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Western Balkans Investment Framework Infrastructure Project Facility Technical Assistance 8 (IPF 8)

TA2018148 R0 IPA

Corridor VIII Rail Detailed Design for the Rehabilitation of the Durres – Rrogozhine Section, Albania WB21-ALB-TRA-01

Environmental and Social Impact Assessment Study

Environmental and Social Management Plan (Draft Report)

September 2021



## Western Balkans Investment Framework (WBIF)

## Infrastructure Project Facility Technical Assistance 8 (IPF 8)

## Infrastructures: Energy, Environment, Social, Transport and Digital Economy

TA2018148 R0 IPA

### **Environmental and Social Management Plan**

#### September 2021

The Infrastructure Project Facility (IPF) is a technical assistance instrument of the Western Balkans Investment Framework (WBIF) which is a joint initiative of the European Union, International Financial institutions, bilateral donors and the governments of the Western Balkans which supports socio-economic development and EU accession across the Western Balkans through the provision of finance and technical assistance for strategic infrastructure investments. This technical assistance operation is financed with EU funds.

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## List of abbreviations

Abbreviation	Meaning
ALB	Albania
ASA	Archaeological Survey Agency
CDW	Construction and demolition waste
CHS	Construction Health and Safety
DD	Detailed Design
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EHS	Environmental and Health and Safety
EMP	Environmental Management Plan
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESP	Environmental and Social Policy
ESS	Environmental and Social Standards
EU	European Union
GHG	Greenhose Gas emissions
HSH	Albanian Railways
IFI	International Financial Institutions
IPF	Infrastructure Project Facility
LARF	Land Acquisition and Resettlement Framework
LARP	Land Acquisition and Resettlement Plan
MIE	Ministry of Infrastructure and Energy
MTE	Ministry of Tourism and Environment
NEA	National Environmental Agency
NTS	Non-Technical Summary
OHS	Occupational Health and Safety
PA	Protected Area
PD	Preliminary Design
PFS	Preliminary Feasibility Study
PIU	Project Implementation Unit
RAP	Resettlement Action Plan
REA	Regional Environmental Agency
SAC	State Agency of Cadastre
SEP	Stakeholder Engagement Plan
ТА	Technical Assistance

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Abbreviation	Meaning
ToR	Terms of Reference
TSI	Technical Specifications Interoperability
WBIF	Western Balkans Investment Framework

## Glossary

Term	Meaning
Baseline	An outline the environmental characteristics of a receiving environment that provides the starting point for an assessment.
Consultation Authorities	Public bodies/authorities, who are legally designated to be consulted on the environmental and social aspects of P/P.
EIA	Environmental Impact Assessment, undertaken at the project level. The EIA for the eventual selected PIP projects is undertaken, if necessary, based on the SEA findings and on the environmental regulations.
EIA Directive <sup>1</sup>	Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU: "On the assessment of the effects of certain public and private projects on the environment"
Environmental topic	This term describes the different features of the environment that may be relevant in a SEA. Alternative terms include "environmental receptor" or "environmental issue".
Espoo Convention <sup>2</sup>	Adopted in 1991 and entered into force in 1997, the Espoo (EIA) Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.
EU acquis <sup>3</sup>	The <i>acquis</i> is the body of common rights and obligations that is binding on all the EU member states.
	Candidate countries have to accept the <i>acquis</i> before they can join the EU and make EU law part of their own national legislation. Adoption and implementation of the <i>acquis</i> are the basis of the accession negotiations.
European Site	Includes Special Protection Areas (SPA), Special Areas of Conservation (SAC) and candidate Special Areas of Conservation.

<sup>&</sup>lt;sup>1</sup>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&from=EN <sup>2</sup>www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authenti c\_ENG.pdf

<sup>&</sup>lt;sup>3</sup>http://ec.europa.eu/enlargement/policy/glossary/terms/acquis\_en.htm

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Term	Meaning
Habitats Directive <sup>4</sup>	Directive 92/43/EU of the European Parliament and of the Council of 22 May 1992: "On the Conservation of natural habitats and of wild fauna and flora".
	The Directive aims to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. It led to the setting up of a network of Special Areas of Conservation, which together with the existing Special Protection Areas form a network of protected sites across the European Union called Natura 2000.
Indicator	Normally associated with monitoring, an indicator is used to measure the achievement of a Plan or Environmental objective
Law on EIA⁵ (EIA Law)	Law no 10440, of the Albanian Parliament, of July 07.2011: "On Environmental Impact Assessment". Law is in full compliance with the EU EIA Directive
Objective	An intended goal, specifying the desired direction and outcome
HS officier	A state or municipal employee charged to supervise the health and safety issues at the worksites.
Post-adoption statement	A summary prepared by the Responsible Authority (MEI) to outline how the assessment and consultation process have been taken into account in the adopted plan.
Responsible Authority	Called also Project/plan developer, a public body responsible for a P/P. The responsible authority for Albanian GMP is MEI.

<sup>&</sup>lt;sup>4</sup>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN <sup>5</sup>http://www.mjedisi.gov.al/files/userfiles/VNM\_Paraprake/Fletorja\_Zyrtare\_101-2011\_-\_Ligji\_nr\_10440\_date\_7\_7\_2011\_-

\_Per\_Vleresimin\_e\_Ndikimit\_ne\_Mjedis\_%28VNM%29.pdf

## Synopsis

Project Title	Corridor VIII Rail	
	Detailed Design for the Rehabilitation of the Durres – Rrogozhine Section, Albania	
Project number	WB21-ALB-TRA-01	
Contracting authority	European Investment Bank	
TA Consultant	IPF8 - COWI IPF	
Main Beneficiary	Albanian Railways (HSH)	
Project area	Durres – Rrogozhine Section	
Lead International Financing Agency	European Investment Bank	
Project Objectives	The specific objectives of the services as described in the ToR (Section 2.2) are to provide the Beneficiary (HSH) and Promoter (MIE) with the necessary support for the preparation of:	
	<ul> <li>The detailed design for the rehabilitation works on Durres (Shkozet station) to Rrogozhine;</li> </ul>	
	<ul> <li>An Environmental and Social Impact Assessment (ESIA) of the proposed rehabilitation project to identify environmental and social risks, impacts and benefits, and structure the Project in compliance with the National legislation and the IFI Environmental and Social Policy (ESP)</li> </ul>	
	<ul> <li>The necessary works and services tender documentation to implement the final detailed design, along with support to the procurement process.</li> </ul>	
Outputs	Activity 1: Inception Period	
	<ul> <li>Inception Report</li> </ul>	
	<ul> <li>Review of the ESIA</li> </ul>	
	Activity 2: Detailed Design	
	<ul> <li>Updated Preliminary Design drawings</li> </ul>	
	<ul> <li>Detailed design</li> </ul>	
	Activity 3: Environmental and Social Impact Assessment (ESIA)	
	<ul> <li>ESIA scoping report</li> </ul>	
	> Final ESIA	
	<ul> <li>Approval/Disclosure</li> </ul>	
	Activity 4: Procurement Plan, Tender Documents and Procurement	
	<ul> <li>Procurement plan</li> </ul>	
	> Tender documents	
	<ul> <li>Report on Tender support</li> </ul>	
	Activity 5: Final Reporting	
	<ul> <li>Final report</li> <li>Bimonthly Reports plus updated risk matrix (No later than 1 month after the end of each 2-month implementation period)</li> </ul>	
	The Consultant should achieve the following main results (ToR, Section 2.3):	
	<ul> <li>Additional Topographical surveys</li> </ul>	
Results to be Achieved	<ul> <li>Geological and Geotechnical investigations</li> </ul>	
	<ul> <li>Track Alignment Detail Design (open line tracks and permanent way in stations, secondary tracks in stations)</li> </ul>	

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	<ul> <li>Design of Structures (civil works, bridges, retaining walls, culverts)</li> </ul>
	<ul> <li>Design of Signalling and Telecommunication systems</li> </ul>
	<ul> <li>Design of Rehabilitation of Stations</li> </ul>
	<ul> <li>Updated Preliminary design</li> </ul>
	The Detail Design shall contain passive provision for the possible future electrification of this section of the line using a high voltage overhead catenary system to accommodate the necessary civil works (i.e. tunnel/structure clearances, ducts and manholes) along the permanent way.
	<ul> <li>All necessary approvals for the detail designs.</li> </ul>
	<ul> <li>Environmental and Social Impact Assessment, Stakeholder Engagement Plan, Non-Technical Summary, Land Acquisition Framework and Resettlement Action Plan compliant with the national legal and the IFI requirements;</li> </ul>
	<ul> <li>Tender Documents preparation, for works and necessary services, compliant with the procurement rules of the EIB and internationally recognised Conditions of Contract such as FIDIC</li> </ul>
	The design of the electrification sub-system is out of the scope of these ToR.
Project Starting Date	07-02-2020
Project Duration	15 months

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### 1 Introduction

The consortium COWI – IPF8 (hereinafter called "the Consultant") is preparing the "Detailed Design for the Rehabilitation of the Durres – Rrogozhine railway line Section, Albania" in the framework of Infrastructure Project Facility (IPF) – Technical Assistance 8 – (TA2018148 R0 IPA)

The ToR for the proposed subproject (WB21-ALB-TRA-01, which is called hereinafter "the Project") was prepared by European Investment Bank (EIB), which is the lead IFI. The promoter is the Ministry of Infrastructure and Energy (MIE), while the beneficiary is the Albanian Railways (HSH), which is state owned company responsible for the rail infrastructure.

The Environmental and Social Management Plan (this report) is part of the ESIA study package on the proposed Project.

### 1.1 Project background

The railway line Durres – Rrogozhine section was built between 1947 and 1950 with little or no maintenance undertaken over the last 25 years. Trains speed is low due to the conditions of the infrastructure and safety concerns, including numerous unmanaged crossings.

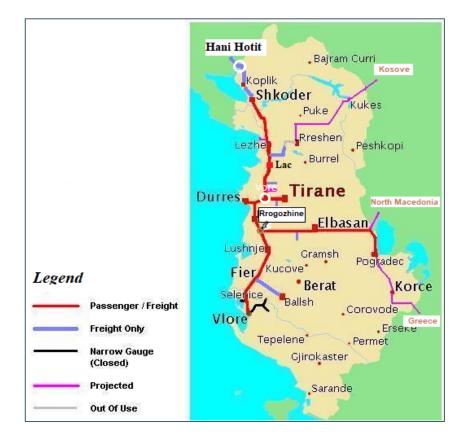


Figure 1-1\_Albanian railway network and the Durres-Rrogozhine section

The Durres-Rrogozhine railway line rehabilitation project is part of Pan European Corridor VIII that will link southern Italy with the east coast of Bulgaria on the Black Sea. The corridor comprises both road and rail links as well as the ferry crossing to Durres.



Figure 1-2\_Schematic location of Durres and of the railway lines

### 1.2 The ESIA study and the present document

#### 1.2.1 The ESIA study package and the present document

This document is part of the ESIA study package on the proposed project. ToR and Implementation Proposal provide that the ESIA study to include the following documents:

- ESIA Scoping report;
- ESIA report;
- Non-Technical Summary (NTS);
- Environmental and Social Action Plan (ESAP);
- Environmental and Social Management Plan (ESMP) this document.
- Stakeholder Engagement Plan (SEP);
- Land Acquisition and Resettlement Framework (LARF); and whether necessary
- Land Acquisition and Resettlement Plan (LARP) or Resettlement Action Plan (RAP), as appropriate.

#### 1.2.2 Purpose of this document

The ESIA report proposes a series of actions to avoid/cancel/mitigate/offset the potential negative effects and, wherever possible, to enhance the existing environment. The Environmental and Social Management Plan consists of a set of management criteria and mitigation measures aiming at the successful implementation of project development. The implementation by third parties requires the ESMP to be sufficiently clear on those criteria.

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### 2 Environmental and Social Management Plan

### 2.1 Purpose and Objectives

Based on the findings of the ESIA study, the Consultant, in coordination with the beneficiaries, will review the best practical strategies/options to address the identified environmental and social issues.

This will result in the development of a clear and easily monitored Environmental and Social Management System (ESMS) that will serve as a framework document for preparing a detailed Environmental and Social Management Plan (ESMP) and a Environmental and Social Action Plan (ESAP) for each development phase of the project activities. Similar to ESMP, the ESAP is prepared as a separate document. The ESMP includes also the monitoring of the environmental and social issues. The ESMP must be developed in compliance with the Standard 1 of the EIB<sup>6</sup>.

An ESMMP aims at the following:

- specify the anticipated environmental and social effects and the respective strategies/mitigation measures at each stage of the project activities;
- ensures the mitigation measures are correctly applied, by monitoring them; and
- identify the responsible bodies for the monitoring activities.

The ESMMP is composed of an Environmental and Social Management Plan and an Environmental and Social Monitoring Plan (see Section 2.6).

### 2.2 Roles and Responsibilities

This section provides for the roles and responsibilities from the pre-construction to the decommissioning phases.

#### **2.2.1** Project developer and other responsible bodies

The Albanian Railways, which is responsible for the ESMP, must demonstrate that they will be establish an ESMP in compliance with the EIB Standard 1.

The preparation of the ESMP aims at ensuring an effective implementation of the mitigation strategies and measures, stakeholder engagement, and other environmental and social requirements. This implementation must comply with the relevant national, EU, EIB and other international standards. The contractors' activities will be monitored and audited in accord with the Monitoring Program, which includes all phases of the Project's development. The monitoring results will be available for inspection by the representatives of the Contractors and Albanian Authorities.

<sup>&</sup>lt;sup>6</sup> https://www.eib.org/en/publications/environmental-and-social-standards

HSH should engage a specialized staff to undertake the necessary steps to control the implementation of the appropriate mitigation measures, strategies, and decisions, as defined in the construction works contract and related permits. This control also includes the coordination with other state institutions, such as the Regional Directorate for Environment Protection, the ASA within the Ministry of Culture, REAs and local governments of the municipalities affected by the project activities, etc.

HSH must develop the necessary mechanism for dealing with all the possible environmental and social issues during all phases of the project development. As a project developer, HSH also should serve as the point contact for consultation and feedback with all the affected actors, including the landowners and the public.

#### 2.2.2 The Contractor

The contractor represents the construction/operation/decommissioning company. It will prepare a detailed plan regarding the mitigation strategies and measures associated with all the detailed project's activities, from preconstruction to construction to operation and further on to the decommissioning and rehabilitation works, including the land ownership aspects, the temporary damages to the private, municipal or state property, as well as the public information and consultation issues. The contractor will provide the due plans and procedures to HSH for approval before the construction stage. These plans and procedures must be developed in compliance with the following key aspects:

- Relevant legislation, procedures, and standards;
- Environmental and socioeconomic controls and mitigation strategies and measures outlined in the ESMP; and
- The codes of conduct are required by the project developer (HSH).

The Contractor must fulfil a set of duties, including:

- Undertaking regular environmental and socioeconomic inspections and reporting directly to the Project developer (HSH);
- Demonstrating how ESMP requirements will be ensured during Project development;
- Demonstrating a commitment to ESMP at all levels in the Contractors' management structure including subcontractors; and
- Preparation of a Contractor's ESMP on the duties and procedures to be followed.

The ESMP on the contractor's duties and procedures should mainly include:

- Environmental procedures;
- Organization and responsible person for each environmental and management issue, including EHS manager, EHS supervisor(s), CHS and OHS officier, etc., as well as their related tasks and responsibilities;
- Site Inspection and Health & Safety issues;
- Workers' Rights and work conditions;

- Audit procedures; and
- Reporting procedures.

The responsibilities related to the decommissioning stage are similar to the preconstruction and construction ones.

HSH and the construction company/ies will be responsible for the ESMP during the pre-construction and construction stages.

The operation and maintenance of the railway will be under the responsibility of the Albanian Railways – owner and operator. The proposed Law dated 09.12.2019 plans to reorganize the Albanian Railways, into four state owned companies that will have the following responsibilities:

- Infrastructure;
- Passengers' transport;
- Freight's transport; and
- Maintenance of rolling stock

The company charged to the infrastructure will be responsible for the maintenance of the railway line, including the track (ballast, rails, slippers, fastenings, drainage system, bridges, signalling and telecommunications, fencing, etc.). While the company responsible for the rolling stock will deal with the maintenance of locomotives and wagons.

#### 2.2.3 Review and amendments

HSH will regularly review the ESMP to reflect any changes in the project implementation and organization. Upon any amendment, the amended plan will be communicated to all relevant parties and stakeholders.

### 2.3 Outline of the Environmental and Social Management Plan

The Environmental and Social Management Plan consists of a set of management criteria and mitigation measures that should assure the successful implementation of the project development. They also include the institutional measures to be taken during the project's implementation, to eliminate the adverse impacts, offset them, or reduce them to acceptable levels. The ESMP should ensure the implementation of all relevant project stages in compliance with the applicable Albanian environmental and social regulations, and EIBs and/or other IFI's Environmental and Social requirements, as well as following the findings of the stakeholder consultations.

The Mitigation and Management of Impacts and Issues include mainly the following:

- Predicting the sources of the likely environmental and social impacts;
- Description of the likely impacts associated with each of the project's stages (design, preconstruction and construction, operation, and decommissioning, closure and reinstatement);

- Evaluation of the probability, significance, and extent of the likely impacts;
- The suggestion of the related mitigation strategies and measures;
- Define the Responsibilities during all the stages of the project's development;
- Institutional arrangement; and
- Taking into consideration the possibility to enhance the environmental and social aspects within the project area.

The proposed mitigation measures must be incorporated into the environmental and social action plan (ESAP), which is part of the ESIA study package. The mitigation strategies and measures consist mainly of the following:

- Applying firstly the principle of avoidance;
- Reduce the likely unavoidable adverse impacts in maximum during the routing selection process, and then later during the design stage; and
- Define the mitigation strategies and actions in compliance with the national and international legislation and standards.

Where impacts cannot be avoided, they should be reduced to the minimum necessary for the safe implementation of the project. Where significant effects cannot be avoided, consideration has been given to mitigation measures that seek to offset impacts through compensation. Any opportunities to enhance the positive effects will also be considered and identified.

# 2.4 Suggested mitigation strategies and measures

Tables 2.2, 2.3, 2.4 and 2.5 at the end of this document show the suggested mitigation measures to be applied during the project's development stages.

### 2.5 Topic-specific management plans

The preparation of an Environmental and Social Management Plan is based on a number of topic-specific management plans. Each of them is developed to address in detail key issues of potential environmental and socioeconomic impacts and risks.

These plans are considered as "live" documents because they must be regularly updated as the quality and quantity of the information on the project area increases, and the assessment and the project's development progress. Additional plans or sub-plans may be introduced to deal with the assessment of any newly receptor or identified effect during the project's activities. Hereinafter follows a list of specific management plans foreseen for the proposed project, as well as an outline of each of them. The list is based on the findings of the ESIA Report and the EIB Environmental and Social Standards<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> https://www.eib.org/en/publications/environmental-and-social-standards

No	Topic-specific sub-plan
1.	Social Management Plan
2.	Land Acquisition and Resettlement Plan
3.	Erosion and Sedimentation Control Plan
4.	Topsoil Management Plan
5.	Water Management Plan
6.	Watercourse Crossing Plan
7.	Infrastructure Utilities Management Plan
8.	Noise and Vibrations Management Plan
9.	Stations' Energy Efficiency Management Plan
10.	Traffic Management Plan
11.	Landscape Management Plan
12.	Cultural Heritage Management Plan
13.	Construction Material Management Plan
14.	Waste Management Plan
15.	Pollution Prevention and Response Plan
16.	Occupational and Public Health and Safety Management Plan
17.	Labour and Working Conditions Management Plan
18.	Emergency Response Plan

Table 2-1\_List of topic-specific sub-plans proposed by the Consultant

In the list above it is not included any Biodiversity Action Plan, as the railway line Shkozet-Rrogozhine runs across urban and semi urban areas and arable lands of insignificant biodiversity values.

Table below shows the Project's development stages and responsible bodies/companies for developing in detail the above-listed topic-specific subplans, as well as for implementing them.

No	Topic-specific sub-plan	Preparation Stage of the detailed Sub-plan and Responsibility	Implementation Stage of the detailed Sub-plan and Responsibility
1.	Social Management PlanPlan	DD & ESIA, C, O	DD & ESIA, C, O
		COWI-IPF6, Constructor,	COWI-IPF6, Constructor,
		Operator,	Operator,
		Developer	Developer
		COWI-IPF6,	COWI-IPF6,
		Developer	Developer
2.	Land Acquisition and	DD & ESIA, BC	BC
	Livelihood Restoration Plan	COWI-IPF6,	Developer
	or RAP, as appropriate	Developer	
		BC	С

Table 2-2_List of	f topic-specific sub-plans	proposed by the Consultant
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No	Topic-specific sub-plan	Preparation Stage of the detailed Sub-plan and Responsibility	Implementation Stage of the detailed Sub-plan and Responsibility
3.	Erosion and Sedimentation	Constructor,	Constructor,
	Control Plan	Developer	Developer
4.	Topsoil Management Plan	BC	С
		Constructor,	Constructor,
		Developer	Developer
5.	Water Management Plan	BC	C
		Constructor,	Constructor,
		Developer	Developer
6.	Watercourse Crossing Plan	BC	С
		Constructor,	Constructor,
		Developer	Developer
7.	Infrastructure Utilities	DD, BC	С
	Management Plan	COWI-IPF6,	Constructor,
		Constructor,	Developer
		Developer	
8.	Noise and Vibrations	DD, BC, BO	С, О
	Management Plan	COWI-IPF6,	Constructor,
		Constructor,	Operator,
		Operator,	Developer
		Developer	
9.	Stations' Energy Efficiency	DD, BC, BO	С, О
	Management Plan	COWI-IPF6,	Constructor,
		Constructor,	Operator,
		Operator,	Developer
		Developer	
10.	Traffic Management Plan	BC	С
		Constructor,	Constructor,
		Developer	Developer
11.	Landscape Management Plan	BC	C, AC
		Constructor,	Constructor,
		Developer	Developer
12.	Cultural Heritage	BC	С
	Management Plan	Constructor,	Constructor,
		Developer	Developer
13.	Construction Material	BC	С
	Management Plan	Constructor,	Constructor,
		Developer	Developer
14.	Waste Management Plan	BC, BO	С, О
		Constructor,	Constructor,
		Operator,	Operator,
		Developer	Developer
15.	Pollution Prevention and	BC, BO	С, О
	Response Plan	Constructor,	Constructor,
		Operator,	Operator,
		Developer	Developer
		BC, BO	С, О

No	Topic-specific sub-plan	Preparation Stage of the detailed Sub-plan and Responsibility	Implementation Stage of the detailed Sub-plan and Responsibility
16.	Occupational and Public Health and Safety	Constructor, Operator,	Constructor, Operator,
17.	Management Plan Labour and Working Conditions Management Plan	Developer BC, BO Constructor, Operator, Developer	Developer C, O Constructor, Operator, Developer
18.	Emergency Response Plan	BC, BO Constructor, Operator, Developer	C, O Constructor, Operator, Developer

DD: Detailed Design; BC: Before Construction; C: Construction; AC: After Construction; BO: Before Operation; O: Operation Consultant: COWI-IPF8, which is responsible for the Design and ESIA

Note: In the case of the proposed Project, the Project Developer (HSH) is in the same time the Project Operator.

Below follows an indicative description of each of the sub-plans included in the table above.

#### 2.5.1 Social Management Plan

The Social Management Plan has been structured as follows:

- o General Requirements for Social Management System
- o Stakeholder Engagement Requirements
- o Community Health & Safety Requirements

#### General Requirements for Social Management System

HSH and the Contractor will regularly review and update as required the SMMP and SEP to ensure it is responsive to changes in project circumstances. HSH and Contractor will implement and comply with all measures specified within the relevant Project Documentation, including inter alia:

- ESMMP
- Stakeholder Engagement Plan (SEP)
- Project contractually binding documents, including the Employer Requirements
- Provisions, if any, in the Environmental Declaration issued by MoTE.

HSH will establish within its organization the social management capacity and capability to undertake inter alia:

- Reviews of the social performance of the contractor(s) and supplier(s) during railway construction and operation;
- Coordinate the implementation of actions/measures under the SMMP which are the responsibility of HSH;

- Regular reviews of compliance with the SMMP obligations; and
- Review and update to SMMP to ensure it reflects project circumstances.

#### Construction Social Management System (CSMS)

As part of the *Site Management Plan*, the Contractor will develop and implement a Construction Social Management System (CSMS) to support the implementation of the SMMP & SEP and support good social management practices. The CSMS will be developed and implemented in-line with international standards (i.e., ISO 14001, EU EMAS & SA 8000) and include inter alia:

• Organization, responsibilities and resources (including commitment that critical Social and Health & Safety (SHS) positions will be identified and maintained);

• Construction Social Management Plan, including supplementary plans (e.g. Waste Management Plans, Hazardous Materials Management Plans);

- Procedure which assesses SHS risks;
- Monitoring Plan (see below);
- Emergency Preparedness & Response Plan;

• An audit process and programme (including performance audits, audits on labour & working conditions);

- Training programme; and
- Reporting of Social performance.

The Contractor shall appoint an appropriately qualified SHS Manager who will be responsible for the development and implementation of the CSMS and coordination to ensure the provisions of the SMMP are complied with. The SHS Manager shall have appropriate qualifications, training, authority & responsibility and resources. The SHS Manager shall have assigned responsibilities including, but not limited to:

• Implementation and maintenance of the CSMS (incl. audits, corrective actions, etc.);

• Implementation of the SMMP;

• Implementation and coordination of Construction Social Management Plan (CSMP) and associated management & mitigation plans;

• Preparation of periodic reports for compliance with SMMP (and other applicable standards/documents) and related to CSMS and CSMP;

Managing an incident reporting system (including near-misses); and

• Preparation and submission of social monitoring reports to HSH, which will include review of compliance with SMMP obligations.

In the event more than one main contractor is appointed then one overarching Project CSMS should be established for all Contractors to adopt.

#### **Operational Social Management System (OSMS)**

HSH will develop and implement an Operational Social Management System (OSMS) to support the implementation of SMMP & SEP and support good social management practices. The OSMS will be developed and implemented in-line with international standards (i.e., ISO 14001 & SA 8000) and include (but not be limited to) the following:

• Organization, responsibilities and resources;

• Operational Social Management Plan (OSMP), including supplementary plans e.g., Waste Management Plans, Hazardous Materials Management Plans, etc.;

- Operational Monitoring Plan (see below);
- Emergency Preparedness & Response Plan;
- An audit process and programme, including performance audits and railway safety audits;
- Training programme; and
- Reporting of Social performance.

HSH shall appoint an appropriately qualified SHS Manager who will be responsible for the development and implementation of the OSMS and coordination to ensure the provisions of the SMMP are complied with. The SHS Manager shall have appropriate qualifications, training, authority & responsibility and resources. The SHS Manager shall have assigned responsibilities including, but not limited to:

• Implementation and maintenance of the OSMS (incl. audits, corrective actions, etc.);

- Implementation of the SMMP;
- Implementation and coordination of OSMP (and associated management & mitigation plans);
- Preparation of periodic reports for compliance with SMMP (and other applicable standards/documents) and related to OSMS;
- Managing an incident reporting system (including near-misses); and
- Preparation and submission of social monitoring reports to HSH, which will include review of compliance with SMMP obligations.

#### Sub-contractor/Supplier Management

The railway Contractor will apply contractual agreements for securing services of sub-contractors and suppliers, which ensure they are obliged to comply with all social requirements contained with applicable Project documentation and standards. The Contractor will advise their sub-contractors and suppliers of their Social, Health & Safety (including Labour & Working Conditions) responsibilities, including relevant requirements within the SMMP. Applicable SHS requirements shall be contained within contractual agreements, including the requirement for sub-contractors to pass requirements to any of their sub- contractors and establish provisions for Health & Safety reporting.

#### Stakeholder Engagement Requirements

HSH shall maintain and implement a Stakeholder Engagement Plan (SEP) and grievance mechanism relevant for each Phase of the Project to ensure that all stakeholders are identified, that sufficient information about issues and impacts arising from the Project (e.g., construction impacts) and proposed mitigation are disclosed in a timely manner and that all stakeholders are consulted in a meaningful and culturally appropriate way throughout project implementation. Determine whether any vulnerable / disadvantaged groups or communities are likely to be disproportionately or permanently and adversely affected by the Project and identify and implement appropriate communication methods to consult with them about mitigation measures.

Contractor(s) shall adopt the SEP and grievance mechanism principles and requirements within their own Management Systems as appropriate and provide training to staff on the SEP requirements.

HSH will aim to involve stakeholders and to keep good communication practices during the lifetime of the project through its PIU. The objectives will be:

• Providing local communities with a project schedule and information on project activities that may affect them, together with mechanisms for their feedback

• Provide general information to improve knowledge of what the project involves, with all stages and expected performance

• To make available to the public a grievance procedure, in order to collect, respond and resolve issues and complaints on a timely basis

For each of the stakeholder groups defined in the SEP, communication tools suggested will be used in order to ensure easy, transparent, direct, open and interactive communication with all stakeholders.

#### Community Health and Safety

Construction work shall commence on site only when the construction phase **Health & Safety (H&S) Plan** has been adequately developed by the Contractor and approved by HSH's Representative.

**Traffic Management Plan** will be developed for the safe use of vehicles on and off site; driving standards; safe access to construction sites with minimum negative impact on the existing roads and in parallel for ensuring community safety and easy access to their properties (homes, land and services). For traffic control and safety, the information about the project activities and driving standards will be announced through public information means. The traffic flow through the site and within the urban areas will be coordinated with the responsible traffic engineers in the municipalities.

 $\ensuremath{\mathsf{A}}$  Construction Community Health and Safety Educational Programme

will be developed to inform and build awareness and understanding of the local community and drivers on the construction hazards and potential adverse impacts during the construction phase and how to minimize the potential for an accident and/or injury to occur. The Programme will be linked to the SEP and utilize various communication methods to address the needs of vulnerable groups such as children and illiterate residents. The design and location of railroad level crossings overpasses and underpasses must take into account the views and concerns raised by local residents and other stakeholders. Warning devices to be installed to warn pedestrians that a train is approaching, special attention to be given to the stations and where vulnerable residents are located. Any hazards such as overhead power lines will be fitted with appropriate warning signs.

## A Community Health and Safety Educational Programme (CHSEP) will be developed for railway continuous/full operation.

HSH will undertake a series of public relation activities (must run and support a series of community activities, including school visits, safety centres, diversionary activities and communications programmes), in order to inform local citizens, passenger and workers about the dangers associated with the railway continuous/full operation, crossing at unauthorized locations, trespass and/or vandalism.

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#### **Community Issues**

Workers will receive training and guidance on how to avoid conflicts with the local community members and sign a labour code of conduct, in order not to minimize potential conflict and community tensions.

**Local Workforce Recruitment Plan** to be developed in order to assure employment of much as possible local workforce. Modes for workforce movements will be well organised and reviewed by HSH and Contractor(s).

#### 2.5.2 LARP

LARF serves as a basis for the development of a detailed LARP, which is developed once the exact nature and magnitude of the land acquisition or restrictions on land use related to the Project are known. The LARP provides more details on the Project Affected People (PAP), the eligibility criteria, and the procedures to be applied for the Project in line with the LARF and in compliance with the national laws (wherever applicable) and EIB Standard 6.

Based on the project LARF, considering the extent of the impact in terms of land acquisition and resettlement, the project LARP will be prepared. The objective of the LARP shall be to specify what procedures to follow and what specific actions to take to properly acquire land and compensate people affected by the Project. The actions from the LARP will allow and provide for adequate participation of the affected people in the displacement process, consultation during all phases and full functioning of the grievance mechanism. LARP shall be based on up-to-date and reliable information about the proposed land acquisition and shall include at minimum the following:

- Description of the project and identification of the project area;
- Identification of project activities that give rise to displacement, being economical and physical ones;
- Identify the Cut-off date;
- Consider alternatives to avoid or minimize displacement and establish meaningful consultations with affected people with regards to acceptable alternatives;
- Establish mechanisms to minimize displacement adverse effects on persons and communities, to the extent possible, during project implementation;
- Provide a comprehensive socio-economic baseline assessment including:
  - census survey covering current owners of land in the affected area to establish a basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and displacement assistance;
  - the magnitude of the expected total or partial loss of assets, and the extent of displacement, physical or economic, information on vulnerable groups or persons;
  - standard characteristics of physically displaced households, if any, including a description of production systems, labour, and household organization;
  - baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and

informal economic activities) and standards of living (including health status) of the displaced population.

- Establish a database of PAPs with information on all affected people and property (including contact details);
- Provide references to the gaps in the legal framework as noted in this LARF, as well as to any changes in the legislation which came into force after the LARF is published that cover eminent domain and resettlement; note the gaps between the changed legislation and EIB Standard 6 requirements, and the mechanisms to bridge those gaps;
- Establish an institutional framework, institutional responsibility for implementation, eligibility, valuation of and compensation for losses and the methodology to be used in valuing losses;
- Establish grievance redress mechanism (GRM) and procedures, composition of GRC, LARP implementation arrangements, monitoring, evaluation of project affected assets subject to compensation and LARP budget and implementation cost.

Activities on the preparation of the LARP will be disclosed in the way to enable significant and timely participation of PAPs.

ToR on the proposed project requires to prepare a Land Acquisition and Resettlement Framework (LARF) and, as necessary, a Resettlement Action Plan (RAP).

During the preparation of the DD and ESIA, it was not possible to obtain official data on Project Affected People (PAPs); these data can be provided only by the State Agency of Cadastre (SAC) in Albania, as the one and only governmental institution, entitled for registering, keeping and disseminating the information. Although the official communication in this regard was made in due time, and, in addition, the project and beneficiary made every other effort to obtain this information, the expropriation list provided within the "Cadastral Report" includes 229 affected properties associated with a buffer zone from railway axis and other engineering objects with no further information. This list does not define if the area is owned by HSH and does not clarify the type of these properties, e.g. residential houses, warehouses, businesses, agricultural area.

Therefore, the analysis of impacts related to land use and all aspects/factors in this regard, is pending, to be performed at another time in the future.

### 2.5.3 Erosion and sedimentation control plan

The Erosion and Sedimentation Control Plan (ESCP) is a guidance manual for minimizing the erosion of soils and the transportation of sediments during the project's activities. It aims to apply standards for the protection of environmentally sensitive areas.

The Plan provides general information on construction processes and describes specific measures to be taken during and following construction to minimize impacts to the environment on the project sites.

The Plan intents to preserve the integrity of environmentally sensitive areas by implementing the following objectives:

- Minimize the extent and duration of disturbance;
- Protect exposed soil by diverting runoff to stabilized areas;
- Properly address sediments management;
- Install temporary and permanent erosion control measures; and
- Establish an effective inspection and maintenance program.

Concerning erosion, the most sensitive sections are the crossings of the rivers and streams.

#### 2.5.4 Top soil management plan

The Topsoil Management Plan (TMP) is a guidance manual for minimizing the loss of productive soil, damages to the soil structure, or pollution of the productive soil.

The Plan provides for general information on construction processes and a map of the soil quality within the Project's fingerprint. It will provide specific measures to be taken before the construction process to minimize impacts to the topsoil.

The Plan should include:

- maps showing topsoil and subsoil types and areas to be stripped;
- maps of areas of soil that need to be protected from construction activities;
- access roads;
- methods for stripping, stockpiling, and improving the soils;
- location and content and volume of each soil stockpile;
- Consultation with the local governments and other related institutions on the reuse of the soil stockpiles;
- the responsible persons/institutions for supervising soil management;

Concerning the proposed project, the topsoil to be permanently removed includes the sections where the horizontal railway line will be improved. This section falls partly in an area currently used as arable land (km 25+700 to km 26+100).

The reuse of the topsoil removed permanently will be decided from the consultation between the Contractor and the local governments. The topsoil, which structure can be damaged from Project's activities is located mainly within the working strip of the railway line.

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#### 2.5.5 Water management plan

The preparation of the Water Management Plan (Water MP) aims at the following:

- Identify activities, which require water consumption and evaluate the amount of water used by the project activities;
- Reporting procedure for registering volumes of water used;
- Provide appropriate measures to be considered for minimizing the use of water;
- Identification of the national and local authorities and other relevant stakeholders and of the appropriate procedures to communicate with them. Water sources to be used will be agreed previously with the relevant local authorities.
- Record all communications with Water Authorities;
- Management of the interruptions of irrigation systems;
- Provide for the procedures regarding internal and external communications during an Emergency Response; and
- Provide for the training of the employee, to minimize the use of water and to respond in the case of accidental water pollution.

Concerning the proposed project, the biggest need for water use will be during the construction of the new bridge at km 5+860 and the rehabilitation of the Lishati and Darsi Rivers Bridges at km 15+420 and km 23+150, respectively.

#### 2.5.6 Watercourses crossing plan

The watercourses crossing include:

- The construction and/or rehabilitation of bridges and culverts; and
- The construction and/or rehabilitation of protection works against rivers and streams erosion.

The Watercourse Crossing Plan (WCP) will describe the approaches and techniques planned to execute the watercourse crossings, predict environmental impacts, and outline the monitoring issues.

A Typical Watercourse Crossing Plan includes the following components:

- Objectives and Approach:
  - Identification of the key environmental and ecological receptors affected by the watercourses crossings;
  - Provide a brief overview of the crossing approach and techniques; and
  - Analyse the potential impact on these key receptors, and describe the proposed mitigation and reinstatement measures.

The crossing approach and techniques and the impacts and mitigation should be based on site-specific data and information for each crossing. The monitoring approach will be based on site-specific features, too.

• Works' description and schedule of the project's activities

Outline the watercourse crossing activities and the foreseen schedule. That is also necessary to avoid the rainy periods and therefore the rivers and streams overflow.

• *Construction techniques and work camps for the main bridges* This section will describe the specification of the technical and logistic aspects, workforce, and equipment, and construction materials to be used.

- Potential impacts
  - Description of the sensitivity criteria for the local environmental receptors;
  - Description of the likely effects on biophysical and socioeconomic receptors, including the hydro morphological characteristics.
- Suggested mitigation strategy and measures

Providing all the cross-references to the relevant parts of the ESIA and to the ESMP, which include the international standards and best practice guidelines for the mitigation measures during such crossings.

- Reinstatement
  - Specification of reinstatement requirements, including the equipment and materials to be used; and
  - Specification of the technical and logistic aspects.
- Monitoring
  - Description of the monitoring objectives, scope and methods/reporting; and
  - Specification of monitoring requirements. Monitoring will be prepared and performed according to the local biophysical features and the reinstatement objectives.
- Responsibilities, legal requirements
  - o Legislative requirements on the national and local approval; and
  - o Overview of Contractor/Sub-contractor set-up.
- Involved stakeholders
  - Outline the required ways and points of contact with the related authorities; and
  - Enable interested stakeholders to monitor the watercourses crossing activities.

#### 2.5.7 Infrastructure utilities management plan

The Infrastructure Utilities Plan (IUP) aims to minimize disturbance to the infrastructure's utilities and enhance the existing situation.

The objectives of the Infrastructure utilities Plan include:

 Minimize the damage to infrastructure utilities from construction activities;

- Ensure that losses of infrastructure or services are temporary and insignificant;
- Ensure the availability of the infrastructure's services to the local communities through alternative temporary ways; and
- Ensure that the new infrastructures will enhance the living conditions in the study area.

The Infrastructure utilities Plan includes:

- Stakeholder notification and engagement: Approach and activities to notify and consult with stakeholders on infrastructure development;
- Public Utilities Assessment: Detail the scope and findings of the public utility assessment;
- Road Closure and Construction: Requirements for a road closure for construction/upgrade activity and measures to minimize traffic interruption;
- Infrastructure Improvement Plan: Approach to selecting infrastructure improvement activities; and
- Monitoring: Approach to monitoring infrastructure improvements and any utility disruptions including community grievance trends and response performance.

The infrastructure utilities that can be affected by construction activities are the power and telecommunication overhead and underground lines, the water supply pipelines, the sewage pipelines, as well as the planned Ionian-Adriatic Gas Pipeline (km 23+500). Whereas, the likely Project's effects on the road infrastructure are mentioned in the Traffic Management Plan (see below).

#### 2.5.8 Noise and Vibration Management Plan

The Noise and Vibration Management Plan (NVMP) aims to reduce at the acceptable limits the railway noise and vibrations generated during the construction and operation stages.

The applicable regulations/standards should be as follows:

- The applicable noise limits are provided by both the EU and Albanian regulations.
- As there are neither EU, nor Albanian specific norms on vibrations, the Consultant COWI-IPF 8 suggests to be based on the German standards, (DIN 4150 and DIN 45669-1), which are widely used in Europe (UIC-Railway-induced-vibration-report-2017, chapter 5: Targets and Actions Levels<sup>8</sup>). These standards describe the methods of signal processing (DIN 45669-1) and measurements (DIN 4150). DIN 4150-1 defines the measurements and prediction method for the prescribed indicators, DIN 4150-2 focusses on the effects on the humans, whereas DIN 4150-3 on the effects on buildings<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> https://uic.org/IMG/pdf/uic-railway-induced-vibration-report-2017.pdf

<sup>&</sup>lt;sup>9</sup> https://www.en-standard.eu/din-standards/

#### 2.5.8.1 Construction noise and vibration management plan

The detailed Plan must suggest specific measures to reduce noise and vibrations at the source, the propagation path and at the receiver, including:

- Define the detailed legal standards to be taken into consideration.
- Identify sensitive noise and vibration receivers before the construction activities.
- Identify construction machinery and activities that generate high levels of noise and/or vibrations.
- Identify the duration of construction works, especially near the sensitive receivers.
- Define a work programme and construction methodology for reducing noise and vibration at source, in particular for work near residential areas and sensitive locations such as educational and health facilities, etc.
- Reduction measures at the propagation path through the application of technical solutions such as the construction of temporary sound and/or vibration barriers around the working site and the use of mobile noise and/or vibration-cancelling systems at high noise and/or vibration emission points.
- Inform the local population on the type and duration of the works, especially on any inevitable activities generating high noise and/or vibration levels near noise and/or vibration-sensitive receivers.
- Address complaints on any excessive level of noise and/or vibration through reducing them at the source and/or the propagation path, as well as through reasonable re-scheduling of the working hours.
- Providing workers with Personal Protection Equipment (PPE) against noise.
- The construction and transport machinery and the PPE must be equipped with an EEC type noise certificate.

#### 2.5.8.2 Operation noise and vibration management plan

The detailed Plan related to the operation stage should take into account specific measures to reduce noise and vibrations at the source, the propagation path and whether necessary at the receiver.

The Noise and Vibrations Study performed by COWI-IPF8 for the Project's purposes do not suggest any mitigation measures at the propagation path and the receiver. However, the design of the stations suggests insulating windows at all the stations' buildings. Therefore, the Noise and Vibration Management Plan during operation must take into account specific measures at the source and the receiver.

The detailed Plan related to the railway operation includes:

- Define the detailed standards and methodology to be taken into consideration.
- Design and construction: Identify the strategies and measures and the best practice to reduce noise and vibrations at the source. The Noise and Vibrations Study provides for the generic and specific mitigation measures at the source, as follows:
  - Generic mitigation measures: use of appropriate rails, rail pads, rail dampers, etc. Therefore, the Plan must take into account what type of such mitigation measures to be taken and where; and
  - Specific mitigation measures: installation of ballast mats in the sections listed in the following table:

From	То	Track length [m]
1+840	4+360	2.520
5+440	5+680	240
9+360	9+680	320
18+160	18+680	520
19+280	19+760	480
21+040	21+280	240
Total		4.320 m

Table 2-3\_Sections where vibration mitigation measures should be taken

- Design and built acoustic insulation on the walls and windows of the stations' buildings, in accordance with the stations' design.
- Operation and maintenance: Identify the strategies and measures and the best practice to reduce noise and vibrations, including:
  - Reduce noise and vibrations through railway maintenance (periodic grinding of the rails, track-based lubrication, etc.);
  - Reduce wheel noise and vibrations through use of k-blocks, LLblocks, wheel-tuned absorbers, etc.
  - The new rolling stock must be equipped with an EEC type noise certificate.

### 2.5.9 Stations' Energy Efficiency Management Plan

The stations' buildings and platform canopies must fulfil the EU standards on energy efficiency<sup>10</sup> through measures both on building envelope and on technical building systems<sup>11</sup>, including the buildings orientation and design (natural daylight and ventilation, effective insulation, etc.) to save energy. The stations' buildings orientation is already defined in the Project's design in function of the location of the railway line, the existing stations' location. The stations' buildings

<sup>&</sup>lt;sup>10</sup> https://ec.europa.eu/jrc/sites/default/files/BrochurelastV.pdf

<sup>&</sup>lt;sup>11</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019H1019

design has already taken into consideration other energy – saving mesures, including:

- the maximization of the natural daylight and ventilation during the whole year;
- the use of termal insulating construction material;
- the use of high efficiency dual-glaze windows, external doors and curtain walls with thermal insulation.

Despite the above measures, a Stations' Energy Efficiency Management Plan would increase the energy saving. The Plan must be based on the "Energy Performance of Buildings Directive 2010/31/EU" (EPBD), as amenden in 2018, and the "Energy Efficiency Directive 2012/27/EU" (EED). It should include:

- Onsite renewable energy supplies to reduce fossil fuel energy use (photovoltaic appliances on the roof od stations buildings and platform canopies, etc.).
- Use of energy-efficient lighting, heating, cooling and water-heating systems to reduce energy consumption.
- Put in place schemes for the inspection of heating and air-conditioning systems, or take measures that have an equivalent impact on energy savings<sup>12</sup>.
- Regular maintenance of the lighting, heating and cooling and waterheating systems.
- All the appliances must be equipped with an EEC type energy efficiency certificate.

#### 2.5.10 Traffic management plan

The Traffic Management Plan (TMP) aims to avoid/minimize the traffic interruption and disturbance, including the roads' users' delay, as well as to ensure the safety of the local communities, the workforce, and the drivers of the working and transport machinery.

The Traffic Management Plan objectives include:

- Access to project's sites;
- Routing of construction traffic;
- Prevention of road user delay;
- Temporary traffic control and management;
- Reducing the probability of traffic incidents and accidents and improving the safety of local communities, workforce, and road users;
- Preventing and remedying roads and railways degradation.

The TMP is regularly updated when the construction methods are developed and vehicle movement requirements are identified in detail. The specific objectives of the TMP include:

<sup>&</sup>lt;sup>12</sup> https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficientbuildings/certificates-and-inspections\_en#inspection-of-heating-and-air-conditioningsystems

- Site access arrangements to the working strip;
- Identification of key sensitivities along with the proposed access and service roads;
- Identification, demarcation, and construction of all access and service roads;
- Mitigation measures to minimize traffic disturbance;
- Mitigation measures to ensure the safety of local communities, road users, and workforce;
- Workers training requirements concerning road safety;
- Driver competency, vehicle maintenance, and refuelling locations;
- Schedule construction activities;
- Defining the roles and responsibilities for the implementation of the TMP;
- Measures to prohibit "off-route" driving;
- Speed limits and methods of enforcement;
- Ways and means to inform the community of traffic risks;
- Inspection, auditing, and reporting.

The TMP includes provisions for the procedures related to communication to stakeholders and affected communities. The consultations with the relevant government agencies and local authorities should identify the planned infrastructure projects. The Contractor should also consult the principal representative of the adversely affected communities, to develop appropriate mitigation measures.

The Project's Design has already defined the location and other characteristics of all the necessary level crossings, service roads, and underpasses. The construction of the new planned service roads and underpasses should precede the construction of the other railway elements in order to not interrupt or disturb the traffic.

#### 2.5.11 Landscape management plan

The Landscape Management Plan (LMP) aims at the landscape's reinstatement once the construction works are finished. The LMP should be executed in close coordination with the Erosion and Sedimentation Control Plan.

LMP includes the procedures to follow during restoration works, including mitigation measures and monitoring procedures. It addresses separately the rehabilitation procedures related to the Preconstruction, Construction, Operation, and Reinstatement stages.

The Landscape Management Plan includes also the visual amenity aspects of the railway line components.

The already designed new railway stations are integrated into the General Local Development Plans and consulted with the three municipalities in the territory of which they are located.

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The railway stations, the protection walls, and the railway line fencing will take into account also their visual amenity.

#### 2.5.12 Cultural heritage management plan

The Cultural Heritage Management Plan (CHMP) aims to avoid any potential damages to cultural heritage resources. The Plan takes into account the relevant national legislation on cultural heritage (Law 17/2018 "On Cultural Heritage and Museums", EIB Standard 5 (Cultural Heritage), as well as the Good International Practice (GIP).

The Cultural Heritage Management Plan includes:

- Formal relevant Albanian, EIB and international requirements, and the ESIA Commitments;
- Information on research material archiving procedures, and recordkeeping;
- Identification of all known Cultural Heritage sources;
- Verification and Monitoring, including procedures for the identification of additional resources not initially identified; and
- Roles and responsibilities, including details on the communication lines between the onsite Cultural Heritage Managers, the construction team, and municipal and national conservation bodies;
- Licensing procedures needed for any archaeological work and on how the licensing will be achieved;
- Suggested protection measures regarding the known Cultural Heritage resources, aiming firstly the principle of avoidance; etc.

The management strategy includes the following steps:

- Institutional engagement strategy to involve the related Albanian authorities in-depth evaluation of sites and the use of intrusive and nonintrusive methods; development of a chance finds procedure; developing site-specific mitigation approaches for archaeological sites, and apply appropriate archaeological rescue methods.
- Community consultation strategy to: inform local stakeholders of project activities; define site boundaries, user access, the timing of use, and schedule of special events; and provide feedback to Project about community concerns.
- Chance Finds Procedures to be implemented in collaboration with the related state institutions (Archaeological Survey Agency). This includes the involvement of licensed archaeologists before contract to handle an archaeological rescue if required at a chance finding; monitoring of construction activities by a professional archaeologist; cessation of work and consultation with relevant authorities in case of any new archaeological discovery.
- Recording and monitoring program, including pre-construction survey and recording; follow-up protection from pollution and vibration of the recorded sites; Use of low impact construction techniques near sites at risk from project's activities; pre-construction preparation of

conservators in the case of accidental damage to cultural resources; and periodic monitoring of site conditions during the Project activities.

The plan will include provisions for the training of all workers and will include procedures related to communication to stakeholders and community improvement opportunities.

#### 2.5.13 Construction material management plan

The Construction Material Management Plan (CMMP) identifies the estimated amount and type of construction material and the potential impacts that may arise from its management. The Plan will recommend good practice procedures to ensure appropriate management of the construction material.

The CMMP includes the procedures for the management and mitigation of the potential impacts that may arise from the extraction, transportation, and management of the construction material. These impacts may include:

- Air pollution;
- Noise and vibrations;
- Impacts on biodiversity and sensitive habitats;
- Visual Impacts;
- Water pollution;
- Waste management;
- Temporary traffic control and management;
- Erosion and sediment control; etc.

#### 2.5.14 Waste management plan

The Waste Management Plan aims at reducing, reusing, and recycling wherever possible the waste generated during the Project's implementation stages. The Plan deals with the management of solid and liquid wastes, including hazardous waste, to avoid any discharges into the soil or water. It establishes procedures for the storage, collection, and disposal of waste.

The Waste Management Plan should be developed before the commencement of any activities. It should comply with EU Directives, Albanian legislation, EIB Standard 2<sup>13</sup> requirements and other international best practices. The EU aims to ensure that the construction and demolition waste (CDW) is managed in an environmentally sound way and the CDW to contribute to the transition to a circular economy. Under the Directive 2008/98/EC, construction and demolition waste is a priority waste stream. The EU objective for 2020 is that *the "preparing for re-use, recycling and other material recovery of non-hazardous construction and demolition waste (excluding naturally occurring material* 

<sup>&</sup>lt;sup>13</sup> EIB Standard 2 Pollution Prevention and Abatement

defined in category 17 05 04 in the list of waste) shall be increased to a minimum of 70 % by weight.<sup>14</sup>

The objective of the Waste Management Plan is to avoid/reduce the impact of waste generated during the construction activities via the following strategy:

- It is recommended to use *green building materials* with significant recycled content that are non-toxic, regionally available, cost-efficient, durable, and easy to maintain.
- Minimize the amount of generated waste;
- Maximize the amount of waste that is recovered for recycling-including segregation of recyclable wastes at source;
- Waste disposal following the waste management hierarchy; and
- Storage and transfer of the hazardous waste to appropriate facilities, in coordination with the responsible local/national institutions, and compliance with the EU, national, EIB, and best practice regulations.
- Buildings and stations' areas will be provided with containers for differentiated waste collection and recycling.

As the waste management is a continuous process, the Plan is updated during the preconstruction and construction phases. This plan also includes provisions for the training of the workforce and technical staff, as well as for the procedures related to communication to stakeholders and the affected community.

#### 2.5.15 Pollution Prevention and Response Plan

The Pollution Prevention Plan (PPP) will take into account all the relevant national regulations and EIB requirements related to pollution prevention. It includes the following issues:

- Hazardous materials: fuels, oils, greases:
  - *General measures* that concern good material handling practices during the construction phase;
  - Product Substitution: Whether possible, using environmentally friendly construction materials; and
  - *Prohibited Materials*: Do not use prohibited construction materials or chemicals that have hazardous or toxic nature.
- Air pollution from dust and gaseous emissions; and
- Noise and Vibrations from Project's activities

Concerning the hazardous substances, the following will be taken into consideration:

• Adoption of Product Specific Practices regarding the following aspects:

<sup>&</sup>lt;sup>14</sup> https://ec.europa.eu/environment/topics/waste-and-recycling/construction-and-demolition-waste\_en

- Fuels, oils, and greases: monitoring of vehicles and construction equipment for leaks;
- Regular maintenance of working machinery and transport trucks to reduce the potential for leakage;
- o Storage of fuels, oils, and greases in appropriate containers;
- Fertilizers: Using as less as possible fertilizers for the revegetation works. Storage fertilizers in appropriate bins;
- Paints: Appropriate storage of paints and disposal following manufacturer's instructions
- Isolation of Potentially Hazardous Materials in appropriate sealed containers. In case of a large amount of such substance, prepare a bermed area that isolates possible leaks.
- Prevention of Accidental Spills. The Plan should define the following issues:
  - Responsibilities: Define the responsibility of all employees and contractors to take appropriate measures to prevent spills in their work and to immediately report any detected spills to their supervisor;
  - Spill Prevention Measures: Describes the requirements for secure storage of hazardous liquids, including physical measures, procedures, auditing, inspections, and risk assessment;
  - Reporting: Records, reporting and notification procedures to be maintained by the HSE team on site;
  - Actions and measures to prevent leakages and spills and to enable an effective response to unplanned releases of liquids, such as fuels, oils, greases, and chemicals.

As per the air quality and noise, the Plan should include:

- As part of the Pollution Prevention and Response Plan, prepare a section for the management of ambient air quality detailing the concept for managing emission control from construction and transport machinery.
- As part of the Pollution Prevention and Response Plan, prepare a section for the management of noise emissions and vibrations detailing the concept for managing noise and vibrations generated from construction and transport machinery.

The Pollution Prevention Plan will include provisions for the workers' training and procedures to communicate with stakeholders and community improvement opportunities regarding pollution prevention and environmental protection.

The implementation of this Plan will avoid any eventual pollution to soil and ground and surface waters.

#### 2.5.16 Occupational and Public Health and Safety Management Plan

Occupational and Public Health and Safety Management Plan (OPHSMP) aims to ensure safe project activities that protect human health, the environment, and assets.

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EIB Standard 9 states that "in compliance with ILO's Guidelines on occupational safety and health management systems<sup>15</sup>, the EU's decent work agenda<sup>16</sup>, the OSH Framework Directive<sup>17</sup> as well as the UN Guidelines on Business and Human Rights, the EIB stresses the employers' duty of care towards project workers and society, in safeguarding occupational and public health, safety and wellbeing within the area of influence of their operations and at associated facilities".

Occupational and Public Health and Safety Management Plan provides for the following aspects:

- Planning for Health and Safety of the workforce and the host communities;
- Accident and Incident Investigation; and
- Health and Safety Auditing.

The Plan includes the following issues:

- Identify the potential hazards and assess the risks associated with the project's activities;
- Describe the response's strategies and the management's organization;
- Define the communication strategies to manage the impacts of any eventual incidents;
- Define the roles and responsibilities of the involved key staff;
- Provisions for the workforce and staff training;
- Define the internal and external notification procedures, community resources, response organization charts, resources, and personnel;
- Procedures of communication with stakeholders and affected communities

# 2.5.17 Labour and working conditions Management Plan

Labour and Working Conditions Management Plan (LWCMP) addresses potential risks to workers' rights, labour standards, and health and safety by summarizing expectations and procedures to maintain the quality of the working conditions, activities, and code of conduct.

<sup>&</sup>lt;sup>15</sup> Guidelines on occupational safety and health management systems:

http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/public ation/wcms\_publ\_9221116344\_en.pdf

<sup>&</sup>lt;sup>16</sup> Directive 2006/0249: http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52006DC0249:EN:NOT

<sup>&</sup>lt;sup>17</sup> Directive 89/391/EEC, as amended by Regulation (EC) No 1882/2003:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003R1882:EN:NOT, Directive 2007/30/EC and Regulation (EC) No 1137/2008:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX: 32008R1137: EN: NOT

The Labour and Working Conditions Management Plan includes:

- The legal framework and Policies and Strategies related to workers' Health and Safety and Rights, based on EIB Standard 8 (Labour Standards), relevant Albanian law and other international standards (ILO labour standards, etc.);
- The Health and Safety performance of the Contractors on the working conditions, including workers' accommodation, that should be in line with Albanian law and international standards;
- The approach and procedures for a workers' grievance mechanism that should be accessible to all workers;
- Approach to monitor and improve the performance of the workers' Health and Safety and rights; and
- Approach to monitoring and improve the performance of the workers' grievance trends and response.

# 2.5.18 Emergency response plan

The *Emergency Response Plan* (ERP) provides for the site-specific actions and procedures to be taken in Emergencies occurring during construction and operation activities. It aims to prevent the potential negative effects in case of accidental and emergencies. This prevention is based on the EIB Policy requirements, the national regulations, as well as on the best international practice. The Plan should identify and prevent major-accident hazards, and avoid/reduce their negative effects on the biophysical and socio-economic environment.

The ERP will address incidents and respective response scenarios, based on the following:

- The identification of the relevant hazards, during project activities, and of their potential effects on the environment and human health;
- Identification of the national and local authorities and other relevant stakeholders and of the appropriate procedures to communicate with them;
- Identification of the necessary measures to reduce human and environmental effects associated with the project activities, as provided in the Albanian law 45/2019 "On civil Protection<sup>18</sup>", as well as in the EU legislation;
- Description of the technical measures to protect the human and natural environment from potential hazards;
- Lessons learned approaches to railways incidents and accidents;
- Description of the organization structure, and explain interactions with a project and operational procedures;

<sup>&</sup>lt;sup>18</sup>https://www.parlament.al/Files/Akte/20190724173027ligj%20nr.%2045,%20dt.%2018. 7.2019.pdf

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- Identification of the system and procedures for providing personnel refuge, evacuation, rescue, and medical treatment;
- Description of training activities and the arrangement for training response teams and for testing emergency systems and procedures; and
- Provisions for the training of all workers on the Emergency Response procedures, and the information regarding internal and external communications during an Emergency Response.

# 2.6 Environmental and social monitoring plan

## **2.6.1** Outline of the monitoring plan

The preparation of the Environmental and Social Monitoring Plan for the design, construction, and operation phases of a project is an integral part of the environmental permit. Selected techniques, standards, and methods of monitoring should comply with international, European, and/or Albanian standards. CMD 912/2015, "On the EIA methodology" requires the preparation of a monitoring program, while Law 10431/2011, "On Environmental Protection", provides for the topics/environmental receptors to be monitored during a project development stages. Article 41 of this law<sup>19</sup>, the list of these receptors includes:

- the quality of surface water;
- the quality of groundwater;
- air quality;
- waste;
- noise;
- radiation;
- the quality of the land;
- flora, fauna, biodiversity, forests;
- the impact of economic sectors on the environment components;
- monitoring of natural phenomena and their potential impact on the environment; and

• monitoring the impacts of environmental pollution on human health. This list does not include any social and cultural receptors, which are subject to other regulations, like the Law "On Cultural Heritage", Law 8561/1999 "On Expropriations and Temporary Takings of the Private Property for Public Interest", EIB Standard 5, etc.

# 2.6.2 Main monitoring activities

The main monitoring activities to be followed during the project's development phases are outlined in the tables 2.4 and 2.5 at the end of this document.

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<sup>&</sup>lt;sup>19</sup> Law 10431/2011 "On environmental protection", as amended, Article 41

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Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Assessment and Management of Environmental and Social Impacts and Risks	Standard1: Assessment and Management of Environmental and Social Impacts and Risks	Implementation of ESMP measures	<ul> <li>-The contractor would be required to produce and implement an Environmental and Social Management System (ESMS), which meets the requirements of ISO 14001 for the preconstruction and construction period.</li> <li>-The ESMS is composed of an Environmental and Social Management Plan, and an Environmental and Social Monitoring Plan.</li> <li>-The Environmental and Social Management Plan shall contain the following topic-specific sub-plans: <ol> <li>Social Management Plan;</li> <li>Land Acquisition and Resettlement Plan;</li> <li>Erosion and Sedimentation Control Plan;</li> <li>Topsoil Management Plan;</li> <li>Water Management Plan;</li> <li>Watercourse Crossing Plan;</li> <li>Infrastructure utilities Management Plan;</li> <li>Noise and Vibrations Management Plan;</li> <li>Stations' Energy Efficiency Management Plan;</li> <li>Cultural Heritage Management Plan;</li> <li>Construction Material Management Plan;</li> <li>Pollution Prevention and Response Plan;</li> <li>Pollution Prevention and Response Plan;</li> </ol> </li> </ul>	All phases of the project's development	-EIB Standard 1; -Albanian environmental and social legislation	<ul> <li>-E&amp;S management organization setup;</li> <li>-HSE reporting systems in place, regular inspection, and monitoring of E&amp;S performance of the contractors demonstrating compliance with social requirements in project documentation;</li> <li>-Updated SMMP and SEP;</li> <li>-Monitoring of applicable legislation;</li> <li>-Sufficient social management capacity and capability for each phase;</li> <li>-CSMS must be in place prior to construction. Draft Manual to be provided for review and approval by HSH within 45 days of contract award;</li> <li>- OSMS must be in place prior to commissioning and continuous/full operating of the railway.</li> </ul>	-Contractor (All plans to support the implementat ion of the ESMMP and the SEP); -HSH (SEP, ESMMP)

## Table 2-4\_Summary of mitigation measures during preconstruction and construction activities

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			<ul> <li>17. Labour and Working Conditions Management Plan; and</li> <li>18. Emergency Response Plan</li> <li>-HSH and the Contractor will regularly review and update as required the SMMP and SEP to ensure it is responsive to changes in project circumstances;</li> <li>-HSH and Contractor will implement and comply with all measures specified within the relevant Project Documentation;</li> <li>-HSH will establish within its organization the social management capacity and capability;</li> <li>-Contractor will develop and implement a Construction Social Management System (CSMS);</li> <li>-Contractor shall appoint an appropriately qualified SHS Manager.</li> </ul>				
Community Cohesion	-Standard 10: Stakeholder Engagement; -Standard 6: Involuntary Resettlement; -Standard 7: Rights and Interests of Vulnerable Groups	-LARF/RAP not properly implemented; -Affected families have not received necessary support in restoring their life and standards from temporary and/or permanent land take	<ul> <li>-HSH shall maintain and implement a Stakeholder Engagement Plan (SEP) and grievance mechanism relevant for each Phase of the Project to ensure that all stakeholders are identified, that sufficient information about issues and impacts arising from the Project (e.g., construction impacts) and proposed mitigation are disclosed in a timely manner and that all stakeholders are consulted in a meaningful and culturally appropriate way throughout project implementation. Determine whether any vulnerable groups (e.g. children) are likely to be disproportionately or permanently and adversely affected by the Project and identify and implement appropriate communication methods to consult with them about mitigation measures.</li> <li>-Contractor(s) shall adopt the SEP and grievance mechanism principles and requirements within their own Management Systems as appropriate and provide training to staff on the SEP requirements.</li> </ul>	Prior start of construction works and during all phases	-EIB Standards 10 and 6; -Albanian regulations;	-Stakeholder Engagement Plan and operational grievance mechanism in place prior to construction	-Contractor; -HSH.

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Air Quality	-Standard 2: Pollution Prevention and Abatement; -Standard 9: Occupational and Public Health, Safety, and Security	-Temporary reversible impacts on local air quality due to construction activities; -Expected positive effects when the railway will be electrified	<ul> <li>-HSH will aim to involve stakeholders and to keep good communication practices during the lifetime of the project through its PIU.</li> <li>-For each of the stakeholder groups defined in the SEP, communication tools suggested will be used in order to ensure easy, transparent, direct, open and interactive communication with all stakeholders.</li> <li>-Implement a Construction Material Management Plan;</li> <li>-As part of the Pollution Prevention and Abatement Plan, prepare a section for the management of ambient air quality detailing the concept for managing emission control from construction and transport machinery.</li> <li>-Pre-notification to stakeholders of critical dust and gaseous emissions from Project's activities;</li> <li>-Community Liaison and Public Grievance Procedures;</li> <li>Good construction practice to prevent dust and particulate emissions by effective control of the potential sources, including:</li> <li>Applying water sprinkling measures in case of visible dust;</li> <li>Proper maintenance of construction machinery/ equipment;</li> <li>Appropriate restriction of vehicle speeds on dust roads /tracks;</li> <li>Cover trucks and stockpiles as needed to prevent</li> </ul>	-Before preconstruction; -Preconstruction; -Construction	-EIB Standards 2 and 9; -IFC Guidelines (Environmental, Health and Safety Guidelines); -Directive 2008/50/EC; -Albanian regulations	-Best practice HSE clauses in construction contract to include the provision of dust suppression measures; -Monitoring and audits reports; -Records of the grievance mechanism.	-Contractor; -HSH
			<ul> <li>dust release;</li> <li>Compliance with construction procedures and schedule; etc.</li> </ul>				
Noise and vibrations	-Standard 2: Pollution Prevention and Abatement;	-Potential annoyance of residents in the	-Pre-notification to stakeholders of critical noise and vibration generation activities; -Implement a Noise and Vibrations Management Plan;	-Design; -Preconstruction;	-EIB Standards 2 and 9;	-Best practice HSE clauses in construction contract to include the provision of	-Contractor; -HSH

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Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
	-Standard 9: Occupational and Public Health, Safety, and Security	vicinity of working sites; -Potential disturbance and/ or displacement of fauna; -Expected positive effects during operation	<ul> <li>Implementat a Construction Material Management Plan;</li> <li>As part of the Pollution Prevention and Abatement Plan, prepare a section for the management of noise emissions and vibrations detailing the concept for managing noise and vibrations generated from construction and transport machinery;</li> <li>Community Liaison and Public Grievance Procedures;</li> <li>Specification during the design phase should ensure that noise level generated at source is below 60 dB(A);</li> <li>The limit of the vibration level is proposed to be 10mm/s peak particle velocity based on widely used German standards (DIN 4150-3);</li> <li>Installation of appropriate elements to reduce noise and vibrations, including temporary barriers;</li> <li>Good construction practice to prevent noise and vibration generation that would cause nuisance, including:</li> <li>Any compressors brought on to construction sites would be sound reduced models fitted with acoustic enclosure;</li> <li>Care would be taken when lying rails and slippers to avoid impact noise from banging steel;</li> <li>Care would be taken when unloading vehicles to minimize noise and vibrations;</li> <li>Delivery vehicles would be prohibited from waiting within or close to the site with their engines running;</li> <li>All machinery items will be properly maintained and operated to avoid causing excessive noise and vibration;</li> <li>Fencing stations to reduce noise and vibrations generated from stations' construction;</li> </ul>	-Construction	-IFC Guidelines (Environmental, Health and Safety; -Albanian regulations on noise; -German standards on vibrations	noise and vibration reduction measures; -Monitoring and audits reports; -Records of the grievance mechanism.	-MoTE

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			<ul> <li>Restrictions on periods of operation and locations of specific construction activities will be agreed upon by the contractor with the relevant local authority;</li> <li>Night-time construction operations only when necessary and after consultation with residents;</li> <li>Concerned residents will be notified and informed before the construction phase when construction works are planned;</li> <li>Provide workforce with personal protection equipment against noise;</li> <li>Reduce noise and vibrations during operation at the source (interface rails/wheel)nand the receiver (stations' buildings).</li> </ul>				
Geology & Soils	-Standard 2: Pollution Prevention and Abatement; -Standard 1: Assessment and Management of Environmental and Social Impacts and Risks	-Erosion on the riverbeds and streambeds; -Modification of rivers and streams morphology; -Accidental pollution of soil by solid and liquid wastes; -Temporary land take and surface sealing; -Soil compaction; -Re-mobilization of contaminants within the soil profile.	<ul> <li>-Erosion and Sediments Control Plan;</li> <li>-Watercourses Crossing Plan for each main river and stream crossing;</li> <li>-Construction Material Management Plan;</li> <li>-Top soil Management Plan;</li> <li>-Waste Management Plan and monitoring its application;</li> <li>-Hazardous Materials Management Procedure;</li> <li>-Pollution Prevention Plan, and monitoring its application;</li> <li>-Community Liaison and Public Grievance Procedures;</li> <li>-Good construction practice to prevent geological risks and soil deterioration and supplemented with commitments to site-specific mitigation through future project development:</li> <li>Take into consideration protection works on the riverbeds and streambeds during the design phase.</li> <li>Take into consideration the geotechnical model and the seismic features, etc., during design;</li> </ul>	-Design; -Preconstruction; -Construction	-EIB PR1, PR3; -Albanian Law; -FAO: Land capability classification; -International best practice.	<ul> <li>-Report on the initial monitoring of subcontractor procedures;</li> <li>-Report on the initial monitoring of subcontractor list of materials;</li> <li>-Results of audits (application of mitigation measures);</li> <li>-Report on the application of the Water Management Plan;</li> <li>-Report on the application of Waste Management Plan;</li> <li>-Report on the application of Hazardous Materials Management Procedure and Pollution Prevention Plan;</li> </ul>	-Contractor; -HSH

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			<ul> <li>The removal and off-site disposal of soils will be avoided where soils are considered to have a value concerning habitat and agricultural productivity, and where soils are to be used for restoration purposes;</li> <li>The temporary storage of excavated soil will be done in a secure location with run-off and erosion prevented. Any soil piles left at end of construction will be removed. Excess concrete or stone will be removed;</li> <li>Specific measures at the watercourses crossings;</li> <li>Vehicle movements on the untracked ground would be limited to reduce the impact of construction on surface cover loss and soil compaction and in particular in areas with softer deposits/soils. The contractor will be responsible for the planning of construction works to avoid access to road construction during periods of highest rainfall;</li> <li>Installation and maintenance of control measures for erosion, run-off, and sedimentation on inclined terrain and in erosion-prone areas (rivers and streambeds);</li> <li>Provision of equipment for the evacuation of leakages;</li> <li>Drilling mud during design and construction phases will be non-toxic;</li> <li>Any eventual fuel tanker vehicles for servicing the construction plant and equipment will carry a suitable sized spill kit and the staff would be trained and regularly updated on their use;</li> <li>Before any construction in geologically sensitive areas, geotechnical investigations will be completed by the contractor to ensure that there is no likely risk associated with underground workings;</li> <li>Site-specific mitigation measures will be further developed before construction through appropriate technical documents.</li> </ul>			<ul> <li>-Report on methods of construction at each river crossing;</li> <li>-Records verifying the restoration and erosion control measures;</li> <li>-Report on use of removed topsoil of high agricultural quality;</li> <li>-Quantities and composition of drilling mud used;</li> <li>-Comparison of before and after photos at rivers and streams crossings</li> </ul>	

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Water resources	-Standard 2: Pollution Prevention and Abatement; -Standard 1: Assessment and Management of Environmental and Social Impacts and Risks	-Impact on surface water by sediment plumes; -Accidental pollution of freshwater resources by solid and liquid wastes; -Modification of the river morphology; -Consumption of freshwater resources	<ul> <li>-Water Management Plan and monitoring;</li> <li>-Watercourses Crossing Plan for each crossing;</li> <li>-Construction Material Management Plan;</li> <li>-Waste Management Plan and monitoring its application;</li> <li>-Hazardous Materials Management Procedure,</li> <li>-Pollution Prevention Plan, and monitoring its application;</li> <li>-Erosion and Sediments Control Plan;</li> <li>-Community Liaison and Public Grievance Procedures;</li> <li>-Specific measures at the watercourses crossings;</li> <li>-Restoration of river banks and river beds and monitoring of restoration works;</li> <li>-Good construction practice to prevent water pollution, including:</li> <li>Work camps would be established at the appropriate distance from surface waters;</li> <li>Minimize the use of groundwater and use low sensitivity groundwater;</li> <li>Work on soft ground in wet weather will be minimized, wherever possible;</li> <li>No water discharge directly to surface or ground waters;</li> <li>Stockpiling out of the construction sites will be prohibited and areas close to watercourses will be avoided;</li> <li>Provision of equipment for the evacuation of leakages;</li> <li>Fuel tanker vehicles for servicing the construction</li> </ul>	-Design; -Preconstruction; -Construction	-EIB Standards 1 and 3; -Water Framework Directive (WFD); -EU Directive 78/659 on Water Quality to Support Fish Life; -EU Directive 76/160 on Quality of Bathing waters; -UNECE: Guidelines on River Water Categorization Based on their Quality Indicators; -Albanian regulations	<ul> <li>-Report on the initial monitoring of subcontractor procedures;</li> <li>-Results of audits (application of mitigation measures);</li> <li>-Report on the application of the Water Management Plan;</li> <li>-Report on the application of Waste Management Plan;</li> <li>-Report on the application of Hazardous Materials Management Procedure and Pollution Prevention Plan;</li> <li>-Reports on restoration works at each crossing;</li> <li>-Volumes of water used;</li> <li>-Quantities and composition of drilling mud used;</li> <li>-Turbidity/suspended solids, oils, fuels, and grease concentrations measured at the crossings before and after construction;</li> <li>-Sensitivity of aquifers traversed;</li> <li>-Comparison of before and after photos at the main rivers crossings.</li> </ul>	-Contractor; -HSH; -MoTE; -Water agencies

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			<ul> <li>activities and equipment will carry a suitable sized spill kit and the staff would be trained and regularly updated on their use;</li> <li>Regular maintenance of all machinery to prevent engine oil and fuel leaks;</li> <li>No crossing of watercourses by vehicles and machinery;</li> <li>Drilling mud must not be toxic.</li> </ul>				
Biological environment	-Standard 3: Biodiversity and Ecosystems; -Standard 2: Pollution Prevention and Abatement	-Habitat restoration; -Habitat loss/ degradation, fragmentation, direct species loss, disturbance /displacement; -Compensation in the form of biodiversity offsets;	<ul> <li>-Use, as much as possible, existing access roads and minimize the construction of new access roads;</li> <li>-Prohibit fires for any reason unless with the approval of local fire authorities.</li> <li>-Prohibit and strict control of illegal hunting (poaching) by workers;</li> <li>-Limit workers to construction sites and prohibit the disturbance to local flora and fauna. Specifically, do not allow: <ul> <li>the collection of medicinal plants;</li> <li>disturbance and hunting of game, birds; etc.,</li> <li>collection of eggs from birds;</li> <li>disturbance of young animals and others;</li> <li>cutting plants or trees.</li> </ul> </li> <li>-Designate smoking areas for workers when constructing in forests or dry periods;</li> <li>-As soon as construction is complete, restore all construction.</li> <li>-Minimum clearing of vegetation and re-vegetation works to disturbed areas as soon as construction is complete;</li> </ul>	-Design; -Preconstruction; -Construction; -After construction	-EIB Standards 3 and 2; -Bern Convention; -Convention on the conservation of European wildlife and natural habitats; -IFC PS6; -EU Habitats Directive; -Albanian regulations	<ul> <li>-Records verifying the implementation of mitigation measures;</li> <li>-Monitoring of the Restoration within the working strip;</li> <li>-Records verifying the implementation of restoration measures;</li> <li>-Monitoring parameters adapted to the specific conditions of each river. Physical, chemical, biological and river morphological elements should be considered and an indication of the monitoring methodology, frequency, and site location for each main river crossing.</li> <li>-Complementary criteria specific to the construction practices employed such as the presence of oil/grease or drilling mud should be considered;</li> </ul>	-Contractor; -HSH; -MoTE; -REAs

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
						-Reporting of rehabilitation targets and findings;	
Landscape and visual Effects	-Standard 1: Assessment and Management of Environmental and Social Impacts and Risks -Standard 3: Biodiversity and Ecosystems	-Impacts from construction works for the working strip; new service roads; fencing; walls. -Impacts from the biophysical rehabilitation of the working strip	<ul> <li>The Landscape Management Plan should be executed in close coordination with the Erosion and Sedimentation Control Plan.</li> <li>Include visibility of the working strip during construction activities;</li> <li><i>Working strip:</i></li> <li>Restore the vegetation within the working strip;</li> <li>Width of the working strip and access roads will be kept to the minimum necessary for their use during the project's activities.</li> <li><i>Fencing and walls:</i></li> <li>Walls as low as practicable;</li> <li>Avoid the use of concrete to reduce the adverse visual effect of walls</li> </ul>	-Design; -Preconstruction; -Construction and after construction	-EIB Standards 1 and 3; -Best practice in Guidelines for Landscape and Visual Impact Assessment.	-Monitoring reports provided by appropriate landscape/ecological site supervisor during reinstatement; -Records verifying the implementation of restoration measures;	-Contractor; -HSH; -MoTE; -REA
Cultural heritage	-Standard 5: Cultural Heritage	-Direct physical damages; -Noise, vibration and pollution; -Blockage of user access; -Visual effects.	<ul> <li>-Cultural Heritage Management Plan;</li> <li>-Guidelines in Employee Code of Conduct;</li> <li>-There is no any known archaeological site/object close to the railway line;</li> <li>-Obtain a permit from the related institutions, after conducting an archaeological survey carried out by a licensed expert;</li> <li>-A licensed archaeologist must be involved during construction works;</li> <li>-Develop and implement a chance to find the procedure and ensure all contractors and other relevant parties are trained in its use</li> </ul>	-Design; -Preconstruction; -Construction; -Decommissioning and Reinstallation	-EIB Standard 5; -IFC PS 8; -Albanian law on Cultural heritage;	<ul> <li>-Percentage of avoidance of known cultural heritage resources;</li> <li>-Chance Finds Record Forms;</li> <li>-Percentage coverage within archaeological site protection checklist.</li> <li>-Percentage of response to relevant Grievances;</li> <li>-Percentage of delivery of Code of Conduct to project management and workforce;</li> </ul>	-Contractor; -HSH; -MCT

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Infrastructure utilities	-Standard 6: Involuntary Resettlement; -Standard 1: Assessment and Management of Environmental and Social Impacts and Risks; -Standard 10: Stakeholder Engagement; -Standard 9: Occupational and Public Health, Safety & Security	-Disruption /Damage to infrastructure utilities (power and telecommunicati on lines, water and gas pipelines, etc.); -Temporary loss of water flow by disruption to flooding channels and irrigation systems; -Temporary interruption of power and telecommunicati ons services; etc.	<ul> <li>-Community liaison;</li> <li>-Infrastructure Utilities Management Plan;</li> <li>-Consultations with the affected service providers;</li> <li>-Documented agreements and collaboration with local authorities and utility companies;</li> <li>-Compensation to affected persons/companies/ institutions;</li> <li>-Diversions to put in place;</li> <li>-Grievance mechanism;</li> <li>-Planned infrastructure crossings in cooperation with local communities;</li> <li>-Reinstatement of roads, irrigation and drainage system, power and telecommunication lines, water supply pipelines, etc.</li> </ul>	-Design; -Construction; -After construction and following post- construction restoration work.	-EIB Standards 1, 6, 9 and 10; -IFC PS and IFC General EHS Guidelines; -Albanian regulations; -International best practice.	<ul> <li>-Project activities restriction schedule</li> <li>-Population affected by disruption/damages to infrastructure;</li> <li>-Type of infrastructure that can be affected (electricity, water, etc.);</li> <li>-Duration of the temporary services interruption;</li> <li>-Standards of the infrastructure services after rehabilitation;</li> <li>-Number of accidents and other events.</li> <li>-Percentage of relevant grievances responded;</li> <li>-Meeting minutes, signed compensation agreements;</li> <li>-Monthly reviews of engagements with local</li> </ul>	-Contractor; -HSH
Traffic and Transport	-Standard 9: Occupational and Public Health, Safety & Security	-Impacts on Safety of local communities, road users, and others;	-All construction activities would be assessed for traffic management requirements, following the national legislation on roads and transport. Only contractors licensed by the Albanian road competent authorities would undertake decommissioning traffic activities:	-Design; -Preconstruction; -Construction;	-EIB Standards 9 and 10; -IFC PS4 and IFC General EHS	communities; -Percentage of infrastructure utilities affected and rehabilitated. -Letters, MoMs, and register of all Communications;	-Contractor; -HSH
	Security	others; -Road incidents;	undertake decommissioning traffic activities;	50.101 001011	Guidelines 3 & 4 requirements to	-Records showing the application of	

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Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
	-Standard 10: Stakeholder Engagement;	-Road infrastructure degradation; -Road user delay.	<ul> <li>-Develop and implement the Traffic Management Plan, which would include: <ul> <li>Transport management planning;</li> <li>Access road maintenance;</li> <li>Vehicle management and maintenance; and</li> <li>Community liaison and safety.</li> <li>Restrictions on timing and location of project activities; and</li> <li>Guidelines in Employee Code of Conduct.</li> </ul> </li> <li>The Traffic Management Plan should comply with the Construction Material Management Plan</li> </ul>		ensure community safety and manage traffic; -Albanian regulations	notification periods for roads/railways damages and closures; -Register of dates and all notifications; -Number of days and kilometers of roads affected; -Record of repaired roads; -Audit compliance with speed limits; -Audit compliance with statutory vehicle limits; -Photos.	
Waste management	-Standard 2: Pollution Prevention and Abatement -Standard 9: Occupational and Public Health, Safety & Security	-Pollution from all types of waste	<ul> <li>-Develop Waste Management Plan to guide management of all waste types to be generated during the preconstruction and construction phase. It would include: Waste selection options; Recycling/reuse options; Waste transport; Disposal options; and Separation of hazardous waste;</li> <li>-Consultation with the affected municipalities on the reuse of the solid waste that will be not reused for construction purposes;</li> <li>-Consultation with the affected municipalities on the disposal of the solid waste that cannot be reused or recycled;</li> <li>-Pollution Prevention Abatement Plan;</li> <li>-Watercourses crossing Plan</li> </ul>	-Design; -Preconstruction; -Construction	-EIB Standards 2 and 9; -Albanian regulations	<ul> <li>-EU objectives for 2020 on waste re-use and recycling<sup>20</sup>;</li> <li>-Number of pollution's accidents, type of polluting substances, and sensitivity of the polluted environment;</li> <li>-Response to any eventual pollution and monitoring result;</li> <li>-Letters, MoMs, and register of all Communications;</li> <li>-Photos.</li> </ul>	-Contractor; -HSH

https://cowi.sharepoint.com/sites/A127055-EX06-project/Shared Documents/09 WORK/50 ESIA/30 ESMP/WB21ALBTRA01\_TECH\_ESMP\_V01.docx

<sup>&</sup>lt;sup>20</sup> https://ec.europa.eu/environment/topics/waste-and-recycling/construction-and-demolition-waste\_en

Indicator	EIB Standard reference	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Community Health and Safety	-Standard 2: Pollution Prevention and Abatement; -Standard 8: Labour Standard; -Standard 9: Occupational and Public Health, Safety & Security -Standard 10: Stakeholder Engagement	-Health and safety risks to residents	Construction work shall commence on site only when the construction phase Health & Safety (H&S) Plan has been adequately developed by the Contractor and approved by HSH's Representative. Traffic Management Plan will be developed for the safe use of vehicles on and off site; driving standards; safe access to construction sites with minimum negative impact on the existing roads and in parallel for ensuring community safety and easy access to their properties (homes, land and services). For traffic control and safety, the information about the project activities and driving standards will be announced through public information means. The traffic flow through the site and within the urban areas will be coordinated with the responsible traffic engineers in the municipalities. A Construction Community Health and Safety Educational Programme will be developed to inform and build awareness and understanding of the local community and drivers on the construction hazards and potential adverse impacts during the construction phase and how to minimize the potential for an accident and/or injury to occur. The Programme will be linked to the SEP and utilize various communication methods to address the needs of vulnerable groups such as children and illiterate residents.	Prior to the start of construction works Prior start of construction works and during construction works Prior start of construction works and during construction works and during construction works	-EIB Standards 2, 8, 9 and 10; -National regulations; -Best practice	<ul> <li>H&amp;S Plan developed</li> <li>Development and implementation of the Traffic Management Plan</li> <li>Development and implementation of a Community Health and Safety Educational Programme</li> </ul>	HSH/ Contractor Contractor(s)/HSH: Contractor will prepare Plan in discussion with HSH, HSH approves the Plan HSH / Contractor
			The design and location of railroad level crossings overpasses and underpasses must take into account the views and concerns raised by local residents and other stakeholders. Warning devices to be installed to warn pedestrians that a train is approaching, special attention to be given to the stations and where vulnerable residents are located. Any hazards such as overhead power lines will be fitted with appropriate warning signs. -Workers will receive training and guidance on how to avoid conflicts with the local community members and sign a labour code of conduct, in order not to minimize potential conflict and community tensions.	During the Design and Operation Phase		- Ensure that level crossings are either under and over passes and/or equipped with adequate safety and signaling equipment	Designer / Contractor (HSH review and implement (as required) provisions during Operation Phase)
							HSH

Indicator	EIB Standard reference	lssue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			A Community Health and Safety Educational Programme (CHSEP) will be developed for railway continuous/full operation. HSH will undertake a series of public relation activities (must run and support a series of community activities, including school visits, safety centres, diversionary activities and communications programmes), in order to inform local citizens, passenger and workers about the dangers associated with the railway continuous/full operation, crossing at unauthorized locations, trespass and/or vandalism.	Prior start of Operational Phase Prior start of Operational Phase/During Operational Phase		Development of a CHSEP for start of railway continuous/full operation. Public access to the information on railway, informing local citizens, passengers and workers on the nature of the railway operation, benefits and risks.	HSH
Community Issues	-Standard 8: Labour Standard; -Standard 10: Stakeholder Engagement	-Workforce health and safety; -Worker rights; -Child labour, forced labour.	-Local Workforce Recruitment Plan to be developed in order to assure employment of much as possible local workforce. Modes for workforce movements will be well organised and reviewed by HSH and Contractor(s)	Prior and during Construction Phase	-EIB Standard 8; -Albania labour law.	Local Workforce Recruitment Plan developed	-Contractor; -HSH
Accidental situations	-Standard 2: Pollution Prevention and Abatement	-Potential risks from no routine events; -Impacts on water resources, soil, etc.	<ul> <li>-Emergency Response Plan;</li> <li>-General commitments – good construction practice:</li> <li>-Hierarchy of safety measures;</li> <li>-Eliminate: wherever possible, hazards are designed out;</li> <li>-Prevent: measures are taken to ensure that the hazard cannot be realized;</li> <li>-Detect: if a hazardous event occurs, the design ensures that it will rapidly be detected;</li> <li>-Control: measures will be in place to control any eventual hazardous events; and</li> <li>-Mitigate: suitable measures will be taken.</li> </ul>	-Design; -Preconstruction; -Construction;	-Guidelines on the requirements to ensure safety and manage non-routine events; -Best practice; -National regulations.	<ul> <li>Inspections to ensure adherence to the Emergency Response Plan;</li> <li>Training records (compliance with assigned training);</li> <li>-H&amp;S monitoring and audits</li> </ul>	-Contractor; -HSH

## Table 2-5\_Summary of mitigation measures during operation and maintenance

Indicator	EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Environmental and Social Appraisal and Management	-Standard 1: Assessment and Management of Environmental and Social Impacts and Risks	Implementation of the ESMP measures	<ul> <li>-Produce and implement an Environmental and Social Management Plan for the operational period;</li> <li>-HSH should regularly review the compliance with the requirements of the ESMP;</li> <li>-Appropriate environmental training of the operational staff;</li> <li>-HSH would implement a communication strategy - as laid out in the Stakeholder Engagement Plan;</li> <li>-HSH and the operational company should liaise with the relevant local authorities and community to identify major events and to plan mitigation strategies;</li> <li>-Development and implementation of an Operational Social Management System (OSMS);</li> <li>-Contractor shall appoint an appropriately qualified SHS Manager.</li> </ul>	All phases of the project's development	-EIB Standard 1; -Albanian regulations	<ul> <li>-Environmental and Social management organization setup;</li> <li>-Monitoring and audits reports;</li> <li>-Compliance with the requirements of the ESMS;</li> <li>-Meeting minutes from engagement and consultations;</li> <li>-Sufficient social management capacity and capability for each phase;</li> <li>- OSMS must be in place prior to commissioning and continuous/full operating of the railway.</li> </ul>	-HSH
Community Cohesion	-Standard 10: Stakeholder Engagement; -Standard 6: Involuntary Resettlement; -Standard 7: Rights and Interests of Vulnerable Groups	-LARF/RAP not properly implemented; -Affected families have not received necessary support in restoring their life and standards from temporary and/or permanent land take.	-Managing community liaison personnel; -Stakeholder Engagement Plan for operations phase.	-During operation, as detailed in LARF/RAP	-EIB Standards 10, 7 and 6; -Albanian regulations;	-Operations phase management systems and functions -Stakeholder engagement plan finalized and posted on Project website; Percentage of responses of relevant grievances; monitoring of grievance trends and response performance.	HSH
Climate changes	-Standard 4: EIB climate – related standards;	-Expected positive impacts	<ul> <li>Implement a Stations' Energy Efficiency Plan;</li> <li>The expected GHG emissions during operation are smaller than the ones released by the existing railway;</li> </ul>	Operation	-EIB Standard 4; -Directive 2008/50/EC;	-Results of audits (application of mitigation measures); -Records of Grievances;	-HSH; -Albanian Railways

Indicator	EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			<ul> <li>-The expected yearly GHG emissions amount during operation (20,000 tons CO<sub>2</sub> eq/year in 2040) are smaller than the EIB threshold amount (20,000 tons CO<sub>2</sub> eq/year);</li> <li>-The future electrification of the railway line will avoid gaseous release from fuel combustion from locomotives;</li> <li>-No vegetation clearing is necessary for the project's purposes.</li> </ul>		-EIB Climate Strategy; EIB Group Climate Bank Roadmap 2021- 2025; -3d National communication to the UNFCCC	-CO <sub>2</sub> eq data and compliance with EU and national limit values.	
Noise and vibrations	-Standard 2: Pollution Prevention and Abatement; -Standard 9: Occupational and Public Health, Safety and Security	-Expected positive impacts; -Potential annoyance of residents in the vicinity of the railway line	<ul> <li>Implement a Noise and Vibrations Management Plan;</li> <li>Community Liaison and Public Grievance Procedures;</li> <li>Good construction practice to prevent noise emission level that would cause nuisance, including (at a minimum):</li> <li>Reduce noise and vibrations during the construction phase to ensure that noise and vibration levels from construction and transport activities are within the permitted standards;</li> <li>Specification during the design phase should ensure that noise and vibrations levels generated at the source are within the permitted standards;</li> <li>Reduce noise and vibrations levels during the operation through use of appropriate new rolling stock and good maintenance of the railway line, to ensure that these levels are within the permitted standards;</li> <li>Investigate complaints about noise and vibration, including cumulative noise and</li> </ul>	Operation and maintenance	-EIB standards 2 & 9; -IFC (Environmental, Health, and Safety Guidelines; -EU and Albanian noise standards; German standards on vibrations ; -Best practice	-Results of audits (application of mitigation measures); -Noise levels; -Compliance with applicable regulatory standards	-HSH; -Albanian Railways

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Indicator	EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			vibration levels, and take appropriate action to reduce these levels as needed.				
Earthquakes	-Standard 1: Assessment and Management of Environmental and Social Impacts and Risks; -Standard 9: Occupational and Public Health, Safety and Security	-Damages to railway infrastructure (bridges) and interruption of the rail traffic	-Emergency Response Plan; -Community Liaison and Public Grievance Procedures; The design has already taken into consideration the seismic features of the Project area; The construction of the bridges and stations buildings will take into consideration the geotechnical model of the soil and other local features.	-Design; -Construction; -Operation and maintenance	-EIB Standards 1, 9; -Eurocode 8	-Records verifying the application of Eurocode 8 provisions in the construction of the Project's components	-Designer; -Construction company; -HSH
Water resource and erosion and sedimentation	-Standard 2: Pollution Prevention and Abatement; -Standard 1: Assessment and Management of Environmental and Social Impacts and Risks;	-Accidental pollution of freshwater resources by railway accidents	<ul> <li>-Pollution Prevention Plan, and monitoring its application;</li> <li>-Hazardous Materials Management Procedure;</li> <li>-Waste Management Plan and monitoring its application;</li> <li>-Good operation practice to prevent water pollution, including (at a minimum):</li> <li>After construction: Restoration of river banks and river beds and monitoring of restoration works;</li> <li>Regular maintenance of facilities to prevent engine oil and fuel leaks;</li> <li>Provision of equipment for the evacuation of leakages;</li> <li>Avoid trains' incidents, etc.</li> </ul>	-After construction; -Operation	-EIB Standards 1, 2; -Water Framework Directive (WFD); -EU Directive 78/659 on Water Quality to Support Fish Life; -EU Directive 76/160 on Quality of Bathing waters; -Albanian regulations	<ul> <li>-Environmental Management training;</li> <li>-Results of audits (application of mitigation measures):</li> <li>Monitoring of Sub- contractor procedures;</li> <li>Procedure and Pollution Prevention Plan.</li> <li>-Records verifying the restoration and erosion control measures;</li> <li>-Reports on restoration works at each crossing;</li> <li>-Comparison of before and after photos at river crossings.</li> </ul>	-HSH; -Albanian Railways
Biological environment	-Standard 3: EIB Standards on Biodiversity and Ecosystems; -Standard 2: Pollution Prevention and Abatement	-Residual impacts on Habitat loss / degradation, direct species loss, disturbance	-Monitoring of the reinstatement of all construction sites and temporary tracks used for construction; -Wherever necessary restore vegetation cover with autochthonous species	-At least one year after construction as no shrubs and trees will be damaged.	-EIB Standard 3: -Bern Convention; -Convention on the conservation of	-Implementation of monitoring parameters similar to the construction phase.	-HSH; -Albanian Railways; -REA

Indicator	EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
		/displacement; -No vegetation of biological value is crossed by the railway line			European wildlife and natural habitats; -EU Habitats Directive; -EU Birds Directive; -EU Natura 2000 - Albanian regulations		
Landscape and visual issues	-Standard 1: Assessment and Management of Environmental and Social Impacts and Risks	-Impact from railway line fencing	<ul> <li>-Monitoring the implementation of the Landscape Management Plan;</li> <li>-Good design, construction, and operation practice to reduce effects on landscape and visual issues, including (at a minimum): <ul> <li>Include visibility of the railway line fencing;</li> <li>Monitoring restrictions of the working strip</li> </ul> </li> </ul>	-Design; -Preconstruction; -Construction; -Operation;	-Best practice in Guidelines for Landscape and Visual Impact assessment	-Site monitoring reports provided by appropriate landscape/ecological site supervisor during the construction period; -Presence of protective fencing to restrict the damage to vegetation within the working strip	-Designer; -Construction company; -HSH; -Albanian Railways; -REA
Cultural heritage	-Standard 5: Cultural Heritage	-No negative effect is expected	-Cultural Heritage Management and Monitoring Plan – a chance find procedure during the construction stage; -Guidelines in Employee Code of Conduct; and -Restrictions on timing and location of project activities close to cultural heritage sites/monuments.	-Design; -Preconstruction; -Construction; -Operation	-EIB Standard 5; -Albanian regulations; -IFC PS 8.	-Project activity restrictions schedule; -Presentations, disclosure documents, MoMs; -Percentage of response to relevant grievances	-Construction company; -ASA; -HSH; -Albanian Railways
Infrastructure	-Standard 10: Stakeholder Engagement; -Standard 9: Occupational and Public Health, Safety and Security; -Standard 6: Involuntary Resettlement	Benefits to local settlements due to infrastructure and service improvements	<ul> <li>Infrastructure Management Plan;</li> <li>Grievance mechanism;</li> <li>Monitoring of grievance trends and response performance.</li> </ul>	-After construction and following post- construction restoration work.	-EIB Standards 6, 9 and 10; -IFC PS and IFC General EHS Guidelines; -International best practice	-Infrastructure improvement plan; signed agreements with authorities; -Percentage of relevant grievances responded.	нѕн

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Indic	tor EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
Waste managen	-Standard 2: Pollution Prevention and Abatement	Impact on health, soils, water resources, and, biodiversity	<ul> <li>Waste generation during operation is limited to leakage of oils, fuels, and greases that can be accidentally released by the locomotives.</li> <li>Mitigation measures are similar to the construction phase.</li> </ul>	-Operation;	-EIB Standard 2; -Waste Framework Directive; -Albanian regulations	Similar to the construction phase	-HSH; -Albanian Railways
Commun Health, Safety, a Security		Railway incidents and accidents	-Checking that the program is prepared and implemented. -Visual monitoring of the implementation through media and other education forms.	-Regular monitoring on monthly basis.	-EIB Standards 9, 10; -International best practice; -ILO Conventions; -Albanian regulations	-Statistics on railways incidents and accidents published yearly by HSH; -Monitoring and audits reports; -Monitoring to ensure accessibility/awareness of grievance submittal process, monitoring grievance trends, response performance; -Security arrangement disclosed in ongoing reporting.	-HSH; -Albanian Railways
Accidenta	-Standard 9: Occupationa and Public Health, Safety and Security; -Standard 2: Pollution Prevention and Abatement	-Potential risks from no routine events; -Impacts on water resources, soil, etc.	<ul> <li>-Emergency Response Plan;</li> <li>-General commitments – good construction practice:</li> <li>-Hierarchy of safety measures;</li> <li>-Eliminate: wherever possible, hazards are designed out;</li> <li>-Prevent: measures are taken to ensure that the hazard cannot be realized;</li> <li>-Detect: if a hazardous event occurs, the design ensures that it will rapidly be detected;</li> <li>-Control: measures will be in place to control a hazardous Event; and</li> </ul>	-Design; -Preconstruction; -Construction;	-Guidelines on the requirements to ensure safety and manage non-routine events; Best practice; -National regulations.	-Statistics on railways incidents and accidents published yearly by HSH; -Inspections to ensure adherence to the Emergency Response Plan; -Training records (compliance with assigned training); -H&S monitoring and audits	-Designer; -Contractor; -HSH; -Albanian Railways

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Indicator	EIB's Standards	Issue/risk	Mitigation actions/measures	Implementation phase	Requirements	Key performance indicator	Responsibility
			-Mitigate: suitable measures will be undertaken.				

### Table 2-6\_Monitoring activities during preconstruction and construction

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
Land Acquisition, Involuntary Resettlement & Economic Displacement	-EIB Standard 10: Stakeholder Engagement; -EIB Standard 6: Involuntary Resettlement; -EIB Standard 7: Rights and Interests of Vulnerable Groups	- To ensure that the LARF and RAP have been undertaken effectively and the affected families have received necessary support in restoring their life and standards from temporary and/or permanent land take.	<ul> <li>-Input and output indicators specified in the LARF/RAP</li> <li>-Assess resettled household to ensure that the resettlement has been undertaken in compliance with LARF and RAP, and EIB Standards 6.</li> <li>-Complaints from residents through the grievance mechanism.</li> <li>-All related activities should be recorded in an appropriate manner to allow for data processing, monitoring and reporting, for example: number of people / households affected, type of impact - temporary or permanent land acquisition, type of compensation packages or assistance provided, identified and assisted vulnerable groups, number of negotiated settlements, number of court or administrative appeals, etc.</li> </ul>	As detailed in LARF / RAP
Air Quality	<ul> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-IFC Guidelines (Environmental, Health and Safety Guidelines);</li> <li>-Air Quality Directive 2008/50/EC;</li> <li>-Law 162/2014 "On environmental air quality protection"</li> <li>-DCM 352/2015 "On the assessment of environmental air quality and the requirements related to some pollutants"</li> </ul>	-Monitor local air quality; -Maintenance of grievance mechanism	-Monitoring and audits reports; -Records on dust suppression measures; -Records of responded and addressed grievances.	-Visual daily monitoring; -Monthly record of grievances

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
Noise and vibrations	<ul> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-IFC Guidelines (Environmental, Health and Safety Guidelines);</li> <li>-Environmental Noise Directive 2002/49/EC</li> <li>-Law 9774/2007 "On the assessment and management of environmental noise";</li> <li>-MoE ordinance 1037/1, date 12.4.2011 " On the assessment and management of environmental noise";</li> <li>-German standards on vibrations</li> </ul>	<ul> <li>-Potential annoyance of residents near the railway line;</li> <li>-Potential disturbance of fauna;</li> <li>-Maintenance of any temporary noise and vibration barriers;</li> <li>-Maintenance and good handling of working machinery</li> </ul>	<ul> <li>Best practice HSE clauses in a construction contract to include the provision of noise and vibration reduction measures;</li> <li>Monitoring and audits reports;</li> <li>Records of the grievance mechanism.</li> </ul>	-Visual daily monitoring; -Monthly record of grievances
Erosion and sedimentation	-EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks	-Monitor erosion at the crossing of the rivers and streambeds; -Identification and reporting of erosive events	<ul> <li>-Results of audits (application of mitigation measures) effectuated by HSH, MoTE, and REAs;</li> <li>-Comparison of before and after photos at rivers crossings;</li> <li>-Number of erosive events caused by the project activities;</li> <li>-Percentage of project-related erosive events detected and corrected</li> </ul>	-Before and during construction works; and -After restoration works
Soil	-EIB Standard 2: Pollution Prevention and Abatement; -EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks; -National regulations;	Monitor the top soil handling measures	-Volume of removed topsoil of high agricultural quality; -Verification of replacement procedures and restoration results	Weekly
3011	-FAO: Land capability classification; -International best practice.	Visual inspection of top soil disturbance and pollution	Number of times where construction engines have been identified outside of the designated areas (working strip, access roads, etc.); -Number of times where fuels by construction engines have polluted the soil.	Daily

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
		Sample and analyse specific areas where polluted soil has been identified	TPH in soil	Before construction works
Water resources	<ul> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks;</li> <li>-Water Framework Directive (WFD);</li> <li>-EU Directive 78/659 on Water Quality to Support Fish Life;</li> <li>-EU Directive 76/160 on Quality of Bathing waters;</li> <li>-Water Framework Directive 2006/118 / EU "On the protection of groundwater against pollution and deterioration";</li> <li>-Water Framework Directive 2006/44 "On the quality of freshwater that needs protection for supporting fish life";</li> <li>-Law 111/2012 "On Integrated Water Resources Management";</li> <li>-DCM 379/2016 "On the approval of the regulations on drinking water quality";</li> <li>-DCM 267/2014 "On approval of the list of priority substances in water environment"</li> <li>-DCM 246/2014 "On the definition of environmental quality norms for surface water"</li> </ul>	Monitoring receiving water quality at construction camps (if discharging to surface or groundwater) Water quality at rivers and streams crossings Water consumption Riverbeds and riverbanks restoration at crossings	Dissolved oxygen pH Turbidity/suspended solids Oil and grease Coliforms Turbidity/suspended solids, oil and grease, pH, Dissolved Oxygen Volumes of water used: construction camps; concrete production; dust suppression; etc. -Channel habitat distribution and coverage; -Photographs comparing before and after crossings.	Monthly -Before construction works -One week after crossing Continuous -Before crossing; and -After restoration works
Biodiversity	<ul> <li>-EIB Standard 3: Biodiversity and Ecosystems;</li> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-Convention on the conservation of European wildlife and natural habitats;</li> <li>-EU Habitats Directive;</li> <li>-Law 9587/2006 "On Biodiversity Protection";</li> </ul>	Site inspection and audit of all activities, and results.	-Records verifying the implementation of mitigation measures; -Conclusions of the audits effectuated by REA and MoTE	-Weekly and Daily before, during, and after construction

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Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
	-Law 81/2017 "On Protected Areas"; -Law 1006/2008: "On the protection of wild fauna"; -Law 10120/2009, "On Protection of the Medicinal Plants"			
Landscape and visual Effects	<ul> <li>-EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks;</li> <li>-EIB Standard 3: Biodiversity and Ecosystems;</li> <li>-Best practice in Guidelines for Landscape and Visual Impact Assessment.</li> </ul>	Project area monitoring provided by appropriate landscape/ ecological site supervisor during reinstatement	-Records verifying the implementation of restoration measures; -Presence of protective fencing to protect vegetation	Weekly
	-EIB Standard 5: Cultural Heritage -IFC PS 8; -Albanian Law on Cultural heritage	-Monitoring of mitigation activities; -Maintenance of grievance	-Completion of required reporting, including Daily logs of archaeological monitoring; and Chance Finds Record	Daily & Weekly per Find
Cultural heritage		mechanism	<ul> <li>-Percentage of avoidance of cultural heritage resources, where feasible;</li> <li>-Percentage coverage within archaeological site protection checklist;</li> <li>-Percentage of relevant Grievances responded and addressed;</li> <li>-Percentage of delivery of Code of Conduct to project management and workforce</li> </ul>	Monthly
Infrastructure	-EIB Standard 10: Stakeholder Engagement; -IFC PS and IFC General EHS Guidelines; -Albanian regulations;	-Signed agreements with authorities and public companies; -Maintenance of grievance mechanism	-Number of entities having a signed agreement; -Percentage of response to relevant Grievances;	Monthly

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
	-International best practice.			
Traffic and Transport	EIB Standard 10: Stakeholder Engagement	<ul> <li>-Potential impacts related to traffic;</li> <li>-Traffic-related parameters;</li> <li>-Maintenance of grievance mechanism</li> </ul>	<ul> <li>-Records showing the application of notification periods for roads damages and closures;</li> <li>-Register of dates and all notifications;</li> <li>-Number of days and kilometres of roads affected;</li> <li>-Record of repaired roads</li> </ul>	Monthly
Waste management	<ul> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-EIB Standard 10: Stakeholder Engagement;</li> <li>-Law 10463/2011, "On integrated waste management", as amended;</li> <li>-DCM 687/2015 "On adopting rules for keeping, updating and publishing data on the differentiation of waste collection at source</li> </ul>	-Visual inspection of eventual pollution from all types of waste; -Waste re-use and recycling	<ul> <li>-Number of times where waste has polluted the environment;</li> <li>-Conclusions of the audits effectuated by the local government and the related state agencies;</li> <li>-EU objectives on non-hazardous waste re-use and recycling</li> </ul>	Daily
Community Health and Safety	<ul> <li>-EIB standard 2: Pollution Prevention and Abatement;</li> <li>-EIB standard 8: Labour standard;</li> <li>-EIB Standard 9: Occupational and Public Health, Safety and Security;</li> <li>-EIB Standard 10: Stakeholder Engagement</li> <li>-Best practice;</li> <li>-DCM 564/2013: "On the approval of the rules on Minimum Safety and Health Requirements at the Workplace";</li> <li>-Law 5/2014: "On safety and health in construction"</li> </ul>	-Mitigating health and safety risks to residents.	-Safety barriers and signage; -Monitoring of Community Health and Safety Educational Program to ensure that it is effective; -Monitoring accidents and near misses; -Complaints from residents through the grievance mechanism.	Prior to the start of construction phase Daily checking of construction sites boundaries.
Influx	-Standard 8: Labour Standard; -Standard 9: Occupational and Public Health, Safety & Security	Ensuring health and well being	Monitoring of protection measures for workers including monitoring of workforce accommodation.	At the construction camps

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Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
Occupational health and safety measures for workers	-Standard 8: Labour Standard; -Standard 9: Occupational and Public Health, Safety & Security	To avoid occupational injuries and / or professional illnesses	Monitoring compliance with applicable standards and national legislation for worker PPE and safety equipment	At the construction sites
Local employment	-Standard 8: Labour Standard; -Standard 9: Occupational and Public Health, Safety & Security	Ensuring local communities benefit from employment opportunities.	Monitoring of number of locals employed on the project.	At the construction sites
Accidental situations	<ul> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-Guidelines on the requirements to ensure safety and manage non-routine events;</li> <li>-Best practice;</li> <li>-National regulations.</li> </ul>	Monitor risks from non-routine events	-Record of number of accidents; -Records on number of times where Adherence to the Emergency Response Plan has been breached	Daily

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### Table 2-7\_Monitoring activities during operation and maintenance

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
Air Quality	-EIB Standard 2: Pollution Prevention and Abatement; -IFC Guidelines (Environmental, Health and Safety Guidelines); -Directive 2008/50/EC; -DCM 352/2015; -Law 162/2014	Air quality monitoring at the stations, mostly at the freight stations	As required by DCM 352/2015	As appropriate
Noise and vibrations	-EIB Standard 2: Pollution Prevention and Abatement; -IFC Guidelines (Environmental, Health and Safety Guidelines); -Ministry of Environment Ordinance 1037/1, dated 12.4.2011; -Law 9774/2007; -German standards on vibrations	<ul> <li>Noise and vibrations monitoring across the densely inhabited areas at the beginning of the operation stage to test the performance of the mitigation measures at the source, including the rolling stock;</li> <li>Periodic noise and vibrations monitoring across during the operation stage to test the necessity to maintain in good conditions the rail track (grinding, lubrication, etc.)</li> <li>Noise and vibration monitoring inside the new stations' buildings to test the performace of the acoustic insulation of the facades and windows.</li> </ul>	Day and night-time noise levels	As appropriate
Erosion and sedimentation	-EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks; -National regulations; -Best Practice	-Identification and reporting of erosive events; -Riverbeds and riverbanks restoration	-Comparison of before and after photos at rivers and streams crossings; -Number of erosive events caused by the project activities; -Percentage of project-related erosive events detected and corrected; -Photographs comparing before and after crossings.	After restoration works

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
Biodiversity	<ul> <li>-EIB Standard 3: Biodiversity and Ecosystems;</li> <li>-EIB Standard 2: Pollution Prevention and Abatement;</li> <li>-Convention on the conservation of European wildlife and natural habitats;</li> <li>EU Habitats Directive;</li> <li>Law 9587/2006 "On Biodiversity Protection";</li> <li>-Law 81/2017 "On Protected Areas"</li> </ul>	Verification of the results of any biodiversity restoration.	-Records verifying the implementation of mitigation measures; -Conclusions of the audits effectuated by REA and MoTE	Every 6 months, for three years
Landscape and visual Effects	-EIB Standard 1: Assessment and Management of Environmental and Social Impacts and Risks; -Best practice in Guidelines for Landscape and Visual Impact Assessment.	Project area monitoring provided by appropriate landscape/ecological site supervisor during reinstatement	-Records verifying the implementation of restoration measures; -Presence of protective fencing to protect vegetation	Annual
Workers Health	-EIB standard 8: Labour standard; -EIB Standard 9: Occupational and Public Health, Safety and Security; -IFC PS and IFC General EHS Guidelines; -National regulations; -Best practice	-Workers health; -Application of training; -First aid equipment at the main stations	-Reports on monitoring of medical facilities at the first aid services at the main stations; -Health checks conducted for all workers every 6 months; -Training records on first aid equipment conditions	Monthly
Accidental situations	-Guidelines on the requirements to ensure safety and manage non- routine events; -Best practice; -National regulations.	Monitor risks from non-routine events (trains incidents and railway line and stations accidents)	-Record of number of accidents; -Records on number of times where provisions of the Emergency Response Plan has been breached	Continuous
Community Cohesion	-EIB Standard 10: Stakeholder Engagement; -EIB Standard 6: Involuntary Resettlement; -EIB Standard 7: Rights and Interests of Vulnerable Groups	To allow and provide full engagement of stakeholders during all phases of the project	The number and types of stakeholder engagement activities should be monitored and reported on – activities need to be processed and analyzed. Monitoring to be done through following activities:	Regular monitoring on monthly base

Indicator	Requirements	Monitoring Task	Monitoring Parameter	Timing
			how many public meetings were held, how many people attended, what issues were discussed, what were the comments/grievances about, how will they pe addressed, etc.	
			The number and types of grievances received should also be monitored and reported on. This should also involve processing and analysis, for example: categorization of grievances (those related to land acquisition, economic displacement, health and safety, construction nuisances, community impacts, etc.), average time to respond, outstanding grievances, etc.	
Social Monitoring	-Standard 8: Labour Standard; -Standard 10: Stakeholder Engagement	To assure proper management of Local Recruitment plan	Record the number of job vacancies resulting from the Project and the number of vacancies taken up by residents of affected local communities.	Quarterly
	-Standard 8: Labour Standard; -Standard 10: Stakeholder Engagement	To assure that the project realization will improve life of the residents	Monitoring effects on population by reporting on a number of questions for the impairments and improvements of the life from project realization and specific problem identified by local residents.	Quarterly
Labour & Workforce Monitoring	-Standard 8: Labour Standard; -Standard 10: Stakeholder Engagement	To assure that all required standards are fulfilled	Monitoring of protection measures for preventing workers accidents during operation phase, worker and labour inspections and disputes.	Regularly on daily base
Community health and safety	-Standard 2: Pollution Prevention and Abatement; -Standard 8: Labour Standard; -Standard 9: Occupational and Public Health, Safety & Security -Standard 10: Stakeholder Engagement	To avoid accidents that may occur during the continuous / full operation of railway	Checking that the program is prepared and implemented. Visual monitoring of the implementation through media and other education forms.	Regular monitoring on monthly base

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