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Corridor Vc Motorway Completion Project

Framework Health and Safety Management Plan

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Abbreviations

E&S	Environmental & Social
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
ESMP	Environmental & Social Management Plan
ESMS	Environmental & Social Management System
EU	European Union
H&S	Health and Safety
H&SMP	Health and Safety Management Plan
HAC	Hrvatske Autoceste d.o.o.
IESC	Independent Environmental and Social Consultant.
KPIs	Key Performance Indicators
LTA	Lenders Technical Advisor
MSDS	Material Safety Data Sheets

1 About the Project

The European Bank for Reconstruction and Development (the "EBRD") is considering financing of a sovereign-guaranteed loan of up to EUR 77.0 million to Hrvatske Autoceste d.o.o. ("Croatian Motorways Limited" or "HAC" or "the Company"). Up to 52 million of the EBRD loan will be used for financing the construction of a 22.5 km motorway section between the border with Hungary and Halasica bridge on Motorway A5 ("the Project"), while the remaining funds will be used for the modernization of the HAC lighting system. EIB is expected to co-finance the Project in an amount equal to EBRD distributed the same way.

The Project section is part of the international Pan-European corridor Vc. It is a part of European network marked E73 which connects north of Europe with the Adriatic and represents the backbone of the road transport infrastructure in the eastern part of Croatia. The Project section has been designed as a dual carriageway, dual lane motorway separated by a central reserve and with one emergency lane each.

The Project consists of the following subsections:

- Hungarian border – Beli Manastir (chainage km 0+000.00 to km 5+000.00, L=5.0 km);
- Beli Manastir – Halasica Bridge (chainage km 5+000.00 to km 22+480.00, L=17.5 km);

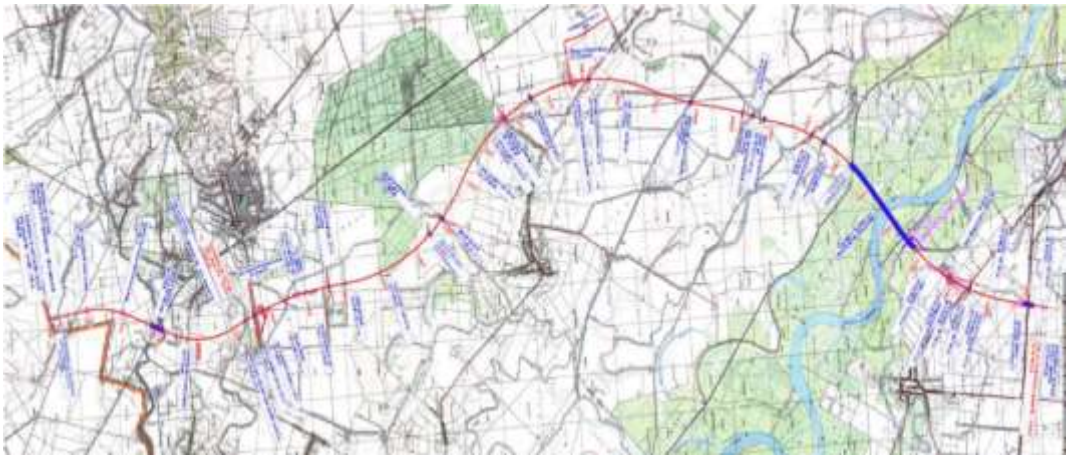

Figure 1 - General Layout Plan of the Project Section

2 About this Document

This document is the Framework Health and Safety Management Plan (Framework H&SMP or the Framework or the Plan) for the Corridor Vc Motorway Completion Project (the Project).

This Framework has been developed to ensure the Project's compliance with the EBRD and EIB requirements in managing identified health and safety risks and impacts.

The main objectives addressed within this Framework are the following:

- to define general high-level health and safety requirements for the construction stage;
- to determine specific management plans to be developed within the Project's ESMS (including H&S);
- to identify the required resources to ensure implementation of activities provided for by the management plans;
- to outline the monitoring and reporting procedures to assess implementation of Framework and other management plans.

The scope of the Framework includes Project-related construction activities at the Project sites, camps, access roads, quarries and transportation routes. Its requirements are applicable to all Project personnel, including personnel of Contractors and Subcontractors and other individuals visiting Project sites and facilities.

This Framework will be considered together with the Framework Environmental & Social Management Plan, as these two documents complement and complete each other, covering together Environmental, Social and Health and Safety aspects of the Project.

3 Project Standards

The Project will be governed by all applicable laws and regulations of the Republic of Croatia, EU Directives and will be subject to Lender's requirements, standards, guidelines and other good international industry practice documents (the Project Standards).

Since the Project Standards are numerous and diverse, the Project may encounter a situation where several documents prescribe different requirements to the same aspects. In such cases, the Project will apply the strictest of the standards in question.

The most relevant international requirements and standards include but are not limited to the listed below.

Lenders' requirements:

- EBRD Performance Requirements;
- EIB Environmental and Social Standards;
- E&S Action Plan

The international standards to be applied to the Project are categorised as follows:

- Relevant international industry practice guidelines;
- Relevant international conventions ratified by Croatia;
- Relevant inter-governmental agreements ratified by Croatia; and
- Any other additional Project-specific standards adopted for the Project

4 Organizational Structure and Responsibilities

The Contractor will have ultimate responsibility for preparation and implementation of pertaining, plans, procedures and other relevant requirements of this Framework.

The Contractor will clearly defined H&S related roles and responsibilities throughout its organization. The Contractor will ensure adequate number of personnel with relevant H&S experience and licenses in line with Croatian legislation requirements. Please see Table 1 below, as minimum requirements.

The Supervision Engineer (if role is contracted as such) will ensure adequate number of personnel with relevant H&S experience and license in line with Croatian legislation requirements. Please see Table 1 below, as minimum requirements.

The Contractor will ensure that all H&S requirements set by Project Standards and this Framework are included in any further sub-contract (throughout supply chain). The Contractor will hold ultimate responsibility under this Contract for the

implementation of H&S requirements and performance of all subcontractors and other parties involved on the Project through supply chain.

HAC (either via the Supervision Engineer or supported by IESC or LTA) will be responsible to review, approve and monitor implementation of Project Standards and requirements of this Framework.

Table 1 - Minimum number of the required H&S personnel

Role	**Required qualification**	**Minimum number of personnel in the role**
Contractor's H&S Manager	Minimum 10 years of relevant H&S experience License in line with relevant National legislation	1
Contractor's Site H&S Inspectors	Minimum 3 years of relevant H&S experience	1 per 75 workers (total number including subcontractors' workers)
Subcontractor's H&S Manager	Minimum 10 years of relevant H&S experience License in line with relevant National legislation	1
Subcontractor's Site H&S Inspectors	Minimum 3 years of relevant H&S experience	1 per 75 workers
Supervising Engineer H&S Manager (if Supervision Engineer is contracted)	Minimum 10 years of relevant H&S experience License in line with relevant National legislation	1
Supervising Engineer Site H&S Inspectors (if Supervision Engineer is contracted)	Minimum 3 years of relevant H&S experience	1 per 75 workers (total number including subcontractors' workers)

5 Contractor's Health and Safety Management System

The Contractor will organize and operate H&S management system in line with internationally recognized systems (ISO 45001) and all its pertaining parts.

6 Project Specific Contractor's Health and Safety Management Plan

Prior to start of mobilization phase, the Contractors will be required to prepare and submit for approval Project Specific Contractor's H&S Management Plan which will, as a minimum, contain detailed description of H&S control and mitigation measures in line with the Project Standards and this Framework.

HAC (either via the Supervision Engineer or supported by IESC or LTA) will be responsible to review and approve submitted Project Specific Contractor's H&S Management Plan before commencement of construction works on site.

6.1 Scope of the Project Specific Contractor's H&S Management Plan

Scope of the Project Specific Contractor's H&S Management Plan will be determined by the Project's area of influence. In particular, the spatial scope of the Plan will include but not limited to the following:

- All Project construction sites;
- All Project construction camps and facilities therein;
- All borrow pits and quarries used for the project
- All access roads and all transportation routes to be used by the Project;
- Other construction, auxiliary or temporary sites used by the Contractor or subcontractors, as applicable.

Furthermore, Scope of the Project Specific Contractor's H&S Management Plan will include all Project related activities, related to preparatory, mobilization, construction and demobilization works.

6.2 Structure of the Project Specific H&S Management Plan (with pertaining sub-plans)

Table 2 - Structure of the Project Specific H&S Management Plan

PROJECT SPECIFIC CONTRACTOR'S HEALTH AND SAFETY MANAGEMENT PLAN	
Management Plan Name	**Purpose and Description**
Risk Assessment	Risk assessment to be undertaken and prepared in line with Croatian legislation requirements, requirements of EU Directives and EBRD and EIB performance requirements and standards.
Occupational Health and Safety	Ensure Project's compliance with Project Standards in managing occupational health and safety risks and impacts. Following topics, as a minimum, will be assessed in detail: • Alcohol and Drugs;

	• Compressed Air; • Confined Spaces; • Collapse; • Dust; • Electric; • Elevated Work Platforms & Man Baskets; • Excavation; • Eye and Face Protection; • Fork Lifts; • Gas Oxygen Equipment and Compressed Gas; • Hearing Protection; • Hot Work; • Housekeeping; • Ladders; • Lifting Operations; • Lighting; • Manual Handling; • Moving Objects; • Noise; • Overhead Lines; • Personal Protective Equipment and Warning Signs; • Portable Tools and Equipment; • Piling; • Scaffold; • Slips and Trips; • Smoking Policy; • Steel Truss Superstructure; • Storage of Materials; • Welding and Cutting; • Work Areas; • Working at Height.
Community Health, Safety and Security	Management of impacts affecting health, safety and security of the communities that will be affected by Project's pre-construction and construction. Following topics, as a minimum, will be assessed in detail: • Identification and assessment of hazards, risks and impacts; • Community health and nuisance related to air and noise emissions • Public Safety; • Site fencing and demarcation; • Access of public to construction site; • Security; • Social and Health Management of HIV/AIDS; • Information disclosure and communication with the communities in the proximity to the site/road in line with provisions of the Stakeholder Engagement Plan;

	• Raising awareness on community safety for both site personnel and affected communities, during construction and operation.
Traffic Management Plan	Management of traffic-related impacts of the Project and minimize risks of traffic accidents due to Project activities during pre-construction and construction. Will organize and control movement and interaction of pedestrians and vehicles in areas used and affected by ongoing works, inside and outside of the immediate construction site. Following topics, as a minimum, will be assessed in detail: • Identification and assessment of hazards, risks and impacts; • Organization of traffic inside and outside construction site • Usage of the Access Roads; • Locations of areas used outside the immediate zone of construction site and traffic communication with these areas. • Transportation Routs; • Collision points of access roads and local roads • Parking Areas; • Training of drivers and operators; • Maintenance of vehicles and equipment; • Communication with local communities regarding temporary disruptions in line with provisions of the Stakeholder Engagement Plan.
Hazardous Materials Safety Plan	Management of hazardous materials used during the Project. Following topics, as a minimum, will be assessed in detail: • Identification and assessment of hazards, risks and impacts; • Storage of Hazardous Materials (oil, fuel, gas, cement) with required safety provision; locations; • Hazardous Materials Handling; • MSDS register • Transfer and transport of hazardous materials and waste to and from the site. Management of hazardous materials is also covered as a part of the Hazardous Materials and Waste Management Plan (under Framework ESMP)
Emergency Preparedness and Response	Following emergency preparedness and response plans will be prepared, as a minimum: • Spill Response Plan, • Fire Response Plan (fire and explosion hazards, identify evacuation routes; • Traffic Accident Response Plan • Structure Collapse Preparedness and Response Plans • Flooding preparedness and response plan • Unexploded ordnance preparedness and Response Plan (which will include Unexploded Ordnance Chance Finds Procedure; • Earthquake Preparedness and Response Plan Minimum content of plans - Organisational structure, Responsibilities, Communication, Procedures, Training, Resources. When required by the National Legislation, Contractor is obliged to consult relevant Institutions/Ministries and obtain approval for these plans.

Camp(s) Management Plan	In addition to the E&S requirements described in Framework ESMP, Camp Management Plan will provide maps; procedures; prevention, control and mitigation measures, which will as a minimum ensure: • Adequate and safe location of facilities within camp; • In-camp traffic organization; • Separation of vehicle and pedestrian paths; • Safe storage locations for materials; • Entrance/exit management.

In addition to the requirements set out in this document, HAC (either via the Supervision Engineer or supported by IESC or LTA) will have a discretion to request additional information, procedures, plans, etc. to be prepared by the Contractor, in line with requirements of Project Standards.

6.3 Minimum Required H&S Procedures and Registries

In addition to procedures and registries (records) required by the ISO 45001 standard, following additional procedures and registries are required, as a minimum:

Procedures:

- Procedure for Hazard Identification and Assessment
- Procedure for Identification of Legal Requirements
- Procedure for Change Management
- Procedure for Internal Audit
- Accident-Incident-Non-Conformance Reporting Procedure
- Procedure for Management of Nonconformities and Corrective Actions
- Procedure for Handling of Hazardous Materials

Registries:

- Registry of Contractor's and Subcontractors' Workers
- Inspection and Incident Registry
- H&S Training Registry
- Visitors Log
- Registry of Vehicles on site and Maintenance Registry
- MSDS Registry
- Key Performance Indicators Registry

7 Performance Monitoring

7.1 Key Performance Indicators

The following key performance indicators (KPIs) will be used to measure the Project's H&S performance:

- Total number of workers on site during course of the project
- Total number of workers on site during subject month
- Total number of workers who received training
- Total number of Contractor's workers who received training
- Total number of subcontractors' workers who received training
- Total number of training sessions held (divided into separate training types)
- Total number of training sessions held during the subject month
- Total number of H&S equipment provided (divided by type)
- Total amount spent of H&S management (including equipment)
- Total Recordable Incidents;
- Total Recordable Incidents Frequency Rate;
- Number of Fatal Accidents;
- Fatal Accident Frequency Rate;
- Number of Lost time Incidents;
- Lost Time Incident Frequency Rate;
- Man-hours (days) since last incident;
- First Aid Cases;
- First Aid Case Frequency Rate;
- Near Miss Cases;
- Near Miss Case Frequency Rate.

The Contractor will be responsible to regularly track and update statistics relevant to listed KPIs in the Key Performance Indicators Registry.

7.2 Inspections

The Contractor and HAC (either via the Supervision Engineer or supported by IESC or LTA) will be responsible perform either separate of joint daily inspections of all Project sites and faculties.

7.3 Reporting

The Contractor will be responsible to report to HAC (either via the Supervision Engineer or by IESC or LTA) on its own H&S performance and performance of the all its subcontractors during the project.

The Contractor will be required to provide following reports:

- Monthly Reports – summary of Contractor's (including subcontractors) H&S performance during subject month; minimum content in line with requirements set out in Table 3;
- Quarterly – summary of Contractor's (including subcontractors) H&S performance during subject quarter; minimum content in line with requirements set out in Table 3;
- Annual – annual summary of Contractor's (including subcontractors) H&S performance during subject quarter; minimum content in line with requirements set out in Table 3; content will be aligned with the reporting requirements of the Annual Environmental and Social Report required by the EBRD;
- H&S Completion Report – content to be agreed by the Contractor and HAC (either via the Supervision Engineer or supported by IESC or LTA) 6 months before estimated completion of works.

Table 3 - Minimum required information in the Contractor's H&S Reports

Chapter	Information to be provided
Executive summary	Short description of key H&S related information for this month
Contractor's and Subcontractor's H&S personnel	Name, Company, Role, License or Certificate
Available H&S Documentation	Document, Issued by, Issue date, Last update
Relevant H&S Correspondence	Document name and number, Date sent/received, From whom, To whom
Machines on the Site	License plates, Type of machine, Last maintenance / service, Reference document
List of subcontractors and number of personnel	Subcontractor, Number of personnel
HSE statistics summary	Description, Cumulative until month, This month, Total, Comments
Health and safety incident/accident	Description, Location, Date Notified, Notes / Progress, Actual date of rectification/close out
Records of training and tool box talks held	Type of training, Date held, Number of Contractors workers attending, Number of subcontractors' workers attending
Positive measures implemented	List and description of positive measures and good practice implemented
Supporting pictures	N/A

7.4 Accidents, Incidents, Non-Conformances, Corrective, Preventive Action and Accident Investigation

All incidents (including accidents, spills, work-related illnesses, damages, near misses etc.) will be reported to the to the HAC (either via the Supervision Engineer or by IESC or LTA) through the Accident, Incident, Non-conformance Form which will be developed as a part of Accident-Incident-Non-Conformance Reporting Procedure.

7.4.1 Accident Investigation

For any serious incident (including injury resulting in more than 2 days' time loss, more than EUR 1,000.00 resulting damage, spills over 5 litres) the Contractor will inform HAC (either via the Supervision Engineer or by IESC or LTA) within 24 hours via Accident, Incident, Non-Conformance Form.

In addition to this, the Contractor will provide detailed written Accident Investigation Report, in two phases, which will include as a minimum:

Phase 1 - Initial Accident Investigation Report (within maximum of 3 days from the incident)

- A brief description of the accident;
- Persons and companies involved;
- Details of the accident;
- Photos/Videos.

Phase 2 - Complete Accident Investigation Report (within maximum of 2 weeks from the incident)

- Investigation activities;
- Analyses and results (Root cause);
- Advices and Corrective and Preventive Actions (with implementation timeline);
- Lessons Learned;
- Photos/Videos

The HAC (either via the Supervision Engineer or supported by IESC or LTA) will be responsible to review and approve these reports and monitor implementation of any corrective and preventive actions identified.

7.5 Recording and Logging

Both the Contractor and HAC (either via the Supervision Engineer or supported by IESC or LTA) will be responsible to keep separate Inspection and Incident Registry records, which will contain information of undertaken inspections,

findings of inspections, any noted incidents, accidents, non-conformances and near misses.

8 Project Specific Training Program

In addition to the H&S training required by Croatian legislation, the Contractor will be obliged to prepare Project Specific H&S Training Programme, as a part of the Project Specific Contractor's H&S Management Plan, which will as a minimum include requirements listed in the Table 4.

Table 4 – Minimum training requirements

Type of training	Expected content	Frequency
Induction Training	Overall H&S principles, hazards, risks, preventive and control measures and requirements.	Before start of work; yearly
H&S training for specific roles and types of works	H&S principles, hazards, risks, preventive and control measures and requirements specific for specific type of work or role (e.g. working at height, welding, truck driver, etc.)	Before start of work in specific role (type of work); Yearly if in role (type of work) for more than a year. After any incident to a group of involved workers and their line manager.
Tool box training	Short and specific knowledge bursts for the particular type of work currently ongoing. Can be delivered by site manager or dedicated worker based on the material prepared by the H&S Manager / Team	Weekly
Emergency response plans training and drills	Specific training for emergency response teams. Emergency response drills for each recognized emergency situation.	Yearly or in line with National legislation requirements, whichever frequency is stricter. After any incident which required emergency response.
Community Health and Safety Training	Training to workers on possible impacts on community health and safety, and prevention and control measures.	Before commencement of works; Yearly
Community awareness training (campaign)	Possible hazards, risks, impacts of Project on community health and safety.	Before commencement of works; Yearly
Traffic Management Training	Specific training on hazards, risk, preventive and control measures recognized in the Traffic Management Plan to all employees involved in traffic management. (routes, access points, access roads, speed limits, locations of schools and hospitals etc.)	Before commencement of works; Yearly
Visitors H&S	Overall H&S principles, hazards,	Before site visit.

Training	risks, preventive and control measures and requirements of the project.	

The Contractor will inform the HAC (either via the Supervision Engineer or by IESC or LTA) about dates of training sessions at least 7 days before the start of training session.

The Contractor will regularly keep and update Training Registry which will as a minimum provide date of training, topics delivered, attendance statistics.

The Contractor will be responsible to ensure that all subcontractors' workers are provided with the same level of H&S training as Contractor's employees.

9 Review and Update

Project Specific Contractor's H&S Management Plan, with its pertaining parts (separately if required), will be reviewed at least yearly, and updated if necessary, or more frequently depending on any change of construction methodology or technological process, requirement of Project Standards, or if required by HAC (either via the Supervision Engineer or supported by IESC or LTA).