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European Bank for Reconstruction and
Development

SARAJEVO PUBLIC TRANSPORT

Tram Track Overhaul – Non-Technical Summary





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QUALITY CONTROL

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1 INTRODUCTION

- 1.1.1. The Sarajevo Canton has expressed an interest in obtaining support from the European Bank for Reconstruction and Development (the 'EBRD' or the 'Bank') for the preparation and implementation of tramway track overhaul on 8km section of the main east-west tram line. The estimated cost of the Project is €20 million.
- 1.1.2. The rehabilitation of the existing tramline is a brownfield category B project under the EBRD ESP. It requires an environmental and social audit of the existing facilities and operations and conditions relevant to the project and a focused environmental and social assessment proportionate to the project's nature, size and location, as well as to the characteristics of the potential impacts and risks.
- 1.1.3. The Project Implementation Unit (PIU) has been appointed to manage the project and monitor its progress, including environmental, social and health and safety performance, on behalf of the Canton. The beneficiary of the investment is the Sarajevo public transport company GRAS (KJKP "Gradski saobraćaj" d.o.o. Sarajevo), who will be primarily responsible for the operation of the renewed track.
- 1.1.4. This document is a Non-Technical Summary (NTS) providing information on the potential environmental and social impacts from the public transport priority project, as well as management measures that will be undertaken by the PIU to mitigate those impacts.
- 1.1.5. In addition to this NTS, a Stakeholder Engagement Plan (SEP) has been developed for the project that describes the planned stakeholder consultation activities and engagement process, including the procedure for resolving grievances related to the project. Furthermore, an Environmental and Social Action Plan (ESAP) has been prepared to structure the future project implementation activities in line with EBRD's Environmental and Social Policy (ESP 2014). The key environmental and social (E&S) project preparation documents – the SEP and NTS - will be uploaded to the GRAS website (<https://gras.ba/bs/>) and the EBRD website (<http://www.ebrd.com>).

2 PROJECT NEED

- 2.1.1. Traffic congestion, especially during the rush hours, is a severe problem in Sarajevo. The poor quality of public transport encourages people to opt for car-use, which generates increased fuel consumption and noise pollution. Due to increased car ownership, traffic growth is rising steadily. There are currently 140,000 vehicles registered in the Canton, for a population of 450,000.
- 2.1.2. The 11km long tram line is the backbone of public transport in Sarajevo and runs from the city centre to the west, passing through residential areas. The 8km long western section between Čengić Vila station and Ilidža terminal has not been properly restructured since it was constructed, about 50 years ago. The poor condition of the tramway represents safety risk and several trams have derailed in past years.

3 PROJECT DESCRIPTION

- 3.1.1. The Project involves an overhaul of eight kilometres of tram lines, for an overall estimated cost of €20 million.
- 3.1.2. The public transport company GRAS operates all tram and trolleybus services, as well as several bus and minibus lines. Other bus and minibus lines are serviced by a private company Centrotrans. Due to its poor performance over the last two decades, GRAS became insolvent. The vehicle fleet is nearly obsolete, particularly the trams and trolleybuses. GRAS has 49 trams, 37 of which are in operation, and 28 trolleybuses, 24 of which are in operation. The average age of the trams is 33 years, while the average age of the trolleybuses is 24 years. The large majority of the fleet is reaching the end of the typical useful life of the vehicles and are in desperate need of replacement.
- 3.1.3. The 11km long tram line is the backbone of public transport in Sarajevo and runs from the city centre to the west, passing through residential areas. The 8km long western section between Čengić Vila station and Ilidža terminal has not been properly overhauled since it was constructed some 50 years ago. Several trams have derailed in past years due to the poor condition of both the tracks and the tram fleet.
- 3.1.4. The British government financed, through its Good Governance Fund, an independent analysis of the company and intends to continue to assist the Canton with corporate restructuring measures. The recommended measures include the tram track overhaul.

3.2 ROAD SAFETY

- 3.2.1. The company abides by local legislation with regards to traffic and road safety. The proactive management of the systems associated with traffic and road safety will, however, be ensured through the development and implementation of a formal road traffic safety management system that aligns with ISO 39001.

3.3 ROUTE SELECTION AND ALTERNATIVES

- 3.3.1. The restructuring will take place on the existing rail track.



Figure 1 - Tram railway reconstruction

4 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL LEGAL AND POLICY FRAMEWORK

4.1 NATIONAL LEGAL FRAMEWORK FOR THE PROJECT

- 4.1.1. When applying to join the European Union in 2008, Bosnia and Herzegovina signed the Stabilisation and Association Agreement, committing to political, economic, trade and human rights reforms. The agreement came into force in 2015. The European Council's opinion on the application is currently in progress.
- 4.1.2. Bosnia and Herzegovina have been a member state of the International Labour Organization since 1993. The country has ratified 83 ILO International Labour Standards (conventions), including all eight fundamental conventions.

4.2 LEGAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL PROTECTION

- 4.2.1. The legal framework that regulates the principles of environmental protection within the concept of sustainable development, environmental monitoring, access to environmental information, public participation in environmental issues, access to justice, environmental damage liability, financing and general environmental policy instruments, administrative and inspection supervision, and other related issues, is established through the following key laws:
- The Law on Environmental Protection (Official Gazette of Federation of Bosnia and Herzegovina, No. 33/03, 38/09, 39/09)
 - Law on Nature Protection (Official Gazette of Federation of Bosnia and Herzegovina No. 66/13)
 - Law on Environmental Protection Fund (Official Gazette of Federation of Bosnia and Herzegovina, No. 33/03)
 - Law on Geological Research (Official Gazette of Federation of Bosnia and Herzegovina, No. 9/10)
 - Law on Radiation and Nuclear Safety in Bosnia and Herzegovina (Official Gazette of Bosnia and Herzegovina, No. 88/07)
 - Law on Spatial Planning and Land Use (Official Gazette of the Federation of Bosnia and Herzegovina, No. 2/06, 72/07, 32/08, 4/10, 13/10, 45/10)
- 4.2.2. Laws on social issues include those relating to land acquisition, public health, and labour law, which deals with workers' rights, including occupational health and safety, labour relations, working conditions, employment, wages, and rights of women workers.

4.3 SUMMARY OF EIA AND PERMITTING PROCESS

- 4.3.1. Local regulations stipulate the implementation of the procedure for assessing the impacts of environmental interventions. By adopting these regulations, the procedure is systematically regulated and aligned with the relevant EU directives:
- Council Directive 85/337 / EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11 / EC of 3 March 1985, 1997
 - Directive 2003/35 / EC of the European Parliament and of the Council of 26 May 2003

4.4 TRAFFIC PLANNING AND ROAD PLANNING

4.4.1. Traffic Regulation laws of the Sarajevo Canton (Official Gazette of Canton of Sarajevo, No. 30/2017, 46/2017) regulate the traffic in Sarajevo Canton, including the:

- Establishment, operation and competence of the Council for Traffic Safety on the roads in Sarajevo Canton
- Establishment of the Traffic Safety Department
- Development of strategic documents
- Financing and monitoring of traffic safety, traffic signalling and road equipment
- Depth analysis of traffic accidents
- Identification and rehabilitation of dangerous places on roads
- Traffic rules
- Special security measures
- Obligations in the event of a traffic accident,
- Organisation of sports and other events on the roads
- Supervision and penalties

5 PROJECT EIA, STAKEHOLDER ENGAGEMENT AND LAND ACQUISITION PROCESS

5.1 ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS

- 5.1.1. The project is classified as a Category B project by the EBRD and therefore does not require an Environmental Impact Assessment (EIA) to be undertaken. It has, however, been screened for potential impacts associated with the construction process, including possible impacts on air, water or soil quality, noise, biodiversity, or the social and cultural environment.

5.2 STAKEHOLDER ENGAGEMENT

- 5.2.1. As a public company, GRAS is under the requirements specified in the Law on Free Access to Information (Official Gazette of Bosnia and Herzegovina, No. 28/00, 45/06, 102/09, 62/11, 100/13) and needs to make pertinent information regarding to all projects of public interest available.
- 5.2.2. GRAS communicates with their users and the citizens of Sarajevo in Bosnian through their official website (<https://gras.ba/bs/>) and the media. Through these channels, GRAS discloses information about its operations, public transport timetables, ticket prices, contact details, news, information on planned disruptions and traffic management, etc. Daily reports on changes in the traffic regime are broadcasted on the television. GRAS issued several notifications to the media regarding the Project.
- 5.2.3. A Stakeholder Engagement Plan has been prepared and it identifies key stakeholders and defines relevant procedures and plans for engagement prior to and during construction. The SEP includes a project specific grievance mechanism and envisages consultations with local communities with respect to construction management and road safety.
- 5.2.4. Disclosure of the NTS and SEP is required. These will be uploaded to the GRAS website (<https://gras.ba/bs/>) and the EBRD website (<http://www.ebrd.com>).
- 5.2.5. Engagement with local communities along the route – specifically on the project schedule and use of transport infrastructure in order to retain access, is also considered important. Consultations will clearly present potential impacts on local communities to confirm the understanding and support of local communities.

5.3 LAND ACQUISITION AND RESETTLEMENT PLANNING PROCESS

- 5.3.1. The restructuring will take place on the existing rail track and no land acquisition will be involved.

6 ENVIRONMENTAL AND SOCIAL BENEFITS, IMPACTS AND MITIGATION MEASURES

6.1 ENVIRONMENTAL

- 6.1.1. Proper disposal of waste from the project (tram lines) will be conducted on the basis of sustainable management, where most of the reusable parts will be refurbished and the rest recycled or disposed of to appropriate landfills.
- 6.1.2. There is a clear indication that GRAS is committed to complying with local environmental legislation and with ensuring that the procedures previously put into place are adhered to.
- 6.1.3. The environmental impacts from the reconstruction of the tram line are in line with those typically associated with construction works (soil and water contamination, waste management, management of carbohydrates, etc) and will be mitigated through the project specific Environmental and Social Management Plan.
- 6.1.4. Environmental impacts will be regularly checked, updated and assessed as a part of the Environmental and Social Management System (ESMS). The ESMS will be introduced by the Company in line with ISO 14001 in order to improve the past and current performance.

6.2 HEALTH AND SAFETY

- 6.2.1. The reconstruction of the existing tramway lines will directly facilitate the traffic on existing routes; the safety and quality of public transport services will be increased.

6.3 SOCIAL IMPACTS AND BENEFITS

- 6.3.1. Reconstruction of the existing tramway lines will improve the reliability and quality of public transport services.
- 6.3.2. Disruption in tram schedules during the implementation of works is expected and GRAS already has measures planned to mitigate these disruptions with alternative transport options (buses and minibuses).

The potential adverse effects are summarised in the table below, along with the proposed key mitigation measures and an assessment of the residual level of effects, assuming the mitigation measures are implemented.

Issue	Current practice	Potential risk	Recommendation
Environmental and Social Management System	<p>An Environmental Manager at the company level has not been appointed.</p> <p>Environmental Management takes place through several departments exclusively as part of the obligation to follow national legislation. No recognised EMS is in place (no environmental Policy, targets nor objectives, EMP, training programme)</p>	<p>The company is not currently controlling the risks of its activities on the environment through an organised system. The proposed project will result in additional environmental impacts, which will need to be appropriately managed to avoid environmental damage or nuisance</p>	<p>Develop an Environmental Management System (EMS) in line with ISO 14001 to ensure that the project is managed by an appropriate EMS</p> <p>Environmental Manager should oversee implementation of the EMS.</p> <p>Consider accreditation of the EMS</p>
Environmental and Social Management Plan	<p>No project-specific Environmental and Social Management Plan that refers to the reconstruction of the tram railways has been prepared, as design development has not reached the required phase</p>	<p>Inability to manage project-specific risks adequately due to the lack of their appropriate identification</p>	<p>Project Implementation Unit (PIU) to develop Framework ESMP (F-ESMP) related to reconstruction of the tram railways and include it in procurement documentation.</p> <p>Include request for the Contractors to prepare Project Specific ESMP based on F-ESMP which will include project-specific Environmental, Social and H&S requirements, (applicable National and EU legislation, Lenders requirements and good international industry practice)</p> <p>The PIU should ensure that a project-specific ESMP addresses identified E&S impacts of the project, takes into account outcomes of Stakeholder Engagement Plan, and defines measures to avoid or mitigate identified impacts prior to the start of procurement process.</p> <p>A project-specific ESMP should be included in the contract documentation for both the contractor and supervisor</p>

Issue	Current practice	Potential risk	Recommendation
			The contractor should be required to prepare site-specific ESMP
Project monitoring and reporting	<p>No reporting metrics are in place for social management during the project.</p> <p>The Project Implementation Unit (PIU) has been appointed to monitor the project</p>	Reported information could be insufficient or irrelevant, resulting in lack of reaction and inadequate E&S management during the project	<p>The PIU staff will be responsible for regular reporting to EBRD on the implementation of both ESAP and ESMS, as well as the SEP</p> <p>Project-related accidents or incidents that may have significant E&S impacts should be promptly reported to the EBRD</p>
Social security and health care contributions	Due to financial difficulties and high levels of indebtedness, GRAS has not been regularly paying social security and healthcare contributions for its employees. Unsettled obligations towards Federal Pension and Disability Insurance Institute are being settled through annual retrenchment plans that secure the funds for paying off the debts. As stated by the GRAS representatives, healthcare contributions have been paid regularly since 2017	Non-compliance with national legislation, Collective Agreement and Rules of Procedure	GRAS will be required to comply with the provisions of national legislation, Collective Agreement and Rules of Procedure and regularly pay social security and health contributions for their employees
Contractor performance on labour and human resources issues	<p>As per national legislation, only registered and licenced companies are allowed to compete in public procurement procedures and therefore be contracted by GRAS</p> <p>GRAS does not include specific requirements regarding labour and HR issues in tendering documentation</p>	There is a risk that contractors will not manage labour and HR issues in accordance with good practice and EBRD PR2 requirements	<p>Develop and implement a monitoring programme to ensure that all contractors and subcontractors fulfil the labour and human resources management standards required under EBRD's PR2</p> <p>React in cases of non-compliance</p>
Environmental training	GRAS provides verbal training, but there is no training programme that covers the implementation of documents and procedures available. (Waste	The lack of training increases the risk of negative environmental impacts by a	Develop a training programme as a part of the ESMS in order to ensure implementation of environmental plans and procedures

Issue	Current practice	Potential risk	Recommendation
	Management Plan, Emergency Response Plan)	lack of adherence to existing procedures	
Groundwater and surface water contamination	<p>Wastewater and surface run-off from tram depot are being collected in five collectors then discharged into the river Miljacka without treatment.</p> <p>The pavement of the parking lot at the depot is in poor condition and has numerous cracks and potholes. Multiple oil and fuel spills are visible</p>	Potholes and cracks in the asphalt next to gutters create potential pathways for contamination of surface and groundwater from petroleum products in the surface runoff	<p>Improve the condition of the pavement of the parking lot at the depots</p> <p>Improve the management of small oil spills by using drip trays and cleaning spills as soon as they happen</p> <p>Undertake a review of drainage system at the depot and develop a plan of measures to ensure the prevention of pollution from these sources</p>
Soil contamination	Used oil canisters, filters, oil and greasy vehicles parts are stored without any protection all around the area were noted. In addition to this, used oil is being collected in the barrels and stored without any physical protection (no secondary containment provided, area is not fenced and roofed)	Poor and inadequate management of hazardous waste serious soil and underground water contamination	Adequate storage areas for hazardous waste (with impermeable lining, bund, canopy/roof and secure access) to be provided for all three depots
Waste management, waste collection	Containers and waste bins for waste collection are not clearly marked	Unclear marking of waste bins and containers can lead to mixing of non-hazardous and hazardous waste	Clearly mark all containers and waste bins at all PP facilities
<p>H&S Management System</p> <p>H&S Manager/Team</p>	An H&S Manager has been appointed in GRAS but has not acquired the necessary qualifications nor H&S license required as per National legislation.	H&S Management System not properly implemented	<p>GRAS should ensure that the appointed H&S Manager or team obtain the necessary licenses for H&S management as per legislation</p> <p>A team (H&S, HR, fleet manager), should develop and implement an H&S Management System in line with ISO45001, to assess risks, prioritise interventions and set standards, targets i.e. accident rate reductions, training requirements, new procedures</p>

Issue	Current practice	Potential risk	Recommendation
			Canton of Sarajevo, Ministry of traffic and PIU to appoint Supervision Engineer that includes H&S manager or team which will be responsible for monitor contractors' and subcontractors' performance, related to the reconstruction of the tram railways component of the project, in fulfilling the H&S aspects of their contractual requirements, undertake corrective measures and manage the implementation of H&S management Plan SEP and ESAP and report to EBRD with agreed frequency and matrix.
Occupational road risk	Many of the mechanisms to manage occupational road risks are already available and correspond to both road traffic law and health and safety legislation. However, there is no recognised system in place	Driver education and commitment is essential because, by the very nature of the task, they are often working alone, away from the PP's sites. The driver needs to follow the standards at all times.	Develop and implement a formal road traffic safety management system that aligns with ISO 39001. for occupational road risks and proactively manage the systems associated with it. This will include regularly monitoring and reviewing such a policy
GRAS internal Traffic Management Plan	There are no designated lanes / paths for pedestrians at both the depots and the workshops	Community health, safety and security risk There is a risk of potential collision with workers and third-party visitors. The nature of the depot is such that vehicle movement around the facility occurs on an almost continual basis	Develop Traffic Management Plan including, but not limited to: <ul style="list-style-type: none"> ▪ Establishing safe vehicle routes; segregation of vehicles and pedestrians (employees, contractors, visitors, etc) ▪ Signage including. height, weight, width restrictions and gradients ▪ Hazard identification and barriers, e.g. overhead cables, fuel tanks, unprotected edges etc
Traffic Management Plan for	PIU or GRAS do not have any traffic management guidelines for construction sites. The management of the	The tram railway reconstruction is taking place in one of the busiest streets in Sarajevo with heavy	Include requirements in the tender documents for the contractor to develop a Traffic Management Plan, and in the supervision contracts the requirement to review and approve it

Issue	Current practice	Potential risk	Recommendation
reconstruction of tram railways	construction sites is solely the responsibility of the contractor	pedestrian and car traffic with various risks associated with moving vehicles, unmanaged materials, trenches, inadequate crossings, etc.	
Emergency preparedness and response	The Company has overall knowledge of legal requirements awareness of emergency procedures.	Lack of Emergency Response Plans is increasing the overall H&S risk.	<p>Develop internal Emergency Preparedness and Response Plan which should assess potential H&S risks, define roles and responsibilities, define training program and reporting matrices. Emergency Preparedness and Response Plan should be regularly revised and updated by H&S Management</p> <p>Canton of Sarajevo, Ministry of traffic and PIU to include a detailed list of emergency preparedness and response plans required for each phase of the Project in Project Specific H&S Management Plan (based on the prepared Framework and as a part of the ESMP) and ensure preparation of these plans by the Contractor prior to the commencement of construction works and their implementation during the project.</p>
Stakeholder Engagement Plan	GRAS and the Canton have issued several project-related notifications to the media. No project-related consultations have been organised	There is a risk of non-compliance with EBRD PR10 requirement regarding transparent and meaningful consultations with project affected people and other stakeholders	<p>A Stakeholder Engagement Plan is developed as part of this assignment</p> <p>GRAS will implement and regularly update the document</p>
Grievance Mechanism	GRAS has several mechanisms for submitting grievances. A project-specific grievance mechanism does not exist	Stakeholders may not be able to have their comments and concerns addressed	A project-specific grievance mechanism, developed as part of this assignment and included in the SEP, will be implemented by GRAS



7 ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING

7.1 ENVIRONMENTAL AND SOCIAL MANAGEMENT

- 7.1.1. Measures to manage the environmental and social effects of the project will be included in the Framework Environmental and Social Management Plan prepared by PIU. These requirements will also be included in the tender documents. Measures relating to public engagement are detailed in the Stakeholder Engagement Plan. The key elements of the required mitigation measures have been summarised in the table above, and any steps the PIU and GRAS must take are described in the Environmental and Social Action Plan.
- 7.1.2. The contractor will then develop a Construction Environmental and Social Management Plan to identify how the commitments will be addressed during construction. This will draw together all the management requirements to minimise disturbance to environmental and social receptors during construction. PIU will engage a contractor to implement these on its behalf.

7.2 ENVIRONMENTAL AND SOCIAL MONITORING

- 7.2.1. During both construction and operation, certain activities, indicators and environmental and social resources will be monitored, in accordance with national and EU legislation, permits, design and EBRD requirements and these will be set out in the Framework ESMP. State inspections and construction supervision engineers will be responsible for the monitoring, reporting and sanctioning of any non-compliance.
- 7.2.2. Monitoring and management actions for stakeholder engagement are proposed in the SEP. There will also be an ongoing requirement for the PIU and (during construction) contractor to monitor stakeholder, individual and community grievances and take appropriate management action, should trends be identified, or key issues occur.
- 7.2.3. Monitoring reports will be produced by the contractor during carrying out the construction works, which will be submitted to the PIU.

8 INFORMATION AND CONTACT DETAILS

Project preparation documents are available on the GRAS website (<https://gras.ba/bs/>) and the EBRD website (<http://www.ebrd.com>).

<p>Contact details for the Project are: KJKP GRAS Contact person: _____ Address: Srdjana Aleksica 1, Sarajevo, Bosnia and Herzegovina Tel: +387 (0) 33 293 333 E-mail: _____ website: https://gras.ba/bs/</p>	<p>Contact details for the EBRD Regional Office in Sarajevo are: Sarajevo Resident Office Fra Andela Zvizdovica 1, 15th Floor, Tower B 71000 Sarajevo Bosnia and Herzegovina Tel: +387 33 257 900 https://www.ebrd.com/ebird-in-bosnia-and-herzegovina.html</p>
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