesti area is located on the left slope of the lovest sector of the Prut River valley.

As a result of recent climate changes, the southen part of the country is increasingly vulnerable to the phenomenon of desertification. It increased the frequency and intensity of climatic phenomena unfavorable: droughts, heat waves, hail, storms, etc., leading to considerable losses in agriculture.

**Biodiversity - flora, fauna and protected areas**

The project area in Giurgiulesti is located in the valley of the r. Prut vegetation has an azonal character. Along the riverbed dominate willow thickets and black poplar plantations. The meadow being capitalized is practically devoid of spontaneous vegetation. Here are found practically all tree species representing spontaneous forest vegetation on the territory of the Republic of Moldova. Tree species are after a certain symmetry, forming separate rows or plots. The soil cover is part of the subregion of typical low-humiferous and carbonate chernozems. Alluvial, pond and meadow soils are developed in the meadow. They are suitable for practicing agriculture. Arable land owns most of the agricultural land.

The closest protected area is situated upstream at approximative 6 km – The 'Prutul de Jos' Natural Reserve is a natural area protected by the state. It covers an area of 1755,4 ha, near the villages of Slobozia Mare and Caslita-Prut, Cahul district.

**Forests**

The forest vegetation near the location is represented especially by spontaneous vegetation of shrubs and trees such as: willow, poplar, beech, rosehip, hawthorn, etc. There are no sectors of valuable forest in the project area that could be affected.

**Fauna**

The fauna of the Republic of Moldova includes about 14,800 species of animals, among which:

- Vertebrates: 461 species (mammals 70 species, birds 281 species, reptiles 14 species, amphibians 14 species, and fish 82 species).
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The analysis of scientific data on populations of fauna species protected in the territory of the Republic of Moldova, as compared to the IUCN, AEWA, CMS, BERNE data.

Due to geographic positioning and the presence of diverse habitats on the territory of the RM, optimal conditions area ensured for a big number of species of birds, many of them being critically endangered, endangered, and vulnerable not only on the territory of the RM, but also at the European and global level. Moreover, many characteristic species of birds are at the limit of their areal, being much more vulnerable and endangered than other populations of these species from the RM neighbouring states.

The status of birds' species in the RM, registered at the international level in the Red List of IUCN, sets forth 3 Endangered species, 7 Vulnerable species and 5 Near Threatened species.

Wild animals being migratory species, can be present in any season and part of the day (day, night) around road construction and operation. In this sense, at the construction stage it is important to carry out the monitoring of fauna species (especially small mammals and birds).

**The air quality and climate change aspects.**

The main contribution to background pollution is due to traffic, heating, dust and trasbordary pollution. There is not important polluters in the area. Main traffic pollutant are coming from and to BCP M1 road and vehicle from Romania.

# 5. POTENTIAL ENVIRONMENTAL & SOCIAL RISKS AND IMPACTS

## 5.1. General risk and impacts of MRCP, Component B

***a. Water Quality***

- Wastewater generated during the construction phase will be (i) the domestic residential sewage and wastewater from the work sites, (ii) washing water from the vehicle and machinery maintenance, and (iii) muddy runoff along with particles in rainy days.
- Environment-friendly mobile toilets and oil separation tanks should be installed on the construction camp. Oil should be collected separately. The temporal canteen should use natural gas or liquefied petroleum gas. The oils should be taken out regularly. Wastewater from oily waste tank, mobile toilets should be collected and treated in septic tanks and discharged to an existing sewer system. Unauthorized dumping of wastewater will be prohibited.
- Storage tank and temporary wastewater treatment facility should be built to ensure the wastewater discharge comply with national standards. Regular maintenance of the construction equipment will be carried out to avoid accidents.
- A regulation on handling chemical materials (e.g., store the chemical away from watercourses and provision of retention areas to contain accidental spills of such toxic and harmful construction materials as caustic and acidic substances, oil and petroleum products) should be prepared and applied to prevent soil and surface/ground water pollution. A prevention and emergency response plan should be developed and implemented to train the workers on safe and diligent handling of chemicals to avoid accidental spills and on emergency response when a spill would occur.

***b. Noise***

A significant increase in noise is expected during construction, due to various construction and transport activities. Construction facilities and equipment will include bulldozers, excavators, graders, stabilizers, concrete mixers, drills, rollers, poker vibrations, concrete pumps, loading machines, and other heavy machineries.

No residential area is within 800 m from the WWTP. During the construction of WWTP, there are only few enterprises in the vicinity and of course BCP facility and traffic. The potential affected people of the WWTP construction are construction workers and nearby enterprise staff (petrol station, insurance companies, agricultural). It is recommended to avoid any temporary barracks constructions near the WWTP as villages near has sufficient places to accommodate workers who will be involved in construction works.

Large amounts of waste materials will be transported to and from the construction sites, frequently during a 8~10 h workday during the construction period. Activities with intensive noise levels will not only have an impact on the residents, but may cause injury to construction workers during operating the equipment. Therefore, these mitigation measures are essential for construction activities to meet Moldovan construction site noise requirements and to protect sensitive receptors.

Machinery will be properly maintained to minimize noise. Noise reduction devices or methods (the use of temporary hoarding or noise barriers and vibration-proof equipment) should be applied to shield noise sources where piling equipment is operating. Noise from equipment and machinery should comply with
The operation of machinery generating high levels of noise, such as piling, should be restricted nearby sensitive areas and stopped between 6:00 a.m. and 10:00 p.m. in accordance with Moldovan regulations.
The movement of heavy vehicles along urban and village roads should also be restricted to between 6:00 a.m. and 10:00 p.m. Adequate route for large trucks should be selected to keep away from residential areas. Traffic on the site and blowing of horns should be controlled and limited. Construction activities should be scheduled to minimize the impact of machinery noise.
Suitable measures should be taken to protect workers' hearings while operating heavy equipment according to the worker health protection law of the Republic of Moldova. Noise limits for construction site according to the national legislation.

The sites for concrete-mixing plants and similar activities should be located at least 0.5 km away from sensitive areas such as residences, schools, and hospitals. However, we strongly recommend using commercial ready-mixed concrete from specialized concrete plants located in other towns in the region of construction area.

*Noise from access road*

Exposure to noise and vibration is considered to be an environmental impact due to the energy produced affecting the environment, especially the atmosphere. The main difference between the noise impact and pollutant emissions is the effect on the environment of sound vibrations transmitted through air or solids (the earth's surface).

The level of noise or vibration impact on a person depends on the level of sound pressure, frequency characteristics of noise and vibration, their duration and occurrence periods.

The main sources of noise and vibration in the work area during the construction period are the machines and construction plant. According to SN no. 2.2.4 / 2.1.8.562-96, the noise level in the work area must not exceed 80 dB.

In order to prevent or reduce the negative impact of noise, a set of measures are included:

- *The parameters of the machinery, equipment, vehicles used in terms of noise, vibrations and other environmental impacts during operation must be compliant with the standard norms and technical conditions stated by the manufacturer, in agreement with health (sanitary) authorities;*
- *To reduce the noise level of construction equipment, it is necessary to use both technical means of noise control (technological processes with less generated noise, etc.), as well as vibration-resistant and anti- noise devices to equip the machines and plant (screens, mufflers, careful tuning of engines and exhaust systems, fixing work of the chassis, etc.) and timely repair or replacement of machines, equipment with an increased noise level.*
- *The construction works shall be performed only during day time.*

The considered measures can significantly reduce the negative impact of noise and vibration on the people, as well as on buildings and structures.

The environmental impact during the construction period is due to emissions from road machines and plant, emissions from transportation trucks of bulk materials, during preparatory works and embankment construction, during the construction of road structures, during reinstatement works of lands temporarily occupied.

When such works are performed, the following gases are released into the atmosphere: carbon oxides, hydrocarbons, nitrogen and sulphur oxides, soot, inorganic dust, etc.

*Emissions due to operation of machines and plant*

The sources of pollutant emissions from machines and plant are the fuel combustion products and abrasion products from adhesion of wheel tyre to the road surface. So there are emissions of: carbon oxides, hydrocarbons, nitrogen oxides, soot, etc. The maximum emissions occur in the cold season.

*Emissions from haulage trucks of bulk materials*

To ensure year-round delivery of road construction materials, products and structures, the existing roads are used.

During transportation of bulk materials (sand), pollutant emissions and components of car exhaust gases are released. Dust can be released when it is disturbed the bulk material (weighed material) during transportation by truck

*Emissions during preparatory works and embankment construction works*

The preparatory works are carried out in stages. Clearing of the road area takes place gradually as the embankment works are performed. During preparatory embankment construction works, the following types of works are performed:

- *Road route survey*
- *Cut of trees and removal of roots*
- *Removal of structures in the road area*
- *Removal of top soil from the totally occupied area*
- *Stockpiling of top soil at the road limit line*
- *Relocation of communications which fall on the way of the road*
- *Levelling and compaction of soil during embankment construction*
- *Soil water spray to obtain the optimal moisture*
- *Performance of trenches and ditches for discharge of meteoric waters.*
- *Transportation and spread of top soil (recultivation).*

During the works, dust emissions, as well as toxic gas emissions occur from the operation of engines and transportation plant.

Bitumen, which is used for the waterproofing is heated in special tanks. When the bitumen is heated, hydrocarbons and burnt gases are released from its surface: sulphur, carbon and nitrogen oxides.

***c. Soil Quality***

Rainfall runoff from the construction sites may pollute the soil. Therefore, during rainstorm days the excavation activities should be avoided. Stripped topsoil will be stockpiled. A drainage system will be built to minimize the soil erosion. Settling ponds will be built on the construction sites. Soils in settling ponds will be cleared for use as refill soils on the construction costs. The soils on the tires of construction vehicles should be regularly cleaned. After the construction, the excavated soils should be refilled on construction site. As soon as refill and land leveling is done, re-vegetation with trees and grasses should be undertaken. All these costs have to be reflected in BoQ of the detailed design Consultant. A method statement regarding this issues has to be prepared by the selected construction Constructor.

***d. Protected areas***

Emissions from vehicles and machinery could potentially impact the plant life along transportation routes and surrounding areas due to air pollution. These impacts are short-term and are considered to be minor impacts on the ecosystems and protected areas. The most sensitive are the Prut river and protective strip. Additionally, the sensitivity of the Prut River and its protective strip suggests that special attention should be given to these areas to prevent and mitigate potential environmental harm. Regular monitoring, environmental impact assessments, and implementing measures to reduce emissions can help manage and minimize these impacts.

***e. Impact of community health and safety risks (including vulnerable and disadvantaged groups)***

- **Community health and safety.** The risk is associated with the potential for unprotected worksites, management of traffic and labor management. While a substantial number of jobs will be created, it is not expected that the Project area will experience substantial labor influx as most of the skills required by contractors can be sourced locally in Moldova but will be transported to other regions. External workers, expat and national, will be accommodated at existing housing

in the area towns houses that are normally rented out for such purposes, which has been prior practice by Construction companies in similar projects. There will be no encouraged dedicated camps established for worker accommodation in the project. Even that, we cannot exclude the foreign or local companies will intend to open work camps. Specific requirements to manage risks associated with labor influx, related to interaction between project workers and local communities, such as communicable diseases and gender-based violence, are managed through contractual requirements, code of conduct and training set out in Project documents. These procedures are guided by national legislation and ESS2 and ESS4. These requirements will be dealt with through the PIU and workers codes of conduct for contractor staff. In the the site-specific ESMPs and construction ESMP will also cover management of risks related to community health and safety and will propose mitigation measures.

- **Occupational health and safety.** The risk may be accidents of falling into ditches or heights, bridges, culverts, collapsing of deep excavations like deep trenching, etc. The risks assessment will be developed for each subproject and updated during the implementation of the project. Mitigation measures will be placed for all identified risks in the OHS Plan. Specific requirements to manage health risks associated with interaction of project workers and local communities, such as communicable diseases and gender-based violence, are managed through contractual requirements, code of conduct, awareness raising, and training set out in this document. These procedures are guided by national legislation and ESS2 and ESS4.

- **Labor influx.** Construction activities under the project will result in job creation but it is not expected that the Moldova and subprojects areas will experience any substantial foreign labor influx. Thus, PIU will minimize the risk of labor influx by requesting contractors to prioritize recruitment of unskilled local labor in the project areas consequently, minimum labor camps will be established. However, the project Contractors will recruit external workers with specialized skills, who will accommodated in local hotels or houses. This has been a practice by other Contractors in previous and similar projects (civil construction, water, sanitation, roads). Labor risks including labor influx and associated Gender-Based Violence (GBV), and child labor are considered low given the small size of subproject construction works and the adherence to the national labor code which prohibits forced labor (article 10, Labor Code). Our national authorities as police, migration office, SRA, CS, border police will be regularly present on site for monitoring. Also, on daily basis the Construction Supervision Consultant will monitor the presence on site and GRM procedure. Since civil works to be supported under the project will be very small in scale and prioritized by Project and together with local communities themselves, the risk of forced labor is expected to be small. Nonetheless, the contractor will be required in the contract to commit against the use of child and forced labor, introduce mitigation measures against GBV, and Project staff in charge of contractor supervision will monitor and report the absence of forced labor.

There will be site specific ESMPs and OHSPs, prepared by the environmental and social specialists, H&S consultants, which the contractor must comply with and it will indicate all risks and mitigation measuresfor all the identified social and labor risks. The main labor risks associated with the project are assessed to be related to the potentially hazardous work environment, the associated risk of accidents for workers engaged in the project and the community and labor influx.

The PIU will ensure that GBV risks are adequately mitigated and addressed. The prevention measures will include but will not be limited to: Code of Conduct for all employees, GBV-sensitized grievance mechanism, awareness raising of all employees and community members on GBV risks and mitigation measures. This SEA/SH-responsive GRM and development of referral service will be prepared according to international best practice and national legislation. On 17.11.2022 Law no. 316 for the amendment of some normative acts (ensuring the rights of victims in the case of crimes regarding sexual life and family

violence) - Law no. 316/2022. Through this law, amendments and additions were made, among others, to the Criminal Code of the Republic of Moldova. After the entry into force of Law no. 316/2022, art. 173 CP RM has the following content: "Article 173. Sexual harassment (1) Sexual harassment, i.e. the pretense of a sexual act or other action of a sexual nature through physical, verbal or non-verbal behavior, if this creates an unpleasant, hostile, degrading, humiliating, discriminatory or insulting atmosphere for the victim, carried out taking advantage by the state of dependence of the victim or by threat, provided that the deed does not meet the elements of rape or non-consensual sexual acts, is punishable by a fine in the amount of 500 to 650 conventional units or by unpaid community service from 120 to 180 hours, or by imprisonment for up to 2 years. (2) The same act knowingly committed against a minor is punishable by imprisonment from 3 to 7 years"

### *f. Labor, SEA/SH risks*

PIU will conduct regular monitoring to ensure proper OHS implementation. The OHS representative will be responsible to provide regular reports to ESS unit of PIU.

**SEA/SH & Gender Based Violence (GBV)**

The contractor is required to address the risk of gender-based violence by providing training and awareness raising sessions for the workers to refrain from any unacceptable conduct towards local community members, particularly women, and ensure implementation of codes of conduct. Moreover, the contractor is obliged to inform their workers about the legal consequences and punishment by law of sexual harassment and gender-based violence.

In addition, the above statement, each of the contractors and construction companies shall include SEA/SH and GBV prevention to their labor management plans.

***Non-discriminatory Nature of Employment***

All the workers hired under the project, whether direct, contracted or sub-contracted, will be employed based on the principles of non-discrimination. As per Article 8 of the Moldovan Labor Code, any discrimination based on gender, age, race, ethnicity, political option, social origin, residence, disability, status or trade union activity, as well as other criteria not related to his/her professional qualities, shall be prohibited.

***Terms of Employment***

All workers will have **written contracts** describing terms and conditions of work. Workers will sign the employment contract in two originals. The terms and conditions of employment will be available at the work sites. Every worker, when employed, will be briefed on the contents of the contract; the internal regulations of the institution; the work safety and OHS arrangements at the work place. All employees will be informed about the possibility to request a copy and to study these internal documents in more detail.

***Employee Rights and Obligations***

The Moldovan legislation specify, among others, that the employees have the right to a safe working environment; lunch breaks and rest days; timely payment of wages and salaries; the right to appeal to employers, trade unions and authorities in case of labor disputes; the right to associate freely.

***General requirements at workplaces***

According to the Government Decision of the Republic of Moldova no. 80 of February 09, 2012 regarding the minimum safety and health requirements for temporary or mobile sites, the Contractor must provide workers with good hygiene standards, with fresh drinking water, clean beds, enough blankets, restrooms and showers, clean bedrooms, good illumination, lockers, proper ventilation, safe electrical installation, fire and lightening protection, separate cooking and eating areas. The recreation and / or accommodation rooms must be equipped with a sufficient number of tables and chairs, corresponding to the number of workers. If there is no room for recreation and / or accommodation, other facilities must be made available to workers so that they can use them during work interruption.

### *g. Traffic management and road safety,*

The upgrade of the road network aims, among other things, to increase the degree of road traffic safety as well. Among the measures that lead to a better carrying capacity and traffic safety, the following can be mentioned:

- *Ensuring visibility in curves and at intersections, preventing tree and shrubbery plantations, booths and kiosks in places where visibility must be ensured.*
- *Ensuring visibility clearing off the vegetation in the road area*
- *Construction of shoulders to allow pull off vehicles aside the carriageway in case of necessity, it is also necessary so that the accidental skidding of the car on the roadway is not the cause of going out of the road limits; the shoulders are also necessary for vehicles to stop for a short time due to various reasons.*
- *Consolidation of shoulders, avoided damage to the road edge, avoided sags formed on shoulders from the wheels of vehicles or the formation of other unevenness that endangers safety.*
- *Arrangement of speed-change lanes at the entrance and exit from priority roads.*
- *Maintenance of road pavement, ensuring normal pavement roughness*
- *Patching of potholes in time, removal of settlements on the carriageway surface, as well as excavated places*
- *Systematic removal of dirt, mud and dust from the surface of upgraded road pavement, prevention of mud from side roads*
- *Consistent, visible and readable road signalling, creating instant reflexes to drivers how to effectively act, without becoming overabundant*
- *Application of video surveillance-based traffic control systems, speed measuring devises*
- *Ensuring unobstructed movement of different types of transport means, arranging additional traffic lanes, speed-change lanes ascending-descending a slope, arrangement of tracks for cyclists in vicinity with localities, road widening within localities in the areas of route vehicle stations.*
- *Ensuring uniform travel speed on the entire road sector.*

### *h. Cultural heritage risks*

The monuments protection zone is legislated in art. 12 of Law 1530/1993:

- ✓ in urban areas - 100 m radius;
- ✓ in the countryside of rural towns - 200 m radius;
- ✓ and in the outskirts - 500 m radius.

In order to maintain the authenticity and integrity of the monuments, their owners are obliged to take measures that ensure the protection of the monuments, not to admit their demolition, mutilation, damage, non-maintenance or abandonment.

Cultural heritage is distinguished by the following forms:

Tangible cultural heritage includes movable cultural heritage (e.g. paintings, sculptures, manuscripts, etc.) as well as immovable cultural heritage (e.g. monuments, archaeological sites, cave dwellings, historic buildings, etc.) that are of outstanding universal value from a historical, artistic or scientific point of view or are of outstanding universal value from a historical, aesthetic, ethnological or anthropological point of view13.

Intangible cultural heritage includes living traditions or expressions inherited from ancestors and passed on to descendants, such as oral traditions, performing arts, social practices, rituals and festive events.

Natural heritage includes natural sites with cultural aspects, such as cultural landscapes, physical, biological or geological formations that have outstanding universal value in terms of aesthetics, science, conservation or natural beauty.

In the Republic of Moldova there are thousands of cultural or natural sites, including architectural monuments, settlements from different historical eras and medieval fortresses. This cultural and natural heritage is relatively evenly distributed throughout the country.

Important archaeological sites as well as cultural monuments protected by the state are included in the national registers by the National Archeology Agency. According to the available information of the National Geospatial Data Fund14 in the area of the Project site there are several archaeological sites (see the table below)

In all 3 locations of the BCP an archaeological site can be identified at the distance from 500 to 1000 m. No one is affected by Project.

According to art. 6 para. (2) and (3) from Law no. 218/2010 regarding the protection of the archaeological heritage, when requesting the urban planning certificate for design, the issuer of the urban planning certificate for design is obliged, in the case of construction works that involve interventions on the soil, regardless of the type of work envisaged and the form of land ownership, to notify, within 2 working days, in writing and in electronic format, the National Archaeological Agency (NAA), with the attachment of the plan of the land on which the works are to be carried out.

In every village covered by Project it is a church but at safe distance from Project location – more than 500 m.

### *i. Land acquisitions and resettlement approach*

The resettlement or acquisition of lands are subject to separate document – RPF. The document takes into account the needs of project-affected persons and is drafted in accordance with the Environmental and Social Framework (ESF) and its social and environmental standards of IBRD (ESS5)[15] and the Moldova legislation.

The RPF objective is to identify strategies, principles, institutional mechanisms, legislative framework and procedures for resettlement or acquisition of assets under the Project implementation, as well as to set forth the framework for the preparation of Resettlement Action Plans, should any be required in the course of the Project implementation.

This RPF applies to the private landowners, whose lands, rights, or resources will be permanently or temporarily affected by compulsory actions by the Government of Republic of Moldova due to land

[13] UNESCO, http://whc.unesco.org/en/conventiontext/

[14] https://geoportal.md/ro/default/map#lat=44703.771873&lon=200574.109893&zoom=3

[15] http://pubdocs.worldbank.org/en/796881511809516397/ESS5-FactSheet-WB-ESF.pdf

acquisition required for Project / sub-projects. It also applies to people who lease private or state-owned lands or those who have no registered or legal rights over the land they use, and who will be adversely affected as a result of the Project/ sub-projects. However, the RPF does not apply to state land that is transferred from one Moldova authority to another, or used temporarily during construction works, unless third parties are adversely affected by the transfer or use.

This RPF was prepared jointly by State Road Administration of Moldova (SRA) and by Custom Service of Moldova (CS). This document is applicable for all sub-projects included in the Project

The following groups of PAPs are eligible for entitlements under this RPF and will be addressed in the RAP(s):

i. All PAPs losing land (and/or access to land and resources) either covered by legal title, legalizable, or without registered ownership status;
ii. Leaseholders / tenants / land shareholders / land share right holders, whether registered or not;
iii. Owners of structures, crops, plants, or other objects attached to the land;
iv. PAPs losing business, income, and salaries.

In case users of land plots not registered in SLC are affected, the SRA/CS through the relevant state agencies / local authorities will assist the affected land users to register or update the registration of their lands in order to enable to compensate them under existing national legislation. The non-land assets/structures on the affected plots of land users without titles will be evaluated and compensated by exactly the same criteria as those with titles.

Compensation and entitlements must ensure that the PAPs maintain or improve their livelihood and standard of living after the project. For purposes of eligibility, the date when relevant Local Authorities issue the Decision on Land Acquisition for Public Needs or the date when survey commences will be set as cut-off date. The publicly disclosed cut-off date will be revealed during the consultation process as part of RAP preparation. The RAP development Consultant will be required to organize public consultations within the affected communities after the social census has been completed and the list of Project Affected Persons (PAPs) has been defined. During these consultations, all PAPs and other local stakeholders will be notified that individuals who occupy or make improvements on affected areas after the cut-off date are not eligible for compensation. Additionally, the cut-off date will be made available on both the SRA and local authority's websites.

Establishing the cut-of-date for the acquisition of land for infrastructure projects is a process with a strict finality. People who are not in the country on the date of the survey or have not entered into the rights of succession or inheritance can request compensation and the extension of the negotiation or compensation term, but not the cancellation of the date for the restrictions on the sale of land subject to expropriation.

In essence, the cutoff date for land acquisition in infrastructure projects serves to balance the rights of landowners with the necessity for timely and effective project execution, ensuring fair compensation while avoiding prolonged delays in the interest of public infrastructure development.

The estimation of land needed per subproject is mentioned in the next chapter.

## 5.2. Specific Project activities and analysis of potential impacts

The main objective of this preliminary ESIA is to ensure the environmental and social security, occupational health & safety (OHS) actions which consists in implementing a set of technical and organizational measures in order to keep as much as possible un-altered state of the environment and to recover the deteriorated components, so that to maintain the environmental balance.

The all three Border Crossing Points on the territory of the Republic of Moldova included and analyzed in this document (Ungheni (new), Leuseni extention/rehabilitation, Giurgiulesti (platform& BCP)) will have the following facilities:

- ***Access roads***

The main access roads were designed separately by SRA/Customs Service and will be integrated in BCP. The interior roads of BCP and paved area with asphalt /concrete will be constructed and maintained accordingly. The detailed possible impacts to the environment and mitigation measures are presented in table of impacts in . The most expect environmental impacts regarding roads and paved area are: dust, surface water pollution, construction wastes generation and management, soil and landscape degradation.

- ***Checkpoint at the entrance***

This new construction of checkpoints and associated infrastructure is not expected to cause environmental impacts as are minor and negligible. The light constructions and mechanical barriers will be installed mostly as prefabricate constructions.

- ***Actual administrative building***

This buildings (Leuseni, Giurgiulesti ) will be just rehabilitated with minor cosmetic repairs and some changes in sanitary infrastructure. The associate with this works impacts are: pollution by paining components, removal of old construction materials, dust generation, water pollution with solvents. Etc.

- ***Existent auxiliary building to be rehabilitated***

This building will be just rehabilitated with minor cosmetic repairs and some changes in sanitary infrastructure. The associate with this works impacts are: pollution by paining components, removal of old construction materials, dust generation, water pollution with solvents. Etc.

- ***New administrative building***

The administrative building will be the biggest infrastructure object in BCP as complexity and size (Ungheni, Leuseni). The possible impacts to the environment are the same with usually construction activities of buildings: noise, vibration, dust generation, pollution of air, water, soil. Risks for workers on highs and associated risks related with installation of sanitary infrastructure and interior finishes.

- ***Car control post***

This infrastructure is largely made up of metal structures and lightweight offices. Their construction and exploitation will not cause severe impact to the environment. Certain impacts during construction work can cause minimal, temporary and reversible pollution of air, soil and water.

- ***TIR (cargo) control post***

This infrastructure is largely made up of metal structures and lightweight offices. Their construction and exploitation will not cause severe impact to the environment. Certain impacts during construction work can cause minimal, temporary and reversible pollution of air, soil and water.

- ***In-depth control of the vehicles area***

The building will be a closed-type building with sliding doors with illumination. Equipped with tools to check and disassemble car parts. There will be a thorough check of the vehicles on the red check line. During the construction period, the air is expected to suffer from work on assembling, welding, painting, transportation. During the exploitation period, impacts related to oil leakage, the household wastes from cars, combustion gases, etc. will be possible.

- ***3D scanner***

Will be installed in all 3 BCP. Irradiation measures will be proposed for mitigation. This objects of BCP represent effective instruments for weighing and scanning vehicles. The construction represents installing of prefabricated elements and equipment's and operation of them will not cause important damage to environment.

- ***Pedestrian checkpoint***

This infrastructure is largely made up of metal structures and lightweight offices. Their construction and exploitation will not cause severe impact to the environment. Certain impacts during construction work can cause minimal, temporary and reversible pollution of air, soil and water.

- ***Pluvial and waste water treatment station***

Will be analyzed suitable technologies & installations that will be built underground or on top (all 3 BCP). Their purpose will be to purify the water that gathers during the atmospheric precipitation from the customs point. The impact during construction is related to excavations, concrete works, construction and installation of the reservoirs. During operation it can cause impacts on surface and underground water, on the soil. These impacts can appear in the event of improper operation of the station. Generally, the work of the station is expected to have only positive impacts by cleaning rainwater from mechanical and chemical impurities, especially engine oils. For WWTP in special in Leuseni the comprehensive plan has to provided in site specific ESMP that will be developed at next stage of the Project.

- ***Fire tanks***

Usually for this type of projects on BCP will be two undergrounds water reservoirs filled with water and to be used in case of emergency related with fire on the BCP infrastructure or vehicles on the territory. Impacts on environment during installation will be minor and reversible related with excavation and concrete works. No negative impacts are expected during exploitation.

- ***Parking for cars of employees and visitors***

The parking area will be an integrated part of asphalt/concrete paved area designed for parking. On this territory will be placed also small containers for household wastes. Construction of this areas will have in general the same impacts as other paved territory. Limited to construction of covered rainwater collection channels, pavement works/asphalt laying, painting of demarcation lines etc. No asphalt plant will be on territory. The construction materials will be transported by trucks from authorized quarries and existing asphalt plants.

- ***Household Waste platforms***

Will be infrastructure elements built with minimal impact on the environment. However, their operation may have environmental impacts but mitigated: the waste platform must be properly insulated and properly maintained to reduce the risk of pollution and contamination; near gas distribution panel should be avoided the fire and avoided gas leakages to minimize the risk of explosion; the diesel generator must be adequately maintained and ensured that the exhaust gas evacuated and wider dispersion; the bus station is maintained in a clean state and installed the containers of domestic waste and regularly evacuated, etc.

## 5.3. BCP and MCS in Ungheni (Zagarancea)

### *5.3.1. Land needs*

Two route variants have been identified as possible. The optimal variant proposed, approved by the competent authorities is much shorter, respectively the area of occupied land smaller. Along its entire length, the access road is designed in embankment, with widths down from 44m to 56m. For the organization of the site and the execution of the works, a strip of land of 4m width or 0.35ha is temporarily

provided from both sides of the embankment. The land area, permanently occupied by the road, is 2.33ha. The land temporarily occupied, after the execution of the works, will be recultivated and will be returned to agricultural set-aside. This is just for access road to BCP in Ungheni. The needs for BCP infrastructure will be known after FS and DD.

In order to fully and rationally use the vegetation layer, which is to be pickled from the land occupied by the access road corridor, the specialists of the Design Institute for Territorial Organization (IPOT) selectively determined its thicknesses, which served as a reference to the calculation of quantities and estimation of costs of land works, as well as the calculation of the amount of compensation of landowners according to Laws no. 1308-XIII of 25.07.1997 and no. 488-XIV of 08.07.1999. Part of the pickled vegetation layer will be used to strengthen the slopes and verges of the projected road, as a measure against erosion that can be caused by rainwater. The rest of the vegetation layer will be transported to the place indicated by the local authorities for its subsequent use as needed.

As a result of the investigations of Universcons LLC, it was identified the possibility of avoiding the opening of a borrow pit for the construction of the embankment of the access road to the bridge, respectively the occupation of new lands, by using the lands from the loan pit on the territory of the Todiresti administrative unit, the volume of which was sufficient both for the construction of the bypass road of the Ungheni town as well as for the access road remain sufficient material. Thus, all the mineral soil necessary for the construction of the road will be taken from the existing borrow pit, and the vegetal one is provided only from the amplitude of the existing road.

The project of the access road to the bridge fits into the route of the national road R1Chisinau-Ungheni-Sculeni-border with Romania, having a harmonious continuation of the bypass of the Ungheni town and do not modify existing landscapes.

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| Characterisation of impacts: | **Intensity:** High ; **Extent:** Local; **Duration:** long-term, during construction time and maintenance period. |

### *5.3.2. Protection against transport noise*

The noise from the car transport, which travels on the access road, will not affect the population of the nearest neighboring localities, Zagarancea and Semeni, given that the distance from the road to the border of the built-up area of Zagarancea village is 250m, to that of Semeni village being 950m, which far exceeds the norm in force allowed.

At the same time, we would like to mention that the noise intensity produced during the traffic of motor transport will be much lower than the noise intensity with medium amount, due to the following factors: the speed of transport in the vicinity of the border crossing point will be low; The geometrical parameters of the road designed in plan and longitudinal profile, the roadway with asphalt concrete coating and flatness required by the technical category of road considerably diminish the noise intensity.

In order to reduce the noise level and comply with the legal limits in force, earmuffs will be used or sound-absorbing panels will be installed. The noise produced by construction machinery decreases with increasing distance from the site of the works. Thus, at approximately 100 m from the limit of the work fronts and of the site organization, the noise level will be a maximum of 66 dB(A), and at 500 m from the site limit, the noise level will be below 50dB(A).

In the open field, when the sound is not reflected by obstacles, the acoustic level decreases by 6 dB when doubling the distance from the source, so that up to the limit of residential areas the noise level will significantly diminish, falling within the limits provided by SR 10009-2017 urban acoustics. As the works

will be carried out outside the residential area (the minimum distance between the site of the works and the inhabited area is approximately 1.4 km), there will be no impact on the local population.

The impact of noise and vibration on fauna will not be significant as will be temporary and limited to working area. The location is the proximity of village on mostly agricultural lands. The biodiversity of Prut river will not be affected. The location will be marked and bordered with a temporary fence.

After completion of the construction works, the only source of noise will be road traffic, but the noise level will not be significant because sound-absorbing panels will be installed along the entire length of the connecting road and bridge (including the platform of the border crossing point)[16].

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| Characterisation of impacts: | **Intensity:** medium; **Extent:** Local; **Duration:** long-term, during construction time and maintenance period. |

### *5.3.3. Air emissions*

As an indicator of air pollution is the concentration and volume of gases released by cars, which are: NOx – nitrogen oxide; SO2 – sulfur dioxide; CO2 – carbon dioxide; VOCs-volatile organic compounds; PM10 and PM2.5 – particles matters generated by diesel-powered vehicles. The construction of the bridge over the Prut at Ungheni, respecting the access to it, will shorten the road connections of the Republic of Moldova with Romania, will reduce the journey times to the border with Romania, will decrease pollution at all levels in the areas currently transited by motor transport.

In the Traffic Study, are given the results of estimating the reduction of emissions of each category of pollutants, calculated by Romanian specialists according to the CORINAIR-Guide procedure of the European Environment Agency when applying the variant of building the bridge for different time horizons. Thus, the reduction of emissions, in tons per year, to traffic estimated for 2018 in case of opening the border crossing point in Ungheni will be for: NOx – 1,513 ; SO2 – 0,002; CO2 – 69,461; VOCs – 0.006 .

The lands adjacent to the road will practically not be affected by pollutants from the gas emissions of motor transport, their sedimentation area will practically not exceed the amplitude of the projected road, given that the widths of the embankment leg, at the height of the embankment from 5.5m to 8.5m, will be from 8.25m to 16.0m

Also, the population of the nearest neighboring localities, Zagarancea and Semeni, will not be affected by pollutants from car transport emissions, given the long distance to them, the norm in force allowed being much smaller.

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| Characterisation of impacts: | **Intensity:** medium; **Extent:** Local; **Duration:** long-term, during construction time and maintenance period. |

### *5.3.4. Impact on water*

The proposed road's location and BCP do not alter the existing rainwater drainage patterns. Earthworks in embankments are designed to avoid adverse effects on current watercourses, underground water sources, and springs. The anticipated impact on the Prut River is considered moderate, given that all construction activities will occur within the meadow. The crucial mitigations involve safeguarding rainwater from

[16] ESIA for bridge (Romania).

pollution and preventing construction materials from entering the river. Implementing effective solutions for water protection, encompassing both surface and groundwater, is a primary concern. This includes the collection of stormwaters and ensuring water supply and sanitation services for the proper functioning of the Border Crossing Point (BCP). The Feasibility Study (FS) and Detailed Design (DD) must present viable strategies to address these water-related considerations.

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| Characterisation of impacts: | **Intensity:** medium ; **Extent:** Local; **Duration:** short-term, during construction time. |

### *5.3.5. Impact on fauna and flora*

In the area of the location of the projected road is present fauna from the groups: mammals - wild boars and deer from the deer family; amphibians – different species of frogs; reptiles - different species of snakes.

The width of the Prut River meadow on the corridor of the projected road is about 650m. The projected road, together with the quarter cone of the projected bridge deck, crosses the meadow and occupies about 570 of its entire width. The height of the road embankment and quarter cone is from 5.5m to 8.5m, which will have a temporary impact on the movement and migration of fauna in the site area through the obstacle effect created by the road.

At the same time, the rest of the meadow, from the left bank of the Prut River to the quarter cone of the projected bridge, of about 80 m, is free, which will allow the easy movement and migration of fauna in its habitat area, as well as the movement of the local population and the staff of the Border Police. The distance of 80 meters is explained by the fact that one of the openings of the projected bridge, of 70 m, was located entirely on the Moldovan bank of the Prut, taking into account the needs indicated above. Additionally, in order to minimize the obstacle effect created by the road and facilitate the movement of both species of fauna and domestic animals and agricultural workers on the left and right lands of the projected road, the project provides for the construction, in the middle of the route, of a 2.0x2.0m frame footbridge.

On the flora, the projected road and BCP infrastructure will not have a negative impact as most of the lands are already involved in agriculture and no protected species are registered nor were discovered during site visits in the area.

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| Characterisation of impacts: | **Intensity:** medium ; **Extent:** Local; **Duration:** short-term, during construction time. |

## 5.4. Giurgiulesti area (platform & BCP) impacts and mitigation measures.

### *5.4.1. Impact assessment of the design road, control border platform, on environment and people*

The impact of truck transport on the Giurgiulesti community is substantial, prompting numerous collective and mayoralty complaints lodged with entities such as the Customs Service, SRA, and GoM. These grievances aim to revolve around the inconveniences stemming from the traffic of vehicles queuing and traversing the town in the direction of Romania or Ukraine - Reni.

The primary impacts encompass:

- ✓ The generation of household and vehicular waste left in the village and on agricultural land, including bags, plastic bottles, old tires, and oil spills etc.
- ✓ The lack of adequate facilities leading to the fulfillment of physiological needs in inappropriate places and the consequent emergence of unpleasant odors.
- ✓ Issues such as noise, vibrations, air pollution from exhaust gases, dust, blocked access to yards and agricultural land, accidents, and hazards for pedestrians and cyclists.
- ✓ While the activities proposed in the project may not completely resolve the issue, they, when combined with other efforts, have the potential to significantly ameliorate the situation in the locality.

Also is a risk for STI and SEA.

#### *5.4.2. Compliance with environmental safety requirements during waste collection, storage and transportation*

It is necessary to have waste management and production control on the construction site. Domestic solid wastes belonging to the class of waste of low risk of hazard shall be temporarily kept in specially designated places, in containers, located on the construction sites and is removed when the solid waste is collected to be disposed in dumping areas.
The construction companies performing the works under the project shall have their own bases for vehicle fleet, where the road construction equipment shall be repaired and maintained. Therefore, the wear tires, scrap non-ferrous and ferrous metals, used oils, etc. are not stockpiled in the operating area. The collection, storage and delivery of these wastes is carried out in accordance with an established procedure in accordance with the contract signed by the contractor with subcontractors authorized this type of activity.

The construction site shall be equipped with a ecological-WC. A specially authorized company for WC maintenance shall collect the wastes, on a weekly basis, based on a previously signed agreement for such services, using a special vehicle for disposal of waste water to a treatment plant, and shall also ensure sanitary maintenance of the WC, which will be as follows

- *Suction;*
- *Wash of cabins, further fill of sanitary concentrate (cleaner) and cleaning with water;*
- *Ensure the necessary paper*
- *Disinfection of equipment with cu disinfectant solutions;*

The expire date of a concentrate is 7 days, after which it is necessary the sanitary maintenance of the device. Operation of the device without the use of sanitary concentrate is prohibited.
There will be no negative environmental impact resulted from implementation of the given scheme of collection and disposal of waste, which implies constant removal of domestic and construction waste from the site, provided the sanitary and hygienic requirements for storage and disposal of generated domestic and industrial waste during the implementation of the project.

### 5.5. Leuseni BCP and associated infrastructure impacts

#### *5.5.1. Waste Water Treatment Plant*

The existing water supply consist of a modern intake from Prut River, pumping station, water treatment plant and water supply.

The worse situation is related with sanitation. The old WWTP is not working.

The wastewater treatment plant is located in the southern part of BCP in close proximity to the r. Prut, in the riparian area. Distance in a straight line to the riverbed to the Prut River is approx. 70 m. The station does not work properly. Wastewater comes gravitationally to the station which currently represents:

- An administrative building with pumping station requiring capital repair
- 4 equalization / settling basins
- 3 biological storage and treatment basins
- Communication networks with each other
- Manholes
- Access routes
- Bordering with fence.

Wastewater treatment occurs naturally through accumulation in biological ponds and treatment by biota under the influence of sunlight and ambient temperature.

The discharge of untreated water occurs directly into the r. Prut without effluent control and without disinfection as required by legislation.

The estimated volume of daily discharges is approx. 200 m3 of wastewater. **We consider this to be the biggest / serious environmental problem that needs to be solved urgently at BCP Leuseni.** This is especially in the context that the volume of passengers and trucks is constantly increasing and BCP is going to be expanded. Downstream r. Prut is an important source of drinking water for approx. half a million of the population, for irrigation, replenishment, is a cross-border river and flows into the Danube and then into the Black Sea.

The following measures to redress the environmental situation are recommended:
All the existing infrastructure of the old WWTP should be demolished using appropriate decommissioning best practices. A mobile crusher with a metal separator can be brought to the site to avoid excessive costs by transporting construction waste and avoiding road pollution in the city. The crushed, sorted material can be largely reused for concrete, access roads, as an embankment for the future infrastructure. The extracted metal can be sold to specialized melting companies and with this money can be used to cover part of the demolition costs.

A 15 m width protective area consisting of a forest curtain of fast-growing trees - willow, poplar, acacia, platens must be planted on the perimeter of the future treatment plant. This will create a physical barrier to the smells and viruses/bacteria that can occur in the city or adjacent areas. Besides the roads and the parking area, the whole territory of the future station should be sown with grass that is properly groomed.

The sludge dewatering area should be redesigned, aimed at ensuring that a smaller area is used and odors are kept under control.

The area downstream the territory of the treatment plant must also be afforested up to the floodplain. The reeds technology can be left as it is, because it acts as natural wastewater treatment during 2-3 seasons, if no additional wastewater discharge occurs.

The first step of sludge disposal is to reduce water ratio of the sludge so that the volume of the sludge becomes smaller. A temporary storage facility need to be designed on the Consulting detailed design stage and built to decrease the water ratio of the sludge. To accelerate settling speed and removal of phosphorous and solids, polyaluminium chloride (PAC) dosage was used for the sedimentation tank. A shelter for keeping the rain away should be built in the sediment zone outside the dewatering room. Leak-proof ground should be paved in the sludge treatment room.
Chemical tests of sludge must be carried out to identify whether the quality of the sludge complies with the Discharge Standards of Pollutants for WWTPs. Dewatered sludge that meets the standard should be transported to the sanitary landfills in a closed container of a self-dumping truck to ensure the sludge will not lead to a second pollution. Environmental supervision staff should be appointed to make sure no spill or dumping during the transportation route occurs.

In long term operation, it is considered that the sludge could be utilized for reclamation after dewatering. According to the quality of the sludge, the dewatered sludge may be used as a resource of improving the soil quality. The future use of it will require additional tests and permission from Ecological Inspection.

The potential negative impacts during construction phase are of short-term magnitude and with proper mitigation measures these impacts can be minimized to insignificant levels. The short term impacts during this phase are described below.

### *j. Solid Wastes*

The solid wastes generated from the decommissioning of existing structures of old WWTP, and construction are abandoned construction materials, scattered sands/stones, concretes. These solid wastes are harmless as a construction inert material, but are polluted by water and soils of waste water, and therefore will affect environmental sanitation of the construction site, hamper the traffic and transportations, damage the surface of roads, further increase idle exhaust emissions of cars, and pollute the ambient air.

The solid wastes must be collected regularly by the city sanitation service and cleaned up in a timely manner and sorted, transported to the municipal landfill MCS or specialized companies, collection of metal, rubber and plastic waste, through processing of rubber and plastic waste.
The recommendation is to reuse construction wastes if and where possible, as much as this practice is suitable.

### *k. Construction Traffic*

Construction activities and traffic may produce to traffic congestion and inconvenience in BCP and to the public due to: (i) increased vehicles for materials and solid wastes transportation, and (ii) deterioration of the roads condition after excavation and leveling. It can bring negative effects to the narrower road and cause larger vehicle flux. In cooperation with the MCS and Border police traffic authority, traffic flow regulation plans should be prepared before construction begins, if necessary. Proper transportation time and route should be selected to avoid rush hours and reduce traffic congestion.

### *l. Public Health and Safety*

Sanitation is a key public health issue during construction. Workers are prone to infectious diseases if they are under a poor working and living condition and high work load. Sanitation requirements should be maintained, including related to air quality, food quality and water supply. Medical facilities and health services will also be provided.
Contractors should be required to take safety measures at the construction site to protect the workers and the public, including provision of appropriate personal protective equipment for workers and arrangement of warning signs to alert the public of potential safety risks in and around the construction sites. Occupational safety and health of workers and measures on worker protection on the construction site should be developed in the Contractor Health and Safety Plan. Accordingly, this provision should be included in the tender documentation.
The potential environmental risks during **operation** of the WWTP based on trickling filters or other technology might be during accidental spills and leakage of wastewater that may cause serious surface and ground water pollution and the Prut river that receive the effluent of the WWTP. Automated flow meter and water quality monitoring system will be ideal to be installed. However, the regularly basic tests are laid in the responsibility of the a contracted laboratory by CS. Specific measures should be taken if any potential incidents or illegal discharge is found during regular inspection and maintenance. Standby equipment and pipes should be installed in such a way that will reduce the risk of accidental overflow. An emergency tank shall be arranged for wastewater storage for incidence of leakage or spills. The WWTP should be strictly monitored to meet the enforcement of wastewater discharge standards. An emergency response plan for accidental wastewater overflows or spills should be also prepared.

An operation and maintenance manual for equipment is regularly provided by the suppliers. The equipment operators and plant manager should be trained on operational safety, maintenance of the facilities, and an emergency procedures and contingency plans should be prepared. Periodic training and practice sessions in safe operating procedures should be held after the plant starts operating. Workers should be provided with protection equipment such as gas masks and breathing apparatuses. Environmental emergency response plan will be activated in case of accidents.

***m. Cultural Heritage.***

It is estimated that currently, no significant issue is associated with the project, hence some specific aspects may need attention as archaeological issues. If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, the Ministry of Culture will be notified and approval/permits will be obtained from local authorities in line with local and national legislation. The ESMP) includes that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted, officials contacted, and works activities delayed or modified to account for such finds.

# 6. ASSOCIATED FACILITIES (INFRASTRUCTURE)

## 6.1. Ungheni area

### *6.1.1. Associated facilities: The bridge over the Prut River – planned to be build and financed by Romania and the EU.*

| **Associated Facilities Analysis** | | |
|---|---|---|
| **Description of Associated Facilities: The new bridge over the Prut River** – planned to be build and financed by Romania and the EU. Border Crossing Point between Romania and Moldova including provision of infrastructure and equipment aimed at improving functionality, co-financed by a Connecting Europe Facility (CEF) grant. Works on the Romanian side will include construction of a new BCP and new bridge over Prut River. Works on the Moldovan side are proposed as part of a co-financed World Bank Project (the Project), and include construction of a 1km long access road and new BCP. Other works include the full BCP facility, as well as procurement and installation of customs control equipment for the facilities (x-ray system, weighing system, contraband inspection kit, rechargeable battery power tool kit , hand tools etc). The activities are described in a CEF grant with the objective to develop 'Solidarity Lanes', essential corridors for Ukraine's agricultural exports, as well as the export and import of other goods in response to Russian aggression in Ukraine and the reorientation of trade routes towards the West. | | |
| **Criteria in ESS1 (paras 10-11, 32)** | **Applicable** | **Analysis** |
| Facilities or activities **not funded as part of the project** that are... | Yes | The Project consists of activities on Moldovan territory co-financed by CEF funding received from the EU and managed by the Government of Moldova. The activities on the Romanian side of the border are not funded as part of the Project. |
| (a) directly and **significantly related** to the project | Yes | The CEF grant to Moldova for partial financing of activities under the Project supports complementary investments on both sides of the border with Romania as part of an application submitted by Romania as the EU member state with Moldova as a beneficiary (since they are allowed to |

| | | |
|---|---|---|
| | | benefit from CEF grants but not allowed to submit their own application). |
| (b) carried out, or planned to be **carried out contemporaneously** with the project | Yes | The activities are to be carried out contemporaneously with the Project as part of the rehabilitation of crossing points along the river border between the two countries. |
| (c) **necessary** for the project to be viable and **would not have been constructed**, expanded or conducted if the project did not exist | Yes<br>Yes | The activities are necessary for the fulfilment of the development objective of the GEF grant application submitted by Romania. The Romanian activities would not be constructed if the complementary facilities and activities under the Project were not undertaken. The parties depends each-other of effective finalization of this international bridge &CBP. |
| **To the extent the Borrower has control or influence**: or must demonstrate extent to which it cannot exercise control or influence by providing relevant legal, regulatory, institutional factors (FN11) | No | During implementation, the Government of Moldova would effectively have no legal or financial recourse or control over the Government of Romania's components and would have no role in managing Romania's CEF funds as these would run through Romania's budget. |
| To the extent that the Borrower cannot control or influence the Associated Activities: to meet the requirements of the ESSs, the environmental and social assessment will also **identify the risks and impacts the Associated Facilities may present to the project.** | No | Environmental and social risks associated with the activities on the Romanian side are major environmental and social issues were described in ESIA approved by the GoR, that could pose delays to the Project are on the Moldovan side and therefore under the control of the Borrower. Risks to the achievement of the Project objectives overall involve potential for lack of coordination between the two sides, delays in contracts, or changes to design which could conceivably result from impacts on land use or environmental conditions on the Moldovan side but are expected to be easily mitigated with Environmental and Social Impact Assessment and associated measures. The activities carried out on the Romanian side involve major site specific constructions and relocation of existing facilities with significant amounts of air and noise pollution, localized water, air, soil, subsoil, biodiversity, landscape impacts, and some moderate occupational and community health and safety risk during construction. There is requirement for land acquisition with potential for economic and physical displacement on the Romanian side described in the ESIA. The activities do not occur in disputed areas and there are no potential significant transboundary risks to the Project. Cumulative impacts associated with the effects of the activities on both sides (impact of bridge works on waterway, increase in non-local traffic (ie to and from Ukraine) should be taken into account in the Project ESIA. |

In the regions located on both sides of the Romanian-Moldovan border, the transport infrastructure is dominated by road and rail networks. Although the density of transport infrastructure is high, its viability is precarious, due to inadequate maintenance, lack of modernization projects and financial resources. This results in significantly increased journey times and transport costs.

The project aims to create a modern communication route with implications for the regional development of the area, traffic fluidization, increasing user safety, reducing journey times, decreasing pollution at all levels in transited areas. Currently, it shortens road connections with Moldova, Ukraine and Russia.

The bridge over the Prut River will ensure the connection of the Pascani – Iasi – Ungheni highway (included in the TEN-T priority network of the European Union) with the M14 road Criva – Briceni – Chisinau – Tiraspol and will reduce the distance between Chisinau and Iasi by approximately 25 km. At the same time, the bridge will connect the highway Tg. Neamt – Iasi – Ungheni through the northern part of Ungheni in Romania with the bypass of Ungheni in the Republic of Moldova.

The future bridge over the Prut from Ungheni will be the first 4-lane bridge connecting both banks of the Prut river.

The cost of the investment is ROL 198.21 million (33 million euros), allocated from European funds from the CEF Program - Connecting Europe Facility 2021-2027 and from the state budget of Romania, allocated through the budget of the Ministry of Transport and Infrastructure, within the limits of the amounts approved annually for this purpose, such as and from other legally established sources, according to the public investment programs approved according to the law.

The future bridge between the brothers from Ungheni, with a length of 261 meters, also includes the installation of a customs post (road) and will make the connection between Autostrada Unirii / A8 / Ungheni – lași – Târgu Mureș.

The main features provided for the new road bridge over the Prut from Ungheni are:

- *261.20 meters – length of the future road bridge over the Prut from Ungheni village (Romania)*
- *13 meters wide new bridge (Stage I) + 11.25 m (Stage II)*
- *8 meters wide – the carriageway* of *the future road bridge over the Prut from Ungheni*
- *1 km long road route*
- *4 x 3.75 meters – carriageway part of connecting road*
- *MD – EU / RO border crossing control point, which will be equipped with parking lots for large vehicles, passenger cars and closed spaces intended for thorough checking of cars and trailers.*

The new bridge will contribute to the development of road connections with the Republic of Moldova, respectively to the connectivity of the Republic of Moldova to the European TEN-T transport network, but also to streamlining traffic and optimizing the flow of transport, eliminating blockages at border crossing points.

### *6.1.2. Border crossing control point on the Romanian part*

A border crossing checkpoint corresponding to prospective road traffic was designed. It runs on a length of about 530 m and is provided with:

- parking area and scales for freight vehicles;
- car parks – only at the exit of the country;
- administrative buildings;
- space for thorough verification of passengers (only at the entrance to Romania);
- enclosed space for thorough checking of cars;
- space for thorough checking of trucks (closed space with storage possibility) and Roboscan;
- customs commissioner's office, near truck parks.

Access to / from the country will be made on 7 lanes for each direction of traffic:

- 2 freight lanes (lorries);

- 3 lanes intended for passenger cars;
- 2 lanes for coaches.

Before the border crossing checkpoint, at the exit from the country, 2 parking lots related to buildings were designed

Administrative:

- approximately 250 m before the border crossing point: 23 places for cars (size 2.50 m x 5.00 m);
- next to administrative buildings: 20 seats for cars (size 2.50 m x 5.00 m).

## 6.2. Leuseni area

| **Associated Facilities Analysis** | | |
|---|---|---|
| **Description of Associated Facilities:** ***Modernization of the Albita-Leuseni Border Crossing Point*** between Romania and Moldova including provision of infrastructure and equipment aimed at improving functionality, co-financed by a Connecting Europe Facility (CEF) grant. Works on the Romanian side will include installation of two new weighing systems in the vicinity of the treatment station of the customs office, construction of the necessary platforms for the weighing equipment (41 m long and 4 m wide), set up of a lane for freight transport, as well as a dedicated lane for Authorised Economic Operators (AEO), and procurement of equipment for facilities for customs control for both the freight terminal and the passenger sector (20 pieces) and IT work station equipment (10 pieces). Works on the Moldovan side are proposed as part of a co-financed World Bank Project (the Project), and include upgrade of a 1km long access road by extending the existing 2 lane road to 4 lanes in anticipation of development of a new 4 lane bridge, replacing the existing 2 lane bridge over the Prut river. Other works include the full refurbishment of the freight entry facility and passenger exit facility and construction of a new freight exit facility, as well as procurement and installation of customs control equipment for the facilities (x-ray system, weighing system, contraband inspection kit, rechargeable battery power tool kit , hand tools). The activities are described in a CEF grant with the objective to develop 'Solidarity Lanes', essential corridors for Ukraine's agricultural exports, as well as the export and import of other goods in response to Russian aggression in Ukraine and the reorientation of trade routes towards the West. | | |
| **Criteria in ESS1 (paras 10-11, 32)** | **Applicable** | **Analysis** |
| Facilities or activities **not funded as part of the project** that are... | Yes | The Project consists of activities on Moldovan territory co-financed by CEF funding received from the EU and managed by the Government of Moldova. The activities on the Romanian side of the border are not funded as part of the Project. |
| (a) directly and **significantly related** to the project | Yes | The CEF grant to Moldova for partial financing of activities under the Project supports complementary investments on both sides of the border with Romania as part of an application submitted by Romania as the EU member state with Moldova as a beneficiary (since they are allowed to benefit from CEF grants but not allowed to submit their own application). |
| (b) carried out, or planned to be **carried out contemporaneously** with the project | Yes | The activities are to be carried out contemporaneously with the Project as part of the rehabilitation of crossing points along the river border between the two countries. |
| (c) **necessary** for the project to be viable and **would not have been constructed**, expanded or conducted if the project did not exist | Yes<br>Yes | The activities are necessary for the fulfilment of the development objective of the GEF grant application submitted by Romania. The Romanian activities would not be constructed if the complementary facilities and activities under the Project were not undertaken. |
| **To the extent the Borrower has control or influence**: or must demonstrate extent to which it cannot exercise control or influence by providing relevant legal, | No | During implementation, the Government of Moldova would effectively have no legal or financial recourse or control over the Government of Romania's components and would have no role in managing Romania's CEF funds as these would run through Romania's budget. |

| | | |
|---|---|---|
| regulatory, institutional factors (FN11) | | |
| To the extent that the Borrower cannot control or influence the Associated Activities: to meet the requirements of the ESSs, the environmental and social assessment will also **identify the risks and impacts the Associated Facilities may present to the project.** | No | Environmental and social risks associated with the activities on the Romanian side described in the CEF application appear to be minor and the main share of environmental and social issues that could pose delays to the Project are on the Moldovan side and therefore under the control of the Borrower. Risks to the achievement of the Project objectives overall involve potential for lack of coordination between the two sides, delays in contracts, or changes to design which could conceivably result from impacts on land use or environmental conditions on the Moldovan side but are expected to be easily mitigated with Environmental and Social Impact Assessment and associated measures. The activities carried out on the Romanian side involve minor site specific rehabilitation and relocation of existing facilities with minimal amounts of air and noise pollution, localized water, air, soil, subsoil, biodiversity, landscape impacts, and some moderate occupational and community health and safety risk during construction. There is no requirement for land acquisition with potential for economic and physical displacement on the Romanian side described in the CEF application. The activities do not occur in disputed areas and there are no potential significant transboundary risks to the Project. Cumulative impacts associated with the effects of the activities on both sides (impact of bridge works on waterway, increase in non-local traffic (ie to and from Ukraine) should be taken into account in the Project ESIA. |

On 12 September 2023, the crossing bridge over the river Prut was put into operation after an important rehabilitation[17] . The repair works on the bridge located on the M1 expressway, located at the border with Romania – Leușeni – Chisinau – Dubăsari – the border with Ukraine, km 0, have been completed. The taking over of works was held at the end of the works. The committee, made up of representatives of the State Road Administration, the design company, the contractor and DRDP Iași, found that the works were executed according to the imposed quality standards, respecting the execution project and the regulations in force. Thus, road and pedestrian traffic on the bridge was successfully reopened. As part of the project, were carried out repair work on the bridge path, its superstructure and infrastructure. Works included: reinforcement of pile and bed with raw stone; strengthening the quarter cone with reinforced concrete; sealing the tightness between the concretes at the quarter of the cone; anchorage reinforcement of the quarter cone; hydrophobization of the soffit of the superstructure; laying the asphalt concrete layer; installation of the safety parapet; installation of deformation joints; application of road markings; installation of road signs.

The bridge over the river Prut, M1, km 0, has a length of 163.6 m and a width of 8.84 m, of which the carriageway is 7 m, and the 2 sidewalks are 0.7 m each. The value of this project is about 27 million lei, money allocated from the Road Fund. In the year 2022, the road bridge undergoing rehabilitation was crossed by approximately 763,000 cars, 297,000 trucks and 46,000 buses, and the total number of passengers who crossed the bridge was approximately 3.8 million. These figures reflect the importance and heavy use of this bridge in road transport, highlighting the urgent need for rehabilitation to ensure the continued safety and efficiency of the infrastructure. This bridge is of major strategic importance for the Republic of Moldova, contributing considerably to mobility, the transport of goods and people, as well as the development of trade between our country and Romania.

[17] www.asd.md

**New bridge will be constructed parallel with the existing one.** Agreements with the Republic of Moldova regarding the construction and modernization of three bridges over the Prut, was approved by the Government of Romania on September 14,.2023. The Romanian government approved, the agreements with the Republic of Moldova regarding the construction of a new bridge over the Prut between the localities of Albița and Leușeni, respectively regarding the modernization of two existing bridges over the Prut, agreed during this year (these agreements include the modernization of the existing bridges between Sculeni and Sculeni (Republic of Moldova) and the localities of Oancea and Cahul (Republic of Moldova)). The agreements with the Republic of Moldova, were signed in Chisinau on May 9, 2023.

## 6.3. Giurgiulesti area

### *6.3.1. R34 road and new proposed bypass to connect M3 road*

| **Associated Facilities Analysis** | | |
|---|---|---|
| ***Description of Associated Facilities:*** ***Rehabilitation of R34 road and new proposed bypass.***<br>The Feasibility Study for R34 Hincești-Leova-Cahul-Giurgiulesti Road Repair Project, km 124,835 to km 180,600 was developed by SRA, The R34 road is a route that links Hincești-Leova-Cahul-Slobozia-Mare, it is a short access way towards the South Prut areas and to the centre of the Republic. The disadvantage of this route is that it crosses a significant number of villages, where this road constitutes the main street and where it is not possible to allocate additional land for road sidewalks, drainage system for rainwater, lawns, etc The Project will be proposed for fiancé to EBRD &EIB in the next negotiation package. The construction period shall include the environmental impact associated with the construction works and is temporary (36 months).<br>Traffic diversions (bypass) of Giurgiulesti. It was also analysed the diversion of traffic from the national roads or other corridors or routes towards the survey R34 Road. At km 167 in Slobozia Mare village, the R34 highway is connected to M3 highway. Thus, taking into account the rehabilitation works on about 80% of M3 Road and the new construction works on Slobozia Mare Bypass, with traffic diversion directly to the final destination, the Giurgiulesti port, the road at the moment is overloaded with the traffic that will be further taken over by M3 road, ensuring the link between Chisinau and Giurgiulesti.<br>This is an essential corridors for Moldova to access the only port to Danube and also for Ukraine's agricultural exports, as well as the export and import of other goods in response to Russian aggression in Ukraine and the reorientation of trade routes towards the West. | | |
| **Criteria in ESS1 (paras 10-11, 32)** | **Applicable** | **Analysis** |
| Facilities or activities **not funded as part of the project** that are... | Yes | The Project consists of activities on Moldovan territory managed by the Government of Moldova. The M3 road works will be retendered in 2024. The money are available from EBRD sources for construction and for CS. |
| (a) directly and **significantly related** to the project | Yes | The both roads M3 and R34 are very important for BCP and platform financed by the Project. Bypass road of Giurgiulesti connecting R34 with M3 is significant for Giurgiulesti community - not to create suplimentary tensions in the relation with drivers and institutions (SRA and MCS) |

| | | |
|---|---|---|
| (b) carried out, or planned to be **carried out contemporaneously** with the project | Yes | The activities are to be carried out contemporaneously with the Project as financing form EBRD are available for M3 road and for R34 the DD and FS are ready. . |
| (c) **necessary** for the project to be viable and **would not have been constructed**, expanded or conducted if the project did not exist | Yes<br>No | The activities are necessary.<br><br>But are not critical for the entire project but will create environmental & social problems for the communities affected. |
| **To the extent the Borrower has control or influence**: or must demonstrate extent to which it cannot exercise control or influence by providing relevant legal, regulatory, institutional factors (FN11) | Yes | During implementation, the Government of Moldova would effectively have control over the components and can influence. GoM will have sign the Contract, will legal, regulatory, institutional factors as will negotiate new financial agreements for R34, will appoint CS. Etc. Can decide if to construct the bypass, change the legislation, give power to SRA and MIRD to administrate the process. |
| To the extent that the Borrower cannot control or influence the Associated Activities: to meet the requirements of the ESSs, the environmental and social assessment will also **identify the risks and impacts the Associated Facilities may present to the project.** | No | Environmental and social risks associated with the activities are necessary and mitigable. Project are on the Moldovan side and therefore under the control of the Borrower. Risks to the achievement of the Project objectives overall involve potential for lack of coordination between the Moldova institutions, environmental conditions on the Moldovan side but are expected to be easily mitigated with Environmental and Social Impact Assessment and associated measures. The activities carried out on mentioned roads involve site specific rehabilitation of existing facilities with mitigable impacts of air and noise pollution, localized water, air, soil, subsoil, biodiversity, landscape impacts, and moderate occupational and community health and safety risk during construction. There is no requirement for land acquisition with potential for economic and physical displacement on Moldova site. The activities do not occur in disputed areas and there are no potential significant transboundary risks to the Project. Cumulative impacts associated with the effects of the activities on roads, increase in non-local traffic (ie to and from Ukraine) should be taken into account in the Project E&S documents. |

According to new FS and detailed design that will follow on R34 is proposed a new roundabout and bypass road of Giurgiulesti village to connect R34 with M3.

***General Data***

The Feasibility Study for R34 **Hincești-Leova-Cahul-Giurgiulesti Road Repair Project**, **km 124,835 to km 180,600** was developed by the Design Company „INTEXNAUCA" S.R.L. in Chisinau, based on Urban Planning Certificate, issued by SC "State Road Administration" (SRA), with all the agreements obtained from interested authorities.

Location of the project: Cahul district, R34 road sector, km 124.835 to km 180.600, roughly the start of Cahul Bypass (start of road sector at km 124+835), intersection with M3.1 Road in Giurgiulesti village (end of road sector at km 180+600).

The R34 road is a route that links Hincești-Leova-Cahul-Slobozia-Mare, it is a short access way towards the South Prut areas and to the centre of the Republic. The disadvantage of this route is that it crosses a significant number of villages, where this road constitutes the main street and where it is not possible to allocate additional land for road sidewalks, drainage system for rainwater, lawns, etc

At km 180+600 it is foreseen the intersection of R34 Road with M3.1Road, and according to project No. RBTC/W-SWEC-19/11 „RSP/W9/05 Construction of M3 Slobozia Mare Bypass, km 0+000 to km18+290" a roundabout intersection is to be provided at PC 178+80.

According to the current legislation, the existing survey road under consideration is a road of Category III.

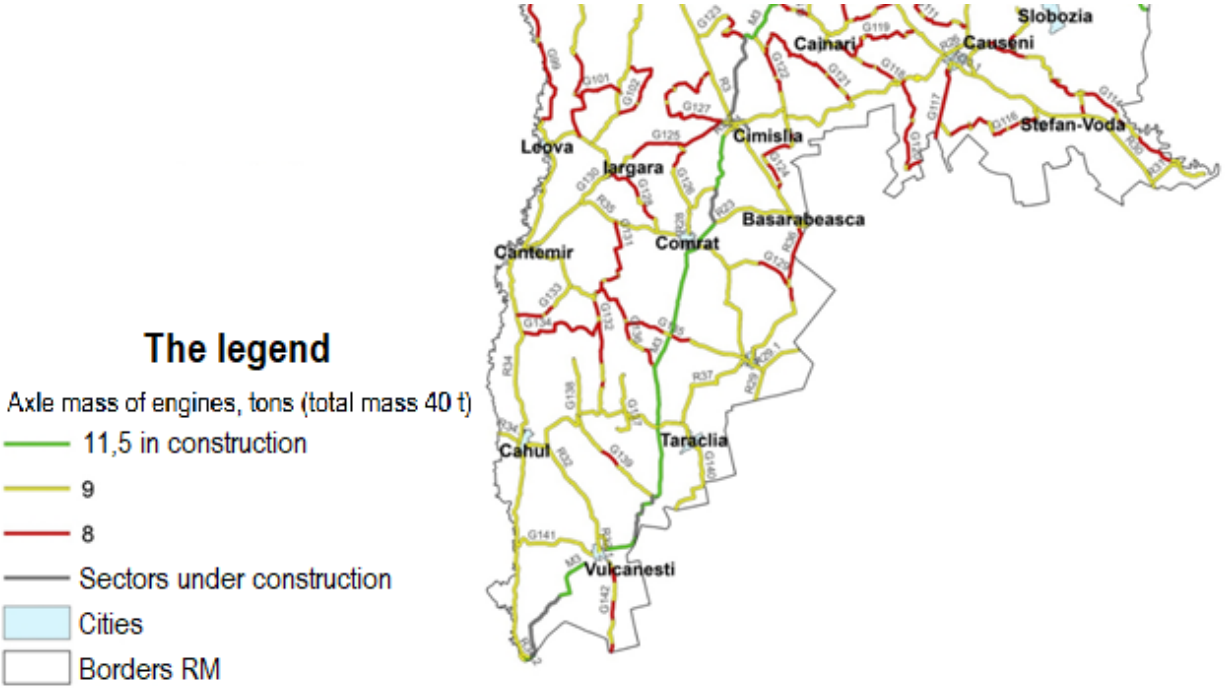
The main objectives for revision and justification of the developed design documents are as follows:

- the general objective of the Feasibility Study is to reduce road transport costs for this road users through rehabilitation or reconstruction of the assessed road sector, improving the condition and quality of the road network and the way of administration and operation;
- ensuring (if possible) organized exit accesses to the main road of the network of both public and local roads;
- arranging interchanges at the intersection of regional public roads and main highways based on the traffic volume;
- providing an asphalt concrete road pavement for a design axle load of 115 kN;
- providing alternative design options for basic design solutions, using estimated costs.
- assessing the negative impact of the road in all directions during repair and maintenance.

***Traffic diversions***

It was also analysed the diversion of traffic from the national roads or other corridors or routes towards the survey R34 Road. At km 167.000, in Slobozia Mare village, the R34 highway is connected to M3 highway. Thus, taking into account the rehabilitation works on about 80% of M3 Road and the new construction works on Slobozia Mare Bypass, with traffic diversion directly to the final destination, the Giurgiulesti port, the road at the moment is overloaded with the traffic that will be further taken over by M3 road, ensuring the link between Chisinau and Giurgiulesti.

*Figure 4-1: Informative map of the allowable weight on the roads in the south of the republic*


The legend
Axle mass of engines, tons (total mass 40 t)
11,5 in construction
9
8
Sectors under construction
Cities
Borders RM
Slobozia
Cainari
Causeni
Stefan-Voda
Leova
Cimislia
Iargara
Basarabeasca
Cantemir
Comrat
Cahul
Taraclia
Vulcanesti

At km 177+200 on the right side is located customs clearance post for goods, which involves the movement of a large number of trucks from Giurgiulesti customs port. R34 road section km 178,570 – km 180+600 run through s. Giurgiulesti. Under the current conditions, the goods to be customs cleared at the customs post at km 177,200 are transported from the port to the customs post, so the trucks cross Giurgiulesti, bringing major discomfort to the locals by causing increased noise, but also vibrations. Long trucks also have a negative effect on road safety.


At the same time, multiple complaints were received against the SRA from the local public administration of Giurgiulesti village.

The Customs Service within the Ministry of Finance of the Republic of Moldova came up with measures including statistical data and the prospective development plans of the customs control area, the need for the construction of the road bypassing the village of Giurgiulesti is an urgent necessity.
Thus, it is proposed to build a bypass road for Giurgiulesti, which, after the completion of the construction works of the M3 road (construction works are currently taking place), will connect the R34 road with M3.
It is proposed for study 2 variants, the first with a length of 3.8km and the second variant with a total length of 3.15km[18]

[18] FS R34. Intexnauca / SRA, 2023.

### *6.3.2. Giurgiulesti village bypass*

In order to avoid heavy traffic on the Giurgiulesti sector, it is proposed by SRA to build a bypass road. The bypass road will connect the R34 road with the M3 road, which is currently under construction.

Based on the destination of the roads to be connected, the bypass road is proposed to be provided for the third technical category with a permanent road structure.

Two variants of drawing the bypass road in a horizontal plane were analyzed.

- Variant no. 1 involves a route with a length of 3.8 km. The connection with the R34 route is at km 175+870.
- Variant no.2 involves a route with a length of 3.1 km. The connection with route R34 is at km 177+400.

Variant number 1 is 0.7 km longer. It involves the construction of a tubular footbridge with Ø1.5m. The width of the lane granted to the road, between the limits of agricultural land is more than 17m, which allows the classification of all elements of the transverse profile according to the technical category. Longitudinal gradients are non-essential 20-60‰.

Option number 2 is the shortest in length but involves the construction of a viaduct with a construction length of about 150m, which involves a fairly large financial effort for both construction and maintenance. It also involves expropriations of arable agricultural land about 1.5 ha.

The proposed road Variant no.1 involves covering a longer distance of bypassing the s. Giurgiulesti by about 4 km compared to Variant no. 2, will also exclude the expropriation of agricultural land and, most importantly, the construction of a viaduct with a length of about 150 m.

Thus, for construction, option number 1 is proposed with the length of the road sector of 3.8 km and the construction of a tubular rainwater discharge culvert with a diameter of 1.5 m.

- *Sector length* *2,8 km*
- *Road category* *III*
- *Road width* *8.0 m*
- *Road platform width* *11,0*
- *Minimum horizontal radius.* *800 m*
- *Maximum longitudinal gradient* *60 ‰*
- *Maximum embankment height* *2.5m.*

Taking into account the main users of the road section of road consisting of long trucks, the intersection with the R34 and M3 road is supposed to be organized as a roundabout with the central island not less than 20 m.

# 7. PUBLIC CONSULTATIONS, STAKEHOLDER ENGAGEMENT PLAN AND GRIEVANCE REDRESS MECHANISM

During the implementation stages of the project, stakeholder engagement will be conducted in an ongoing manner and will cater to the three complementary components and their respective activities. Tailored use of participatory instruments and modalities for engagement, feedback and communication will ensure that different beneficiaries', users' and stakeholder groups' views, needs and preferences are taken into account in an easy and accessible manner.

**Component A and B**. Under Components A and B, target communities will be engaged in identifying safety measures associated with roads and BCP construction and rehabilitation investments. Stakeholders will be also enabled to monitor the progress of works, and influence planning processes and decisions during road rehabilitation in affected project areas. Throughout the process, public consultations will be used to address progress updates and any other issues that may arise during implementation. In case if additional land or real estate objects will be required, the owners and users will be consulted as required in the RPF.

Also, the additional round of consultations will be organized during preparation of technical design to ensure that opinion of local stakeholders are taken into account and all concerns and grievances are addressed and responded to.

## Communication Tools

**- Public Consultations**. Consultations will continue to be organized during the project design stage and the project implementation. Public consultations will be organized for ESF framework documents, as well as site specific ESIA and other ESF documents. Moreover, public consultations will be held on an ongoing basis as part of the citizen engagement process during the project cycle.

**Workshops.** The workshops with local authorities and SIMC members will be held to consult on the selection of Project activities in terms of Component B scoping and implementation, routine monitoring of project activities, GRM handling, raising stakeholder awareness on project benefits, establishing project implementation procedure, timing for project implementation, identification of special needs for PAPs with vulnerabilities, etc. Other topics relevant for these workshops will be identified during project implementation.

**Information boards.** Establish Information Boards in each sub-Project area, in the communities that will benefits by investments and also in localities with investments for BCP facilities and facilities where component B will be implemented. 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.

**GRM** will be established in line with the World Bank's ESS-10 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 or using the project digital platform.

***SIMC*:** For each sub-project affected localities Social Impact Monitoring Committee (SIMC) will be created. Affected people from the community could submit in written form the complaint, request or grievance to the SIMC.

## Proposed Information Disclosure Approach

The table below provides a preliminary summary of the suggested information to be disclosed based on the project design and topics that might be of interest to stakeholders. The table, like the entire document, is an evolving tool and can be updated at any point during project preparation and implementation. Some of the proposed documentation in the current draft may not be subject to disclosure and can be removed by the SRA/MCS from the table along with this reference.

In the line with WB ESS10, the information will be disclosed in Romanian language and in a manner that is accessible and culturally appropriate, taking into account any specific needs of groups that may be differentially or disproportionately affected by the project or groups of the population with specific information needs. The disclosed project information will allow stakeholders to understand the risks and impacts of the project, and potential opportunities

| **Project Component** | **Type of information to be disclosed** | **Methods of disclosure** | **Timing/Frequency** | **Target stakeholders** | **Responsible stakeholders** |
|---|---|---|---|---|---|
| All | Proposed Project Design | SRA/MCS official websites, public consultations | Before project appraisal | All | SRA/MCS World Bank |
| All | ESF documentation | SRA/MCS official websites, public consultations | Before project appraisal | All | SRA/MCS World Bank |
| All | GRM<br>GBV/SEA/SH<br>Health and safety impacts | SRA/MCS official websites, public consultations | During project implementation | All | SRA/MCS, Contractors, subcontractors, MCS |
| Component **B** Facilitating trade and expanding Solidarity Lanesh | Public outreach and communications consultancy<br>Bidding documents<br>RPF<br>RAP<br>GRM<br>ESIA, ESMPs<br>Technical design<br>Location of auxilary facilities | SRA/MCS official websites, public consultations, SIMCs | Before civil works commencing, during the project implementation | Residents/business owners/vendors from the project area/vulnerable group, residents of affected settlements | SRA/MCS, SIMCs |

| | | | | | |
|---|---|---|---|---|---|
| Component C Building delivery capacity and project management support | Publishing reports | SRA/MCS official websites, | Periodically during project implementation | All | SRA/MCS |

## Monitoring and Evaluation

The Stakeholder Engagement Plan will be periodically revised and updated as necessary in the course of project implementation in order to ensure that the information presented herein is consistent and is the most recent, and that the identified methods of engagement remain appropriate and effective in relation to the project context and specific phases of the development. Any major changes to the project related activities and to its schedule will be duly reflected in the SEP.

Implementation of the SEP, including the monitoring of output and outcome results will be the joint responsibility of SRA and CS PIUs staff working closely with field-based team members (CS, Environmental and social experts from the Contractor`s site). The PIUs will monitor the SEP in accordance with the requirements of the Project Loan Agreement and the World Bank ESF including changes resulting from adjustments in the design of the project or project circumstances. The corresponding local government bodies will act as the intermediary project partners at local and community level. SIMCs established on local level in each locality where the Project will be implemented will be responsible for community monitoring of compliance with national legislation and ESF documentation, communicate with Project implementation parties on behalf of community members.

| **Monitoring indicator** | **Frequency** | **Responsibility** |
|---|---|---|
| Involvement of stakeholders through organizing consultations at all stages of project implementation | Throughout the entire project implementation cycle | SRA/MCS |
| Information disclosure on official web-sites and resources | Throughout the entire project implementation cycle | SRA/MCS |
| Grievance submission channels are available for all stakeholders and easy accessible. Grievances were handled and included in the grievance log. | Semi – annualy | SRA/MCS |
| All received grievances have been addressed, resolved and responded to. | Semi-annualy | SRA/MCS |
| All SIMCs had been established | During 90 days after Project appraisal | SRA/MCS , local administrations |

## Grievance Redress Mechanism

### Definition of the GRM

Transparency and accountability are core elements of the Project. For this purpose, the project will include a GRM. The goal of the GRM is to strengthen accountability to beneficiaries and to provide channels for project stakeholders to provide feedback and/or express grievances related to project supported activities. The GRM is a mechanism that allows for the identification and resolution of issues raised by stakeholders. By increasing transparency and accountability, the GRM aims to reduce the risk of the project negatively affecting citizens/beneficiaries and serves as an important feedback and

learning mechanism that can help improve project impact. The mechanism focuses not only on receiving and recording complaints but also on resolving them. While feedback should be handled at the level closest to the complaint, all complaints should be registered and follow the basic procedures set out in this chapter.

For the purposes of these Operational Guidelines, a GRM is a process for receiving, evaluating, and addressing project-related complaints from citizens and affected communities at the level of the project in a timely manner. The terms 'grievance 'and 'complaint' are used interchangeably.

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

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

*GRM's management*: The GRM is managed by the SRA's and MCS's PIU.

*GRM at the level of SIMC*: For each sub-project affected localities Social Impact Monitoring Committee (SIMC) will be created. Affected people from the community could submit in written form the complaint, request or grievance to the SIMC.

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

### Grievance Investigation and Resolution Process

GRM at the Project level will be maintained during the entire period of Project implementation. The GRM will ensure that all stakeholders can effectively be engaged in the Project design, implementation, provide project staff with practical suggestions/feedback on Project activities allowing them to be more accountable, transparent, and responsive.

This mechanism will follow the following principles:

▪ Grievances will be treated confidentially, assessed impartially, and handled transparently.
▪ The submitting and readdressing of the grievances will be free of charge for complainants.
▪ The SRA and CS will ensure that all project-affected parties will have equal opportunity to submit their grievance in accessible way. The Project beneficiaries may use a range of contact options (telephone number, e-mail address and postal address, etc.). The GRM is accessible to all stakeholders.
• The channels for filling in grievance form should be disclosed on official sources.
▪ The SRA and CS will provide an opportunity to submit a grievance anonymously.
▪ Affected persons may raise a complain at any time of project related activity.
▪ The GRM is designed to be responsive to the needs of all complainants, including anonymous ones. ▪ All grievances, simple or complex, will be addressed and resolved as quickly as possible. The action taken on the grievance will be swift, decisive, and constructive.
▪ In cases where the aggrieved individuals or group is not satisfied with the outcome of the amicable mechanism, they will always be able to file to the court at any stage in the resolution process;

▪ All grievances will be registered and documented, and each grievance resolution process and communication will be systematically tracked;
▪ The channels for filing complaints will be listed in SEP and communicated to the public during the consultations.

The Project implementation entities will ensure equal and nondiscriminatory access to grievance mechanisms, but the special attention will be given to the most vulnerable groups: people less informed, with limited legal knowledge, the poorest community members, with limited or no access to internet. The project team will be working together with social assistances and community mediators to provide access for complaints and ensure that the most vulnerable groups views are taken into account.

The Social Specialist (or Environmental & Social Specialist – depending on PIU structure) will serve as Grievance Focal Point(s) who will register the submitted grievances in the Grievance Log (database) and review within 15 (fifteen) calendar days, including the information verification, cross-checking, and analysis, and follow-up with the complainant as needed. As necessary, the Grievance Focal Point will involve the other relevant units' specialists in this activity.

Sub-project level GRM mechanism.

Will be operated through the SIMC (will be established at the later stages of the Project).

The Mayor's Office Secretariat is designated as the Reception Point for collecting grievances/complaints from community people from the localities where SIMC operates.

- The grievance redress mechanism should be communicated to community people and contact details should be made available to all.
- Complaints & grievances will be addressed through the following steps and actions:
- First, complaints should be logged at the Social Impact Monitoring Committee (SIMC) at the local administration offices where resolution will be attempted with the involvement of the Engineer or can be contacted a SIMC member directly.
- The affected person/s may call Engineer representative directly and make an appointment to discuss their issues. Should the complaint arise from direct fault of Contractor to comply with environmental and social requirements set out by Employer, Engineer will take immediate action for resolution of grievance in the most prompt time by asking immediate rectification from Contractor.
- SIMC shall collect, document and address grievances referred by the local police officer in case community people are not aware of the grievance mechanism established by Engineer and the grievance is filed at the local police office. Accordingly, the local police officer should be informed that citizens can choose addressing their grievance to the SIMC and ask prompt involvement of Engineer in resolving the matter.
- The grievances may be recorded as anonymous, should this be asked by the affected person.
- The complaint/grievance will be filed in a template Letter of Complaint, attached hereto.
- If no solution is reached within 15 days, the affected person/community can further submit their case to the appropriate department of the SRA.

**SEA/SH GM**

Sexual exploitation and abuse / sexual harassment (SEA/SH) grievance redress mechanism is a grievance mechanism that allows for safe and ethical handling of SEA/SH allegations. This is project level grievance mechanism adapted for SEA/SH cases.

The Project level GRM will be designed to also address SEA/SH cases in ethical and confidential manner. The complainant will be able to submit the grievance with the help of project level GRM, also possibility of anonymous grievance submission will be ensured by RSA/MCS . The envelopes with RSA/MCS office post address and post stamps will be placed in contractor`s camp`s and Engineer`s offices for ensuring that employees have a possibility to submit the complaint anonymously. The special designated GBV focal point in RSA/MCS will undergo sensitization on SEA/SH handling issue process and be responsible for investigation of the SEA/SH cases and communicate with Project staff with GM responsibilities to investigate and address the grievance. The confidentiality of complainant`s personal data will have a high priority.

The special SEA/SH grievances handling and investigation trainings based on World Bank guidelines and requirements will be organized by RSA/MCS focal point for staff with GRM responsibilities.

**GRM for employees**

A locally-based project-specific GRM, proportionate to the potential risks and impacts of the project, will be established, building upon existing labor practices and HR procedures. In addition, a GRM specifically for direct and contracted workers will be provided in accordance with ESS2. 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.

### Channels to Make Complaints

Project proposes the following channels through which citizens, beneficiaries and PAPs can make complaints regarding project-funded activities:

| | **State Road Administration** | **Custom Service of Moldova:** |
|---|---|---|
| **By Email:** | serviciu@asd.md | callcenter@customs.gov.md |
| **Web page:** | www.asd.md | www.customs.gov.md |
| **In writing:** | Chisinau, Bucuriei str. 12A MD 2004 Republic of Moldova | 30, Nicolae Starostenco Street, Chisinau, MD-2065 |
| **Social Media:** | https://www.facebook.com/asdrum | https://www.facebook.com/ServiciulVamalRM, https://t.me/s/ServiciulVamalRM |
| **Phones:** | +373 22 22 11 14 | +373 22 574 182 / 574 133 |
| Call center 24/24 | +37360477117 | +373 22 78-88-88 |
| **SIMC** | Contact number of SIMC from the affected locality (the contact will be indicated when SIMCs are created). | Contact number of SIMC from the affected locality (the contact will be indicated when SIMCs are created). |

### Grievance Log

It is important that all complaints, including the anonymous ones, to be recorded in writing and stored in a database.

Each grievance should be assigned with an individual reference number and appropriately tracked and recorded actions are completed. The all grievances submitted will be registered / entered by RSA/MCS in to a unique register/database. The directly received grievances by local group will also be sent to RSA/MCS for registration in the unique register. RSA/MCS will be the grievance focal point of this Project. Thus, RSA/MCS will collect the grievances and further will direct them to the local level or to the Project level for examination and solution depending on the subject and location of the grievance.
A simple database will be developed under the Project to manage and monitor the grievances. The documentation on grievances will include:

- the name and contact details of the complainant;
- the date and nature of the complaint;
- the group charged with addressing the complaint;
- any follow up actions taken;
- the proposed resolution of the complaint; and
- how and when relevant Project decisions were communicated to the complainants.

For the verbal grievances, it will be suggested to the complainant to file a written grievance/complaint or to use the number phone and email address appointed for Project grievances in order to be directed to relevant staff/groups for appropriate grievance resolution.

The Grievance log will be submitted to the Bank of quarterly basis for review.

### World Bank Grievance Redress service

WB's Grievance Redress Service: Stakeholders may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Information on how to submit complaints to the WB's GRS is available at http://www.worldbank.org/GRS. The mechanism of addressing the complaints will be the following: Stage 1: Receiving the Complaints/proposal/suggestion (all together named future "complaint") do not matter what form of receiving: verbal, writing, online etc. An initial screening is done by the receiver - Social specialist and included obligatory in the GRM Log. All complaints that meet the admissibility criteria (related to the Project) are transmitted also to the concerned to obtain their views/proposals on the complaints or allegations of violations contained therein.

### Awareness Building

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, consultations, etc

### Monitoring and reporting on GRM implementation

Policies, procedures and regular updates on the GRM system will be made available for all stakeholders. The PIU will regularly track and monitor the status of complaints to ensure that all grievances are resolved within the established timeframe. The PIU will also provide and publish reports available to the World Bank team, and all stakeholders that would contain the following information:
• Status of establishment of the GRM (procedures, staffing, awareness building, etc.)• Quantitative data on the number of complaints received, the number that were relevant, and the number resolved;
• Qualitative data on the type of complaints and answers provided, issues that are unresolved;
• Time taken to resolve complaints;
• Any issues faced with the procedures/staffing or use;
• Factors that may be affecting the use of the GRM/beneficiary feedback system;
• Any corrective measures suggested/adopted and satisfaction of the complainants.

The PIU will compile a report summarizing SEP results on annual basis. This report will provide a summary of all public consultation issues, grievances and resolutions. The report will provide a summary of relevant public consultations' findings from informal meetings held at community level. This report will be available on-line for general population. Stakeholders should be reminded once again that the grievance mechanism is available and important. The SEP will be revised and updated, supplemented as needed with project-specific arrangements and will be publicly disclosed.

The project's grievance redress mechanism will not prevent any stakeholder from accessing national courts or taking advantage of other grievance redress mechanisms.

*Everyone should know that the mechanism exists and how to use it. This should be done through:*

All managers, supervisors and workers need to be fully briefed on the grievance mechanism.
Trainings should be provided to managers, supervisors and workers on the grievance mechanism.
BCP Project's environmental & social specialist should provide this training to contractors and construction supervision specialist as well.

There should be meetings with Project team, Contractors employees also with community from Zagarancea, Giurgiulesti, Leuseni, to explain the mechanism to them, what a grievance is; how to raise it; where to get the necessary forms, where to hand them in, who to give the forms to; where to go for information on how to use the mechanism.
Copies of the mechanism should be put on all notice boards that are seen regularly by employees and workers, and copies should also be put up in workshops and change rooms and other areas where employees gather; where employees have access to email, copies of the mechanism should be sent to them by email; All current employees should be given a 'hard copy' of the mechanism when it is introduced.

*Everyone should be able to see that the mechanism is working.* But at the same time, if the person making the complaint asks for it, they should be treated with confidentiality.

*People should know what the steps are in the process; there should be clear time-frames and there must be a way of checking to see if the agreements have been kept.* The mechanism must make sure that grievances are settled as close to where they started as possible, and that they are settled quickly and fairly.

A member of senior management – usually this is the Project Manager – should take overall responsibility for the mechanism.

## 8. INSTITUTIONAL ARRENGEMENTS

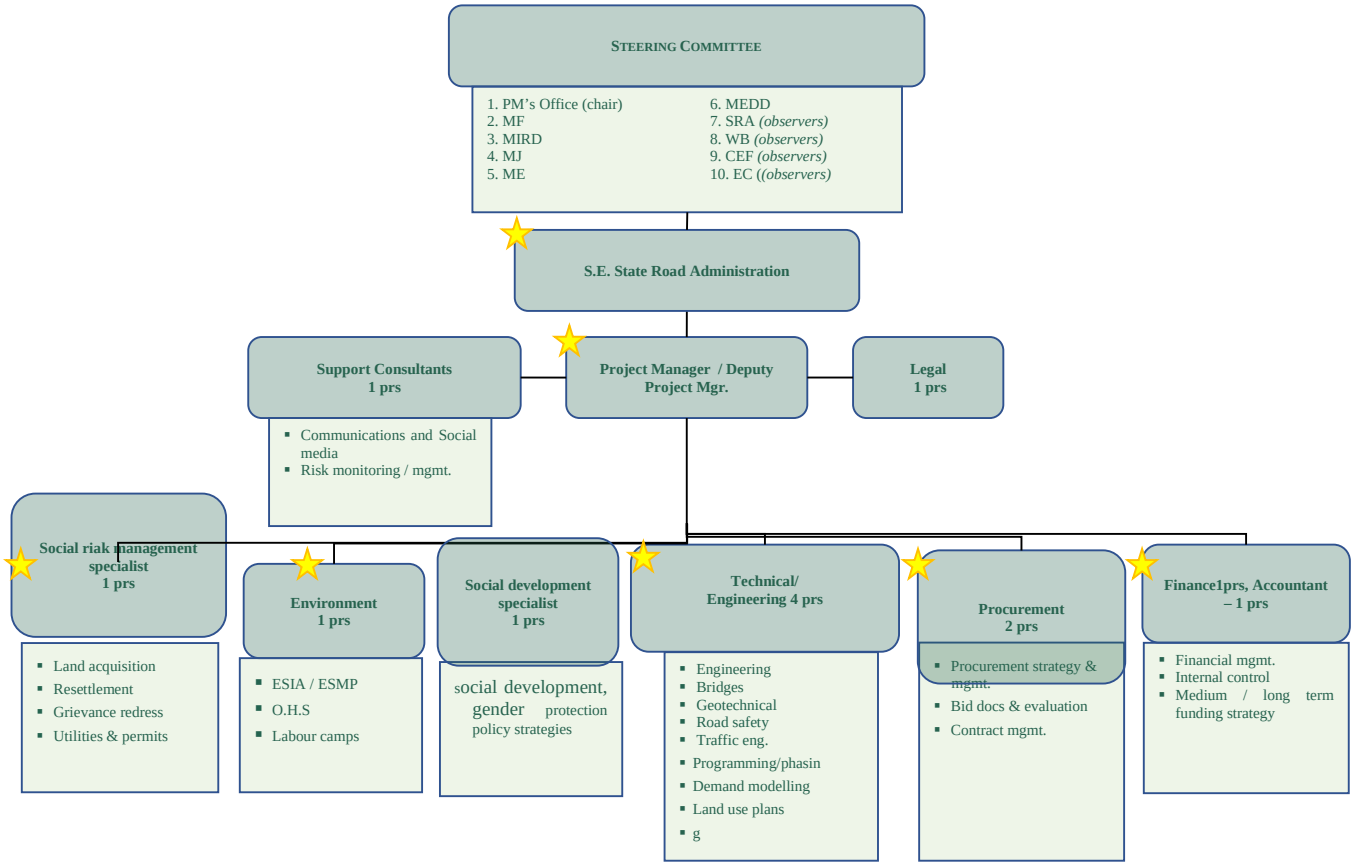
**Responsible Staff**

The Project will entail two Implementing Agencies – the Moldova Custom Service (MCS) under the Ministry of Finance and the State Roads Administration (SRA) under the Ministry of Infrastructure and Regional Development.– and the day-today-the implementation will be ensured by the Project Implementation Units under the SRA and MCS.

The overall responsibility for the implementation of all aspects of the project lies with the PIU's Project Director who will include also the implementation of the labor management procedures concerning the direct workers.

The PIU staff under the SRA will be formed of **six permanent staff**, Director, Legal advisor and Expert on financial management and chief accountant, Procurement Specialist, and Environmental and Social specialists (part-time).

PIU institutional arrangement chart for the E&S implementation across project's components.



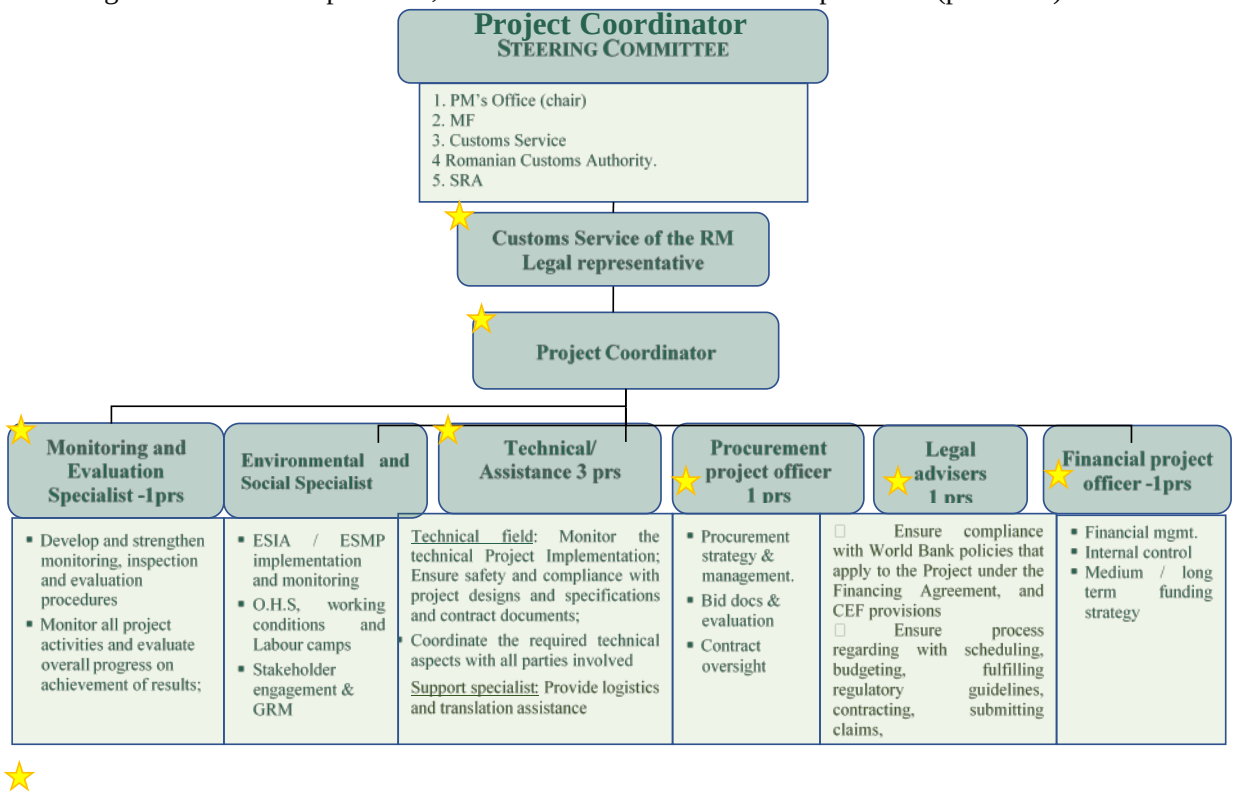

In context of this Project implementation, the staff assigned by PIU's will be responsible for the following:

- Implementing the E&S documents;
- Ensuring that the contractors comply with the LMP;
- Monitoring that the contractors meet the labor and OHS obligations toward the contracted and subcontracted workers, as required by the Moldovan legislation in force and ESS2;
- Monitoring contractors and sub-contractors' implementation of labor management procedures and ESMPs;

- Monitoring compliance with occupational health and safety norms at all workplaces in line with the national occupational health and safety legislation;
- Monitoring and implement training on LMP and OHS for project workers;
- Ensuring that the grievance redress mechanism for project workers is established and implemented and that workers are informed of its purpose and how to use it;
- Have in place a system for regular monitoring and reporting on labor and occupational safety and health performance.

The SRA and Investments department acting as a PIU will do the same for roads and BCP civil works infrastructure.

The PIU staff under the MCS will be formed of Deputy Director, Project coordinator, Legal advisor, Financial project officer, Procurement project officer, 3 person for technical assistance, Monitoring and Evaluation Specialist , and Environmental and Social specialists (part-time).




The civil works Supervision Consultant(s) (if envisaged by the project) will oversee labor and safety performance on a daily basis on behalf of the Employer (SRA and MCS). The site-specific ESMPs require the Supervision Consultant to employ qualified experts for such oversight and to report on performance to the PIU monthly.

**The Contractors (Consultants) will be responsible for the following:**

- To obey the requirements of the national legislation and the ESMP, ESIA, LMP;
- To develop "Occupational Health and Safety Plan", which will apply to contracted and sub-contracted workers. These procedures and plans will be submitted for review and approval to PIUs.
- Assign or employ a person responsible for the adaption and implementation of the OHS plan to the requirements of the project

- To maintain the records of recruitment and employment process for the contracted workers;
- To communicate clearly the job description and the employment conditions to all contracted workers;
- To have a system for regular review and reporting on labor, and occupational safety and health performance.
- A Grievance Redress Mechanism (GRM) has been detailed within this ESIA in line with SEP. The Contractors will be required to comply with the GRM provisions.
- The Contractors will be fully responsible to ensure that their workers know and are trained on their obligations with respect to GBV, safe disposal of wastes and reporting of communicable diseases, if they contract any.
- The contractor will develop and implement a Code of Conduct. The construction contractor should also submit a Code of Conduct for review and approval to PIU. The Code of Conduct will reflect the company's core values and overall working culture including prohibition of any type of harassment and will include provisions related to SEA/SH and gender-based violence (GBV).
- The Contractors are required to ensure that the assigned workers are adequately trained and briefed with overall safety arrangement, use of equipment, GRM procedures, and the working conditions under the project.

When the contractor(s) are known, these labor management procedures can be updated, to include additional details about the companies

# 9. ENVIRONMENTAL AND SOCIAL MANAGEMENT & MONITORING PLANS

## OBJECTIVES, STRUCTURE AND CONTENT

The objectives of the **Environmental and Social Management Plan (ESMP),** including the Monitoring Plan, are:

- ✓ To ensure subproject components are conducted in compliance with the national laws and regulations as well as the requirements of the WB ESSs.
- ✓ To measure the success of proposed mitigation measures in minimizing and/or reducing potential environmental, health, safety and social impacts;
- ✓ To control the changes to baseline environmental, health, safety and social conditions during preconstruction, construction and operation activities;
- ✓ To facilitate a continual review of activities based on performance data and consultation feedback; and
- ✓ To implement corrective actions or new adaptive management programs, as required.

The ESMP sets out the measures required during the two development phases of the project:

- Pre-construction and construction; and
- Operation, including an **Environmental & Social Monitoring Plan E&SMP)**.

The ESMP sets out:

- The environmental aspects that need to be managed;
- Proposed mitigation measures;
- Responsibilities for implementing and monitoring the measures;
- Targets and / or indicators of success; and
- Estimated costs (where appropriate).

*Table 8-1: Environmental Management and Monitoring Plan*

| **Project activities** | **Potential effects/impacts** | **Mitigation measures** | **Responsibility for remediation measures** | **Request for monitoring** | **Cost** |
|---|---|---|---|---|---|
| PRECONSTRUCTION PHASE / DECOMMISSIONING | | | | | |
| Cutting trees, excavation works. Clean up the site from existing materials and preparation works on the site | Cutting trees | Special permit require from Environmental Agency, planting new trees after construction if is possible | SRA/CS/Contractor | SEI | Operational |
| | Noise emissions | Use of new and defect-free equipment | Contractor | Supervisor/ Employer | Operational |
| | Dust emissions | Sprinkling the site with water | Contractor | Supervisor/ Employer | Operational |
| | Soil contamination | Visual control of cars and vehicles | Contractor | Supervisor/ Employer | Operational |
| | Pollution of the site | Washing the tires | Contractor | Supervisor/ Employer | Operational |
| | Generation of waste | Transport of waste from the authorised waste company | Authorized company | Supervisor/ Employer | Operational |
| CONSTRCUCTION PHASE | | | | | |
| Opening the basement foundation | Soil degradation | Removal of soil with humus and storage until being reused for zone leveling and rehabilitation after the construction phase | Contractor | Supervisor/ Employer | Operational |
| | Soil contamination – light soil contaminations as result of leakages of fuel and other liquid materials from the vehicles. Also soil can be contaminated with improper storage of waste created during construction (construction waste etc.) | Visual control of vehicles and other equipment that can potentially leak oils.<br><br>Separation of waste from building materials and its proper storage in a temporary adequate place. | Contractor | Supervisor/ Employer | Operational |

| Project activities | Potential effects/impacts | Mitigation measures | Responsibility for remediation measures | Request for monitoring | Cost |
|---|---|---|---|---|---|
| | Water contamination | Construction of ditching channels | Contractor | Supervisor/ Employer | Operational |
| | Air emissions Dust emissions during working activities as well as emissions coming from vehicle combustion. | Sprinkling the construction site with water Usage of new and damage free machinery | Contractor | Supervisor/ Employer | Operational |
| Construction works | Water discharge Construction activities (works with cement and masonry) might cause water discharges in the surrounding environment. Especially in the time where watering of the basement and the watering of floor platforms happen we might have an increased quantity of water discharged. | Usage of water should be controlled. | Contractor | SEI/ HPC | Operational |
| | Noise emissions Noise is mainly a result of car engines working and their traffic. | Using new and damage free equipment | Contractor | SEI/ HPC<br><br>CS / SRA | Operational |

| Project activities | Potential effects/impacts | Mitigation measures | Responsibility for remediation measures | Request for monitoring | Cost |
|---|---|---|---|---|---|
| | Generation of waste Construction activities might result with generation of solid waste, especially inert ones. | Gathering and transportation of waste done by licensed waste company | Contractor | Client SRA/CS SEI/ HPC | Operational |
| | Health and safety of workers Different accidents Potential risks present:<br>-Inadequate lightning during night shifts,<br>-Operating with equipment without safety belt;<br>-Using equipment with improper braking systems;<br>-Loss of attention and low level of seriousness during work | -Supervision of the works should be done regularly in order of ensuring that safety conditions are met and any irregularity is being corrected following the best practices.<br>-Ensure instructions for drivers of heavy equipment.<br>-Ensure communication between workers in the site where heavy equipment has access.<br>-Ensure adequate lightning system for night shift.<br>-Ensure equipment are properly maintained and that safety equipment is functional.<br>-Ensure usage of safety belts. | Contractor | Work Inspectorate | Operational |
| | | OPERATION PHASE | | | |
| Activities in the BCP | Emission of combustion air from heating system and vehicles | Implementing ventilation system.<br>Proper maintenance of heating system based on natural gas.<br>Organize properly the traffic in BCP . | Custom Service, Border Police | SEI/ HPC | Operational |

| Project activities | Potential effects/impacts | Mitigation measures | Responsibility for remediation measures | Request for monitoring | Cost |
|---|---|---|---|---|---|
| | Generation of household waste | Household waste -to be stored in containers. | Company for Waste Management | Custom Service | Operational |
| | Generation of hazard waste (if any) | Treatment of hazard waste in accordance with regulations and administrative instructions, that administer this field of waste. Treatment options should be selected in cooperation with authorities and in line with local legislation. | Custom Service | SEI/ HPC, Custom Service | Operational |
| | Water discharges | Supply and mounting of a rain waste water pre-treatment plant which has to be mounted at the territory. Connect sewerage from sanitary rooms to constructed Waste water pumping station and to treat it in a new WWTP | Custom Service | Waste water monitoring from authorized / accredited laboratory, SEI/ HPC, Regular inspection of sewerage pipes. | Operational |
| | Underground water pollution | Construction of safe sewerage system according to the construction project | Contractor | Custom Service, Regular inspection of sewerage pipes. | Operational |

## Environmental & Social Monitoring Plan

### 1. Earthworks

For earthworks will draw attention to the following:

- Ensure that the Contractor is trained to ensure that the fertile soil layer has to be properly disposed of and stored so as not to be mixed with other types of building materials, demolition or household waste. The location for temporary storage must be coordinated with local authorities. all this process must be documented including the quantities and locations.
- We will draw attention to the fact that the excavation works will be done in a favorable time, without precipitation, in compliance with the occupational safety and health requirements. Excavations must be specifically marked to prevent accidents. In the event that artefacts or archaeological remains are discovered during excavations, the works will be stopped to notify the competent authorities.
- will ensure during the site inspections that the trucks that will carry the excavated material have to be in a technical state and if they go out on the national roads to be covered with awnings or other cover material to prevent the loss of excavated material on the road. The wheels of the machines leaving the site will have to be washed.

**2. Demolitions**

The environmental specialist will monitor the following during demolition work:
- If extraction and separate storage of hazardous waste such as asbestos, batteries, paint-covered surfaces are done properly. If they are safely transported to permanent storage or treatment centers.
- Monitor the extraction of materials that can be recycled / reused such as planks and other pieces of wood, ferrous and non-ferrous metal waste, etc. to be separated and avoid to be mixed with mineral waste.

Demolition work will be done carefully to limit dust generation.

**3. Foundations**

For foundation work, environmental monitoring will be done to ensure that ground and meteoric waters are properly discharged during work.
Also, that work will be done to limit dust generation.

**4. Visual Monitoring activities**

Generally, site clearance, general construction activities and materials storage will be inspected to the existing construction site and those spaces that are earmarked for temporary use.
The surrounding environment (side-walks, roads) shall be kept free of soil and debris to minimize dust.
There will be no open burning of construction / waste material at the site.

**Ambient air pollution**

During construction ambient air pollution will be increased locally due to heavy machinery used, handling of materials at the sites, excavations, and due to increased traffic connected with the construction works and transport of materials with heavy trucks. The increase of air pollution will be temporary and localized. Environmental consultant will monitor that the cars are periodically inspected technically and in good condition, not to produce excess smoke.

**Construction noise and vibration**

The Contractor shall ensure construction equipment shall be maintained to a good standard.

The equipment will be checked at regular intervals by the Consultant to ensure they are maintained in working order and the inspection result will be recorded by the Contractor & Consultant as part of environmental monitoring. In addition, the Consultant will, monitor if Contractor will:

- Discourage of the idling of engines;
- Prohibit the use of equipment and machinery that causes excessive pollution (i.e. visible smoke) at project work sites; In well-serviced and emission controlled vehicles or machinery smoke should not be visible > 10sec.
- Ensure material stockpiles being located in sheltered areas and be covered with tarpaulins or other such suitable covering to prevent material becoming airborne.
- Impose speed restrictions for haulage trucks;
- The Consultant will monitor if Contractor ensure no burning of debris or other materials will occur on the site.
- The Consultant will monitor if Contractor instituted dust suppression measures as:
- During dry periods and where dust becomes a nuisance, health or road safety issue spraying of all construction sites and transport and access routes at appropriate intervals. Will check of official approval of the proposed sources of water for sprinkling is set as it is required;
- All trucks used for transporting materials to and from the site will be covered with canvas tarpaulins, or other acceptable type cover (which shall be properly secured) to prevent debris and/or materials from falling from or being blown off the vehicle(s);
- Areas of reclamation shall be completed, including final compaction, as quickly as possible consistent with good practice to limit the creation of wind-blown dust.

**Disruption or impairment of access**

Construction activities may have, if not properly planned have an impact on access either for road users crossing the border point, pedestrians and – or for both.

**Borrow pits**

The borrow pits to be used for construction will be identified by the Contractor in BCP areas. According to Moldova legislation this borrow has to be legalized. Extraction of earth materials from borrow pits can result in pits of considerable depths. If left unmanaged such areas can significantly disturb the natural topography and pose potential hazard to people and animals that may traverse the area. Consultant will visit regularly borrow pits to make sure excavations and loading are done in safe manner and environmental friendly.

**Surface water pollution**

Drainage canals and streams are the most sensitive natural receptors near the Project site. During construction surface water can be contaminated by accidental spills and leaks from machinery, by debris that may be inappropriately handled or stored during construction, or by erosion during the

works. Water bodies could also be polluted by the uncontrolled discharge of gray water, housing and construction waste from the work camps. Visual and laboratory monitoring of water will provided.

**Soil and groundwater pollution, soil disturbance**
Soil and groundwater can be contaminated by accidental spillage, leakage from any construction machinery, temporary storage of oil and/or fuel, long-term material storage, e.g. at the construction camp site and to any other activities associated with the use of machinery. The sampling of soil and visual monitoring of construction area and adjacent territory will be ensured periodically.

**Impact on flora and fauna**
During construction parts of the construction area vegetation will need to be removed to accommodate the construction area, access roads, and / or to allow for the safe movement of construction machinery. Valuable trees, other than spontaneous vegetation, are subject to Environmental Agency cutting trees Authorization.

**Construction waste**
During construction Consultant will monitor the waste management as the Project will generate different types of waste:

- Inert mineral materials such as excavated soil, sand and gravel;
- Asphalt and concrete rubble, which will be entirely recycled and used as construction materials for filling, grading and landscaping;
- Demolition waste from the demolition of structures;
- Organic waste from the clearance of the site;
- Household waste and wastewater from the construction offices.

In case construction and demolition waste is not properly transported and disposed, it may cause soil, surface and ground water pollution at the disposal sites. Some materials such as asbestos which may need to be handled locally, may pose health hazards for the work force if the need for precautionary measures has not been recognized and if workers are not appropriately sensitized and trained.

**Maintenance of drainage structures**
Drainage structures and side ditches will have to be regularly inspected and be kept free from debris and obstructions. On newly constructed structures cleaning may have to be more frequent as sedimentation may be more pronounced initially.

## 5. Socials aspects monitoring

**Closure of the main road during temporary border point works**

Significant negative impacts, even during construction, are not likely to occur. The temporary road closure by heavy equipment or blocked areas in construction zones are bearable.
The road will not be entirely closed and alternative routes will be provided. There is alternative road, constructed by Project on temporary border point, which are used during construction. Periodic temporary border point inspection will be done to ensure site is maintained clean of household wastes and not polluted by accidental leakages. Also, periodic visual monitoring of artesian well, pumping stations (source of water) and WWTP will be done.

**Gender-responsive interventions**
The Environmental & Social Consultants will monitor if:

- Equal opportunities for men and women, including those who are particularly vulnerable – elderly, women with children, young persons – shall be provided by construction contractors through hiring local skilled and unskilled labor, through providing equal pay and appropriate work schedules allowing conciliation of work and family obligations. This will help increasing economic growth and generate income among the local families. Another important aspect will be to provide opportunities that are appropriate not only for men as they represent the majority of labor force in the construction sector, but also for women.
- Gender sensitization for Contractors at the outset of the construction works, specific provisions in the contract clauses, such as reconciliation of work and family life is very important. This will ensure that women with small children of kindergarten age are not discriminated in employment. This means that once employed, women with children of kindergarten age would not be forced, under the threat of dismissal, to start work at very early hours when the educational institutions are not open yet.
- Contractors should be required to arrange for needed training for its workers and be sensitized and aware of diseases associated with human mobility. Provisions should be there in place related to the prevention of human trafficking, including but not limited provisions in the employment contract requiring workers to adopt adequate behavioral patterns. The awareness on trafficking in persons for workers, HIV-AIDS and STD should be stipulated in the contract clauses.

**Community participation and monitoring**
Vicinity communities' participation and monitoring will be essential during the construction phase. Communities are willing to be regularly informed about important matters such as progress in construction works, to provide information on unknown serious issues such as delay problems, construction defects noticed by community members, unauthorized storage of construction materials, environmental damage caused by the contractor. Public consultation on trimestral basis, on the request, will be organized in closest Mayoralty for sharing information with the local population as is most possible affected by heavy traffic associated with Project activities.

## 6. Health & Safety

**Risk of fires and explosions**

Risk of fires and explosions are mainly limited at the storage areas for fuels and lubricants. In these areas there may be an increased risk for public safety and workers if necessary precautionary measures are not followed. This could lead to injuries of workers and people visiting or passing by the site and may also cause damage to facilities. Also site offices and trucks and machinery may be on risk of fire and explosions. The Consultant will monitor if the risky areas are proper maintained, if fire signing are on right place, fire extinguishers are available. Workers are trained.

**Public safety and traffic safety**

Intensified traffic of heavy machinery and trucks to and from the construction site, increased traffic along haul routes and at demolition sites have potential to increase the risk of traffic accidents. The same applies to situations where local deviations are temporarily required – e.g. where drainage canal or other structures are built.

Construction sites that are inappropriately secured can create additional safety hazards for border point visitors – especially during the night.

**Worker's health & safety**

Road construction bears many dangers and there is a risk that workmen - or visitors - may be injured at the construction and demolition sites if necessary safety and occupational health rules or standards are not being followed. Excessive noise, dust or sun exposure can also be critical issues during construction. This monitoring activities were described before.

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| **SLAB ANALYSES / SITE MONITORING** | | | | | |
| Soil contamination<br>Hydrocarbons contaminations | Areas most vulnerable to the discharge of hydrocarbons | 1 x prior to start of works;<br>At quarterly intervals during the construction<br>1 x upon completion of construction – same sites | Accredited lab (sampling, lab analysis and data interpretation) | Contractor<br>SE to approve sampling points and reports | Contractor costs |
| Ambient air emissions<br>Ambient air quality during peak construction activities (CO, $SO_2$, | Potentially most affected residential areas, houses on | 1 x prior to start of works<br>At quarterly intervals, while the construction activities inside each | Accredited lab (sampling, lab analysis and data interpretation) | Contractor<br>SE to approve sampling points and reports | Contractor costs |

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| $NO_x$, particulates PM10 and PM2.5, hydrocarbons, and benz(a)pyrene) | roadside; pedestrian areas | BCP and village affected by construction are at peak | | | |
| Ambient noise pollution<br>Ambient noise levels during peak construction activities – compliance with maximum exposure limit of 70 dBA | Most affected residential areas and BCP | At monthly intervals during the construction while the construction activities in settlements are at peak; in case of complaint. If the results are unsatisfactory undertake weekly measurements | Handheld equipment (analyser) with application software | MCS 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 | - |
| **VISUAL OBSERVATIONS MADE DURING SITE CHECKS** | | | | | |
| **Material supply** | | | | | |

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| Asphalt plant<br>Possession of official permit / valid license | Asphalt plant | Prior to start of works | Inspection | SE | NA |
| Stone quarry<br>Possession of official permit / valid license | Quarry | Prior to start of works / during construction | Inspection | SE | NA |
| Sand and gravel pit<br>Possession of official permit / valid license | Sand and gravel borrow pit / separation | Prior to start of works / during construction | Inspection | Borrow pit or separation operator/ SE | NA |
| Soil for embankment construction<br>Compliance with provision of license | Construction site | Prior to start of works / during construction | Inspection | Borrow pit or separation operator/ SE | NA |
| **Material Transport** | | | | | |
| Asphalt<br>Truck load covered | Construction site | continuous monitoring | Supervision | Contractor[19]/SE | NA |
| Stone<br>Truck load covered | Construction site | continuous monitoring | Supervision | Contractor/SE | NA |
| Sand & gravel<br>Truck load covered | Construction site | continuous monitoring | Supervision | Contractor/SE | NA |
| Soil<br>Truck load covered | Construction site | continuous monitoring | Supervision | Contractor/SE | NA |
| Transport routes<br>Compliance with approved transport routes as per Contractor's Method Statement | Construction site | continuous monitoring | Supervision | Contractor/SE | NA |

[19] Here, CC means the CC's environmental manager / specialist

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| **Construction Site – Construction Phase** | | | | | |
| Vibration<br>Effects of vibration on properties | Properties as indicated by owners | Upon complaint | Visual inspection | Contractor/SE | NA |
| Dust impact<br>(suspended particles) | At construction site and in particular in residential areas | Unannounced inspections during delivery of materials and during construction; upon complaint | Inspection / visual observation | Contractor/SE | NA |
| Access to private property / land / public facilities | Construction site | Random checks minimum weekly during construction activities | Supervision | Contractor/SE | NA |
| Vehicle and pedestrian safety when there is no construction activity (Visibility; safety) | At and near construction site | Random checks at least once weekly in the evening | Observation | Contractor/SE | NA |
| Water and soil pollution from inappropriate material storage, management and use (Problems; compliance with approved site management plan) | Construction site; contractor's camp/yard | Unannounced inspections | Inspection; observation | 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 construction site | Prior to start of works In the deforestation period | Visual inspection | Contractor/SE (Environmental Protection Inspectorate, "Moldsilva" Agency) | BOQ |
| Tree plantations<br>(Successful tree plantations / number | Along the project road | Towards the end of construction | Visual inspection | Contractor/SE | BOQ |

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| of healthy trees growing. Replacement of any failed trees) | | | | | |
| Reinstating of disturbed areas to an acceptable state | Along the project road | On closure | Visual | Contractor | NA |
| **Noise** | | | | | |
| Monitoring of levels of environmental noise: equivalent noise levels and maximum noise levels during day and night times<br>To be measured once prior to construction start to establish a Project baseline, on locations near the closest sensitive receptors identified by the Supervising Engineer, and in locations to establish background levels (e.g. at a distance of more than 300 m from the road) | One time measurement | Standard referenced method (on-site analysis and data interpretation) | Contractor (via contract to accredited institution) | | |
| **Grievances – monitoring of implementation of Stakeholder Engagement Plan** | | | | | |
| Monitoring of enforcement of compliance mechanism.<br>Monitoring of stakeholder engagement activities prescribed by the SEP (implementation of actions, complaints received, response time, complaints satisfied)<br>Monitoring of grievance redress process | At and near construction site | Continuous | Stakeholder engagement | SRA | Implementation costs |

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| Monitoring of social and environmental issues reported by the project communities | Along the project | Continuous | Social and Environmental Impact Monitoring Committees | SRA | Implementation costs |
| Monitoring of parameters indicated in the updated RAP, including general information on RP implementation, number of affected people/households/businesses and types of impact.<br>Monitoring of grievance redress process | Along the project | Continuously on a quarterly basis. | SRA monitoring of grievances/complaints from local community & other stakeholders;<br>Construction contractors' reports and grievance management records. | SRA | RAP Implementation costs |
| Monitoring of social and environmental issues reported by the project communities | Along the project | Continuous | Social and Environmental Impact Monitoring Committees | SRA | Implementation costs |
| **Disruption of Access caused by inconsistent Road Design** | | | | | |
| Consult the design documents with every affected community and improve the design to accommodate the issues raised by them | consultation | Before construction | consultation | SRA | |
| **Cultural heritage** | | | | | |
| Archaeological heritage in case of incidental archaeological discovery (chance find procedure) | Along the project road | As required (in a case of discovery) | Visual | Contractor | Contractor costs |
| **Health and safety – monitoring of implementation of Construction OHS management plan, Community health and safety management plan and Emergency Response Plan** | | | | | |
| Worker's health & safety<br>(Appropriate PPE is worn by all workers; organization of bypassing | Construction site | Unannounced inspections during work | Inspection | Contractor/SE | NA |

| Environmental & social indicator / parameter | Location | Frequency | Type of monitoring | Responsibility | Cost |
|---|---|---|---|---|---|
| traffic / securement of work site; availability of potable water and mobile toilets for workers; incidences; accidents) | | | | | |
| Monitoring of enforcement of public safety procedures and operational health / safety during construction. | Construction site | Continuously | Inspection; observation | Contractor/SE | NA |
| **Operations phase** | | | | | |
| • Regular selection and collection of waste<br>• Regular annual monitoring and control of storm water systems.<br>• Regular maintenance of the storm water systems | Along the project | Continuously | Visual inspection | SRA | NA |
| • Implementing of environment and forestry monitoring and control<br>• Monitoring the condition of wild animals (including bird species), especially migratory species in the period from spring to autumn<br>• Measures to save bees and other melliferous species<br>• Implementing invasive species control measures | Along the project | Permanently | Visual | EIP, Forestry institutions, EA | NA |

# ANNEXES

Annex 1. *Impacts and mitigation measures*

*Table 8-2: Table with impacts and mitigation measures*

| ***Environmental and social components*** | ***Project activity*** | ***Potential Impact*** | ***Scale of the impact*** | ***Suggested Mitigation Measures*** |
|---|---|---|---|---|
| Soils and land | • Transportation<br>• Grading<br>• Leveling<br>• Potholes patching/ cracks priming<br>• Pavement / Carriageway surfacing (laying of asphalt-concrete mixtures, laying cement-concrete slabs, etc.)<br>• Use of hazardous materials, such as combustive-lubricating ones, bitumen, etc./ heating and spraying of bitumen<br>• Heavy machinery and | **Negative:**<br>• Damage to land due to:<br>o site preparation works/ earthworks<br>o excavation of constructional materials<br>o haul roads<br>• Damage to soil structure due to traffic of vehicles and storage of constructional materials (cement-concrete slabs, gravel, et.) in the immediate vicinity of road rehabilitation works<br>• Accident soil pollution by petroleum hydrocarbons and other hazardous and toxic materials in the area of mobile asphalt plant operation<br>• Land damage/ soil pollution by bitumen, asphalt concrete mixtures during loading-unloading/ transportation and laying<br>• Soil pollution due to leaks of lubricants | Temporary/ local | • To use asphalt mixtures from an existing asphalt plant.<br>• To use vicinity localities for workers accommodations.<br>• To plan carefully construction works to minimize land affected and ensure soil pollution prevention<br>• To minimize construction site's size/ to minimize land affected/ to ensure soil pollution prevention<br>• To ensure accuracy of road rehabilitation works/ to avoid spills, leaks, etc.<br>• To provide proper haul roads to minimize impact on the land |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | equipment operation<br>• Traffic of construction vehicles<br>• Hauling of constructional materials such as bitumen, borrow materials, asphalt-concrete mixtures, concrete, cement-concrete slabs, gravel, etc.)<br>• Rehabilitation of road drainage system (drainage channels, chutes, etc.)<br>• Quarrying<br>• Constructional materials stockpiling<br>• Construction waste disposals<br>• Construction/ rehabilitation of sidewalks<br>• Establishment of construction camp – not for living (sewage | • Temporary uncontrolled surface run-off due to construction / rehabilitation of drainage channels<br>• Soil pollution by components of combustion gases emitted by construction vehicles (esp. heavy metals)<br>• Soil contamination due to constructional materials/ construction wastes disposals<br>• Soil pollution due to contaminated surface runoff from the road under rehabilitation<br>• Soil erosion caused by re-channelization of waterways<br>• Formation of gullies along drainage channels<br>• Soil contamination due to improperly arranged temporary offices<br><br>**Positive:**<br>• Slopes stabilization towards landslides prevention/ reduced risk of landslides<br>• Decreased risk of soil pollution, soil erosion and landslides resulting from | Permanent/ local | • To avoid loss of vegetation along the roads<br>• To rehabilitate borrow areas, quarries and temporary haul /access roads by planting grass and trees and other measures<br>• Proper design and installation drainage and retaining structures/ civil engineering structures/ clean up drainage channels/ culverts to minimize the risk of erosion and landslides on downlands<br>• To avoid road rehabilitation works during heavy rains/ to mitigate velocity and volume of polluted surface run-off<br>• Carry out landslides prevention activities/ physical stabilization of slopes (retaining walls, piles, etc.), if needed<br>• To provide proper construction waste disposals |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | facilities, waste disposals, etc.) | rehabilitation of drainage system<br>• Decreased risk of land degradation potentials/ gullies formation | | • To provide proper stockpiling of constructional materials<br>• Planting / re-habilitation of vegetation (buffer strips) along the roads to minimize spreading of combustion gases/ particulates/ dust, if appropriate<br>• Backfilling and restoration of eroded channels to natural conditions/ re-vegetation, if appropriate<br>• Organize properly temporary sewage facilities<br>• Clean up of the work site/ restoration of damaged areas after rehabilitation works are finished |
| Water Resources | • Road leveling<br>• Potholes patching/ cracks priming<br>• Pavement / Carriageway surfacing (laying of asphalt- | **Negative:**<br>• Groundwater pollution due to contaminated surface runoff/ migration of spills/leaks from improperly stored lubricants and construction wastes<br>• Groundwater pollution due to leaks from hauling vehicles | Temporary/ Local | • To plan carefully construction works to minimize impact on water resources<br>• Minimize collection of water and mud, where possible, to execute road |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | concrete mixtures, laying cement-concrete slabs, etc.)<br>• Use of hazardous materials, such as combustive-lubricating ones, bitumen, etc./ spraying of bitumen<br>• Heavy machinery and equipment operation<br>• Traffic of construction vehicles, machinery, etc./<br>• hauling of constructional materials such as bitumen, borrow materials, asphalt-concrete mixtures, concrete, cement-concrete slabs, gravel, etc.)<br>• Rehabilitation of road drainage system (drainage channels, chutes, etc.) | during transportation/ loading-unloading<br>• Groundwater pollution by bitumen spills<br>• Increased siltation potential/ sediment runoff into downland waterways (if any) due to modifications of drainage patterns<br>• Groundwater pollution by spills from road accidents of vehicles used for construction works<br>• Disturbance to underground water table due to use of heavy machinery<br>• Increased pressure on water resources due to additional water use for road maintenance works<br>• Groundwater pollution by compounds of wastes produced by infrastructure connected with accommodation facilities during road rehabilitation/ improper sewage facilitates | | rehabilitation works during dry season<br>• Mitigate run-off velocities and volumes/ design outfalls properly<br>• To prevent leaks/spills during transportation/ loading-unloading of constructional materials<br>• Stockpiles of constructional materials should be covered with fabric or other materials to prevent/ mitigate contaminated runoff<br>• To provide proper stockpiling of constructional materials and disposals of hazardous wastes/ avoid stockpiling on the slopes or near waterways, if any/<br>• contaminated run-off from stockpiles should be drained into ditches with oil traps facilities<br>• Ideally, excavate cutoff ditches around stockpiles to prevent materials from being washed away by |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | • Quarrying/ removal and placing borrow materials<br>• Heating and spraying of bitumen<br>• Constructional materials stockpiling<br>• Construction waste disposals<br>• Establishment of construction camp/<br>• accommodation facilities (sewage facilities, waste disposals, etc.) | **Positive:**<br>• Decreased risk of water pollution resulting from rehabilitation of drainage systems as compared to previous road condition<br>• Decreased risk of under-flooding resulting from rehabilitation of drainage system as compared to previous road condition<br>• Decreased risk of sedimentation/ turbidity of waterways (if any) resulting from expected lower erosion potential | Permanent/ local | surface runoff/ arrange interception ditches to prevent muddy water to reach waterways (if any)<br>• All lubricants and engine oils should be collected and recycled or disposed offsite<br>• Design drainage system to ensure soil stability/ soil erosion prevention and thus to avoid surface water pollution by suspended solids<br>• Where possible, maintain natural drainage<br>• Water for road construction works should be obtained from such sources and used in such amount that would not affect appropriate domestic water supply in the settlements<br>• To avoid loss of vegetation during road rehabilitation works<br>• Re-vegetation or physical stabilization of |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | | | | eroded slopes along the road<br>• Restoration of damaged lands, planting of grass and trees<br>• To organize properly accommodation/ sanitary facilities for workers<br>• To clean up the area after the construction work is completed |
| Air/ Acoustic | • Traffic of vehicles used for road/ hauling of constructional materials and construction wastes<br>• Crushing and screening of materials | **Negative:**<br>• Air pollution by components of combustion gases (CO2 , NOx).<br>• Air pollution by volatile hydrocarbons aggravated by unfavorable weather conditions (wind, hot, etc.)<br>• Local impairment of air quality during crushing and mixing of raw materials<br>• Noise pollution and vibrations from hauling vehicles, operating machinery and equipment<br><br>**Positive:** | Temporary/ Local | • To plan carefully construction works to minimize air and acoustic pollution<br>• Control construction methods and used machinery and equipment<br>• Careful timing of works in residential areas)/ restrict construction to certain hours<br>• To avoid laud beep signals in settlements/ to minimize disturbance to residents<br>• Restrictions speed of construction vehicles, |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | | • Decreased risk of air pollution due to reduction of combustion gases emissions into the air | Permanent/ Local | especially in residential areas<br>• Either use of sprinkling-machines "inhaling" dust…<br>• or control by water or other means/ water spaying twice a day during construction to avoid dust<br>• Watering of access roads to minimize dust formation, if applicable<br>• Vehicles delivering materials should be well maintained and covered to prevent/ reduce spills, emissions and dispersion |
| Fauna and flora/ habitats | • Road rehabilitation works (leveling/ potholes patching/ cracks priming/ pavement)<br>• Use of hazardous materials, such as combustive-lubricating ones, bitumen/ heating and spraying of bitumen | **Negative:**<br>• Soil and water pollution by hazardous and toxic substances<br>• Impact on biota due to contaminated environmental media (air, water, soil)<br>• Noise pollution/ vibration due to operation machinery/ equipment<br>• Noise pollution due to traffic of construction vehicles<br>• Disturbance to habitats/ loss of fauna and flora species during rehabilitation works | Temporary/ local | • To plan carefully construction works to minimize impact on flora, fauna, habitats/ careful siting, alignment, design of associated infrastructure to minimize impacts (especially in sensitive arias, if appropriate)<br>• Careful timing of works |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | • Heavy machinery and equipment operation<br>• Traffic of construction vehicles, machinery, etc.<br>• Hauling of constructional materials<br>• Rehabilitation of road drainage system (drainage channels, chutes, etc.)<br>• Constructional materials stockpiling<br>• Construction waste disposals | • Disruption of wildlife passages, local migration routes and patterns causing increased road kills, etc.<br>• Changes to aquatic eco-systems due to increased sediment runoff into waterways due to construction/ modification of drainage patterns | | • and work seasonally, as appropriate/ no construction during breeding season<br>• Trees and other vegetation should be protected during bitumen spraying<br>• To avoid excessive/ to minimize loss of vegetation during road rehabilitation works<br>• Big potholes should be either covered or fenced if they are going to be left opened over night<br>• To avoid loud beep signals from vehicles and machinery in the areas where wild animals inhabit<br>• Ideally, to provide passages through the road for animals/ wire fence in sites where wild animals inhabit<br>• Careful selection of sites to be used for constructional materials stockpiles/ construction wastes disposals |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | | | | • Use of appropriate construction methods<br>• Clean-up of construction sites<br>• Rehabilitate work sites, operation sites quarries/ borrow areas, access roads by planting grass and trees and other relevant measures |

| ***Environmental and social components*** | ***Project activity*** | ***Potential Impact*** | ***Scale of the impact*** | ***Suggested Mitigation Measures*** |
|---|---|---|---|---|
| Landscape/ Aesthetic | • Construction of detours/ access routes/ haul roads<br>• Earthworks/ quarrying/ removal and placing borrow materials<br>• Traffic of construction vehicles/ heavy machinery and equipment operation<br>• Construction/ rehabilitation of road drainage system<br>• Constructional materials stockpiling<br>• Construction waste disposals<br>• Establishment of construction camp | **Negative:**<br>• Local visual impacts/ marred landscape<br>• Damage to vegetation along the roads<br>• Damage to or degradation to some natural and manmade landscape valuable sites, if any, due to easier access<br>• Loss of trees and other vegetation<br>• Dust, waste, debris etc. during construction works<br><br>**Positive:**<br>• Improved manmade landscape | Temporary/ Local<br><br>Permanent/ Local | • To minimize construction site's size to minimize impact on landscape/ careful planning, siting and design of works<br>• Screening/ fencing of intrusive items<br>• Careful de-commissioning of construction areas/ waste disposal sites// clean up construction sites after road rehabilitation works are finished/ re-vegetation of work area, etc.<br>• Excavated materials, if any, should be used for backfilling of borrows and gravel pits |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| **Land Acquisition & Economic Displacement** | • BCP extension | **Land Acquisition & Economic Displacement** | major | • Hold individual consultations on the FS of BCP &road design documents with every community separately.<br>• Additional consultations with affected businesses and ensuring access to the business facilities during and after the Project implementation<br>• Develop RAP and implement land acquisition measures; compensate for economic displacement. |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| **Road safety and accessibility issues arising**<br>There are a number of road safety concerns associated with the existent design.<br>Mobility of pedestrians and motor users and access to public and private properties | • Road and BCP | **Road accidents,**<br>**Access to proprieties** | major | Consultations and engagement, to ensure that sufficient access to community, businesses and all personal assets is retained.<br>Development of TMP<br>Implementation of Traffic Management Plan to maintain vehicle and pedestrian access, safe passage of vehicles and pedestrians, and provide clear warning and instructions to vehicles.<br>• Implementation of Mobility and Access Facilitation Plan with measures to ensure people are adequately informed of road closure and alternatives are provided for citizens to access their |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| | | | | homes and private properties, as well as public services |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| **Impact on Community Health & Safety (CHS) during Construction**<br>*Construction Phase*<br>Increased the risk of accidents to the public, largely through the movement of plant and machinery and the delivery of materials.<br>Risk of influx (albeit minor) from workers from outside the area which may give rise to certain risks to the communities. | • Road & BCP | Increased the risk of accidents to the public, | local | Contractor CESMP Plan, including Traffic Management Plan.<br>Good site management, security, health & safety measures, warning signs etc. applied by the Contractor to minimise risks to an acceptable level.<br>Fencing and signage to discourage public from entering the works area.<br>• Appropriate siting of Workforce Accommodation (if any) and good community engagement mechanisms along with a grievance process. |

| *Environmental and social components* | *Project activity* | *Potential Impact* | *Scale of the impact* | *Suggested Mitigation Measures* |
|---|---|---|---|---|
| **Risks to Worker Health & Safety**<br>*Construction Phase*<br>The works will give rise to occupational, health and safety risks to workers, including those related to working with plant and machinery, formation of asphalt, use of cement, working near utilities.<br>*Operations*<br>Occupational health and safety risks to road and BCP operation and maintenance workers | • BCP & acces road | **Risks to Worker Health & Safety** | major | Contractor's CESMP, including Health and Safety provisions, in accordance with the Employer's Requirements and the Law on the Safety and Health at Work.<br>Good workforce management, implementation & enforcement of code of conduct, provision of health surveillance & healthcare access for workers.<br>Occupational health and safety provisions in contracts.<br>Grievance mechanism for Workers established, disclosed and implemented. |

| ***Environmental and social components*** | ***Project activity*** | ***Potential Impact*** | ***Scale of the impact*** | ***Suggested Mitigation Measures*** |
|---|---|---|---|---|
| Risk factors that increase the potential for violence against women and sexual harassment during BCP and road construction works | • Works | Risk factors that increase the potential for violence against women and sexual harassment during construction works | minor | Contractors ESMP and individual worker contracts to provide for preventive measures Conduct awareness sessions and implement Code of Conduct |

## Annex 2. Grievance registration form

Reference No:

Note: you can remain anonymous if you prefer or request not to disclose your identity to the third parties without your consent. In case of anonymous grievances, the decision will be disclosed at the official website

First Name _____
Last Name _____

❑ I wish to raise my grievance anonymously
❑ I request not to disclose my identity without my consent
❑ Contact Information Please mark how you wish to be contacted (telephone, e-mail).
❑ By Telephone: _____
❑ By E-mail _____
❑ I will follow up the resolution at the website as I want to remain anonymous
Preferred Language for communication: ❑ Romanian ❑ Other (indicate)

Description of Incident or Grievance (What happened? Where did it happen? Whom did it happen to?
What is the result of the problem? Date of Incident/ Grievance)

❑ One-time incident/grievance (date _____)
❑ Happened more than once (how many times? _____)

Signature: _____ Date: _____

Please return this form to responsible person