



ALBANIA

EuropeAid/129604/C/SER/AL

VLORE BYPASS

Preparation of Feasibility Study,
Preliminary and Detailed Design

MILOT - RRËSHEN

Preparation of Preliminary and
Detailed Design for doubling the road section

Vlora Bypass Environmental and Social Action Plan (ESAP)

Project	Design				Phase	Section / Bridge			Type	Free Number		
0	1	5	E	V	0	0	0	0	R	0	0	4

Revision	Date	Subject
0	15.06.12	First Draft
1	18.06.12	Second Draft
2	07.09.12	Final Draft
3	04.06.2013	Final DRAFT
4	10.06.2013	Final Report

Contents

1	<i>Introduction</i>	3
1.1	Overview of the project	3
1.2	Presentation of the Environmental and social Action Plan	3
2	<i>Detailed description of the actions considered</i>	4
3	<i>Annex 1 Safety Issues and Audit Recommendations</i>	19

1 INTRODUCTION

The European Bank for Reconstruction and Development (EBRD or the 'Bank'), considers providing financing support to the Construction of the Vlorë Bypass.

1.1 OVERVIEW OF THE PROJECT

North of Vlorë, the national road network is currently being developed with the construction of new dual two carriageway links. The closest section between Levan and Vlorë is now completed and will connect to the Vlorë Bypass through a roundabout.

On the south outskirts of Vlorë, the existing Coastal single lane route has been considerably upgraded not only to improve access to towns but also to contribute to the emergence of tourism by providing better access to beaches and coastal resorts. The new bypass will also provide an alternative itinerary to Sarandë which is at the moment best connected by a longer route via Tepelenë.

The Vlorë bypass can be considered the "missing link" that remains to be constructed along this itinerary. Today all through traffic has to cross the centre of the city causing congestion, delays, costs, hazards, pollution and globally negative impacts on the environment and quality of life of Vlorë's citizens.

The Vlorë Bypass will provide an easier access to the coastal road and will divert the through traffic away from the city and the seafront of Vlorë, which is under development at the moment.

Vlorë bypass will be approximately 29,0 km in length and will be classified as a secondary road, with a single carriageway, according to Albanian Roads Design Manual. It will also include at grade junctions, numerous bridges, retaining walls and important earthworks.

1.2 PRESENTATION OF THE ENVIRONMENTAL AND SOCIAL ACTION PLAN

The Environmental and Social Action Plan (ESAP) (i) describes the actions necessary to implement the various sets of mitigation measures or corrective actions to be undertaken; (ii) briefly describes how the environment and the stakeholders are affected; (iii) sets these actions in a timeframe for their implementation; (iv) describes the schedule, mechanism, institutional arrangement, roles and responsibilities for external reporting on the implementation of the ESAP.

General Road Directorate of Albania (GRD) has prepared and disclosed an Environmental and Social Impact Assessment (ESIA) for the construction and operation of the Vlorë Bypass. The ESIA describes the project and the natural and human components of the environment that could be affected, and evaluates the potential impacts the project could have on those resources. The ESIA meets the requirements of Albanian regulation on Environmental Assessment and EBRD's Performance Requirements; it describes actions that will be taken to prevent, control or otherwise mitigate potential impacts and to engage with key stakeholders.

Requirements needed to avoid or control potentially significant impacts are described in this Environmental and Social Action Plan, which will be part of the financing agreement between EBRD and GRD. The performance of the required actions will be reported to the Bank by GRD and will be evaluated by EBRD during the construction of the project.

The table on the following pages identifies against the relevant EBRD's Performance Requirements (PR) (i) the actions required; (ii) the environmental and social risks, liability and benefits; (iii) the sources of the requirement; (iv) the timing of the actions; (v) the criteria to be used for determining whether the goal of the action has been successfully achieved; and (vi) responsibility of the action.

Implementation of all these actions is under the responsibility of GRD. When Contractor and their eventual sub-contractors perform work under contract, GRD will be responsible for their compliance with the requirements of this ESAP, even if work's supervision is performed by a Supervisor designated by GRD. This is expected to be accomplished by inclusion of ESAP requirements in contracts and subcontracts, and by direct oversight and supervision by GRD and/or its appointed Supervisor.

This ESAP might be revised during construction of the Vlorë Bypass. No changes will allow violations of Albanian regulation or of EBRD requirements for environmental and social performances.

2 DETAILED DESCRIPTION OF THE ACTIONS CONSIDERED

<i>No.</i>	<i>Action</i>	<i>Environmental Risks, Liability, Benefits</i>	<i>Source of requirement</i>	<i>Timetable</i>	<i>Target and Evaluation Criteria for Successful implementation</i>	<i>Responsibility</i>
0	Submit periodical reports to the Bank on Environmental, Social, Health and Safety (ESHS) performances, including status of each ESAP elements and other agreed activities.	n.a.	EBRD	Each 3 months during construction.	<ul style="list-style-type: none"> ○ Submission of the ESHS report on schedule and in a mutually agreed format. 	<ul style="list-style-type: none"> ○ GRD
1	PR 1 - Environmental and social management					
1.1	Develop and implement an integrated environmental, social, health and safety management system to include: <ul style="list-style-type: none"> ○ Environmental and social safeguard measures (including compensation procedures). ○ Monitoring. ○ Public Consultation and Disclosure Plan. 	Definition of clear procedures and responsibilities concerning Environmental, Social, Health and Safety issues.	Albanian laws Environmental permit Best practice EBRD PR 1	Develop systems prior to the project being submitted to EBRD's Board. Implement throughout construction and operation.	<ul style="list-style-type: none"> ○ Systems developed by qualified consultant, staff trained, system implemented. ○ Status reported to the Bank. 	<ul style="list-style-type: none"> ○ GRD
1.2	Appoint and maintain on-site a person to be responsible for overseeing Occupational Health and Safety (OHS), to report directly to the project Supervisor and subsequently to GRD and the Bank.	Prevention of construction injuries.	Best practice EBRD PR 2	At all times during construction.	<ul style="list-style-type: none"> ○ Appointment of a qualified official. ○ Qualification of the OHS Officer submitted to the Bank with first ESHS report. ○ Qualified official maintained at all times. 	<ul style="list-style-type: none"> ○ Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
1.3	Appoint and maintain on-site a person to be responsible for Environmental and Social compliance (ES), to report directly to the project Supervisor and subsequently to GRD.	Enforcement of mitigation measures defined in the ESIA.	Best practice EBRD PR 1	At all times during construction.	<ul style="list-style-type: none"> ○ Appointment of a qualified ES Officer. ○ Qualification of the official submitted to Bank with first ESHS report. ○ Qualified official maintained at all times. 	<ul style="list-style-type: none"> ○ Contractor
1.4	Establish and implement corporate policies and procedures that oversee Contractor's environmental, social, health and safety performances during construction, to include as a minimum: <ul style="list-style-type: none"> ○ Appropriate ESAP and other legal requirements in contracts, including requirement for staff/management training. ○ Regular inspections of Contractor's construction camp(s) and construction operations. ○ Regular Contractor's reports on its performances to the Supervisor and/or to Bank to determine if corrective actions are needed. ○ Verification of training and professional credentials for Contractor's Health and Safety managers and staff. 	Prevention of construction injuries and enforcement of mitigation measures defined in the ESIA.	Best practice EBRD PR 1	Before start of works.	Include in ESHS reports to Bank: <ul style="list-style-type: none"> ○ Policies and program description and adoption status. ○ Highlights of performance (appointments, inspections, etc.). ○ Trainings. ○ Summaries of project and Contractor ES and OHS performances. 	<ul style="list-style-type: none"> ○ GRD

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
1.5	Obtain and comply with all required permits and authorization including location and exploitation of borrow pits and quarries, explosion works to be carried out in borrow pits and quarries, and water to be pumped in water tables and streams.	Compliance with the applicable Albanian regulation.	Best practice EBRD PR 2	At all times during construction.	<ul style="list-style-type: none"> ○ All permits and authorizations received. ○ Reports submitted to authorities as required. ○ Compliance status reported to Bank. 	<ul style="list-style-type: none"> ○ Contractor
1.6	Adopt and implement the Environmental and Social Management Plan (ESMP) presented in the ESIA.	Enforcement of the management and monitoring procedures defined in the ESMP. Maintain local community support.	Best practice EBRD PRs	As defined in the ESMP.	<ul style="list-style-type: none"> ○ Report to Bank on highlights of implementation. 	<ul style="list-style-type: none"> ○ Contractor
1.7	Appoint an independent EHS consultancy to undertake periodic external monitoring of key Environmental, Social, Health and Safety issues as outlined in this ESAP and in the ESMP.	Check conformity of Contractor and Supervisor practices.	Best practice EBRD PR 1	The independent EHS consultancy should be appointed prior to first disbursement. Monitoring should be performed twice a year during construction.	<ul style="list-style-type: none"> ○ Monitoring reports submitted to Bank with ESHS reports. 	<ul style="list-style-type: none"> ○ GRD or Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
1.8	Conduct a detailed baseline survey of the built and natural environmental conditions along the selected construction traffic routes.	Specification of sensitive areas Baseline for compensation of damages, if occur.	Best practice EBRD PRs	Before start of works.	Detailed baseline survey on the built and natural environmental conditions.	o Contractor
2	PR 2 - Labor and working conditions					
2.1	Develop and implement an Occupational Health and Safety Plan (OHSP) to guide all activities on project sites during site construction and operation. Requirements to include: <ul style="list-style-type: none"> o Occupational Health & Safety Policies and Objectives. o Organizational framework, operating procedures, competence, training program and documentation. o Job- and task-specific hazard analysis and controls for all activities. o Provision of Personal Protective Equipment (PPE), requirement for use of PPE and enforcement of PPE use. o Safety training for all personnel in their language, covering hazards and safety protocols of their jobs. o Oversight of Contractor OHS implementation, including mandatory reporting. o Recording incident statistics, including total work hours, lost time incidents, major injuries, etc... 	Prevention of construction injuries.	Best practice EBRD PR 2	GRD or Supervisor Plan to develop plan prior to construction. Contractor Plan prior to Contractor activities on-site.	Submission and approval of GRD or Supervisor plan by independent OHS Professional or EBRD prior to construction commencement. Submission of Contractor OHS plan and approval by GRD or Supervisor. Report to Bank on OHS issues, including incident statistics, status of training and accidents.	o Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
2.2	Facilitate local labour force by: <ul style="list-style-type: none"> ○ Providing information on employment opportunities, with fair hiring practices including appropriate advertising for all positions. ○ Employing local workers whenever possible and considering training for non-skill workers and for permanent positions. Training should also be provided so as to facilitate employment opportunities for men and women ○ Paying wage at least average for the area for similar position. ○ Construction camps must comply with Albanian regulation and provide adequate portable water, heating, ventilation, showering and cooking facilities. ○ Provide employments opportunities to men, women and young people. 	Employment opportunities for local workers.	Best practice Albanian legislation EBRD PR 2	GRD or Supervisor Plan to develop plan prior to construction. Contractor Plan prior to Contractor activities on-site.	Local announcements when hiring is in process have been made. Camp conditions in compliance with EBRD PR 2 and international best practice have been addressed. Training with local workers has been provided.	○ GRD and Contractor
2.3	Develop a formal grievance mechanism for employees and subcontractors and disseminate about its uses to the workforce, in the language (s) of the workers.	Workers' well being and fair treatment.	EBRD PR 2	Develop and implement prior to construction and throughout project performance.	Submission to Bank of grievance procedure for review and approval with ESHS reports. Thereafter, report to Bank of all workers' grievances with ESHS reports.	○ Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
2.4	Develop Human Resources Policies and Procedures Manual to comply with national law and EBRD requirements. Make these policies and procedures available to employees in their language (s).	Human resources.	Albanian laws EBRD PR 2	Before start of works.	Submission of HR Policy and procedures to the EBRD for review. Include in ESHS report to Bank data on workers, including dismissals and new hires, collective bargaining developments, status of medical checks, etc.... Report to Bank the numbers of workers in various categories (management, skilled and non-skilled workers, local, non-local, expatriate, women, men, etc...	o Contractor
2.5	Safety campaign in schools located in settlements near the alignment.	Prevention of crossing of children on work sites.	Best practice	Prior the start of the works.	School campaign being held. Thereafter, report to Bank of all workers' grievances with ESHS reports.	o GRD
3	PR 3 - Pollution prevention and abatement					
3.1	During construction, develop and implement waste and wastewater management plan for all wastes, including chemicals, fuel, oil, silt, construction debris, domestic/household solid wastes. During operation, especially in the case of fuel storage, ensure that soil, surface water and groundwater pollution does not occur, or if occurs, that adequate remediation is performed.	During construction, adverse effects from construction site activities, construction camps that could be generated by the operation of construction machinery and the workers'	Albanian laws Environmental permit EBRD PRs 1, 3 Best practice	Develop prior to construction and implement throughout project construction and operation.	During development phase: o Review and/or approval of plan by authorities, if required. o Report to Bank on status of plan and approval. During constructional phase: o All wastes managed in accordance with approved plan. o Reports to authorities as required in permits. o Reports to GRD by all contractors	o Contractor and GRD

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
		presence. During operation, soil, surface water and groundwater pollution related to traffic and maintenance activities.			on amounts, types and management of all solid wastes. <ul style="list-style-type: none"> ○ Reports to Bank by GRD and all contractors on amounts, types and management of all solid wastes. ○ Immediate report to Bank and relevant authorities of significant incidents and response actions. During operation: <ul style="list-style-type: none"> ○ Performance of soil, sludge, surface water and ground water monitoring measurements as required and defined by the Environmental Permits. 	
3.2	Develop and Implement air quality management practices to control construction dust and vehicle emissions during construction and traffic emission during operation including (at a minimum): <ul style="list-style-type: none"> ○ Periodic observation monitoring for visible dust near construction traffic areas. ○ Implement dust suppression as needed in dry conditions (with water, gravel, etc.). ○ Cover loads as needed to prevent dust. ○ Maintain vehicles and equipment in good running conditions. ○ Respect speed limits in traffic management plan. 	During construction, adverse affects on air quality due to material supplies, earth works, and construction traffic. During operation, compliance with applicable Albanian regulation on air pollutant.	Albanian laws and decrees Environmental permit EBRD PR 3	Develop prior to construction and implement throughout project construction and operation.	During construction: <ul style="list-style-type: none"> ○ Performance of soil, sludge, surface water and ground water monitoring measurements as required and defined by the Environmental Permits. During operation: <ul style="list-style-type: none"> ○ Review and/or approval by authorities of air monitoring plan if required and defined by the environmental permit. 	<ul style="list-style-type: none"> ○ Contractor and GRD

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
3.3	<p>During construction, implement noise and vibration management practices to control construction noise and vibration nuisances related to rock excavation, transport of material and construction works, including (at a minimum):</p> <ul style="list-style-type: none"> ○ Surveying of any protected objects in the construction routes, checking whether noise limits values are met. ○ Design of temporary noise barriers. ○ Monitoring of noise and vibration standards during construction. <p>During operation:</p> <p>Minimize the impact of the Project on neighbouring dwellings and other sensitive receptors (Schools, Hospitals, etc...).</p>	Noise protection of sensitive areas.	EU Directive 2002/49/EC Albanian laws EBRD PR 3	Develop prior to construction.	<p>During development phase:</p> <ul style="list-style-type: none"> ○ Review and/or approval of management practices by authorities, if required. ○ Report to Bank on status of management practices and approval. <p>During construction:</p> <ul style="list-style-type: none"> ○ Construction noise and vibration assessment. ○ Review and/or approval of management practices by authorities, if required. ○ Contractor reports on noise and vibration monitoring measurements. ○ Report to Bank on status of management practices and approval. <p>During operation:</p> <ul style="list-style-type: none"> ○ Compliance with Albanian regulation on Noise related to infrastructures. 	<ul style="list-style-type: none"> ○ Contractor and GRD
3.4	Develop and implement erosion and sedimentation control plan for all earthworks and other areas where the ground will be disturbed during construction in accordance with good international practices, including at a	Stream siltation, pollution of drinking water wells, lost of topsoil and fauna disturbance.	Best practice	Develop prior to construction and implement throughout	<p>During construction:</p> <ul style="list-style-type: none"> ○ Minimise erosion into streams. ○ Review of plans by authorities as required by permits. ○ Submit with first ESHS report to 	<ul style="list-style-type: none"> ○ Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
	minimum): <ul style="list-style-type: none"> ○ Minimize disturbance on slopes and/in water. ○ Use best practice to prevent run-off. ○ Repair ruts and other features caused by work in wet weather. ○ Segregate topsoil from subsurface material and store in secure area for use. ○ Protect storage pile(s) with covers, including vegetative cover as needed to prevent erosion and dessication. 			Project construction.	Bank erosion and sedimentation control plan. <ul style="list-style-type: none"> ○ Report to Bank on highlights of erosion program. 	
3.5	Develop and implement Groundwater and Surface water protection plan with special attention to the locations of drinking water wells and springs.	Ensuring the prevention of surface water, groundwater by the operations of construction against accidental spillages (oils, lubricants, or other hazardous substances).	Best practice	Develop prior to construction and implement throughout project construction.	During development phase: <ul style="list-style-type: none"> ○ Review and/or approval of plan by authorities, if required. ○ Report to Bank on status of plan and approval. During construction: <ul style="list-style-type: none"> ○ All groundwater and surface water protected in accordance with approved plan. ○ Reports to authorities as required in permits. ○ Immediate report to Bank and relevant authorities of significant incidents and response actions. 	<ul style="list-style-type: none"> ○ Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
3.6	Provide portable toilets or other means to contain sanitary wastes as needed, at all works locations. Discharge wastes to appropriate treatment as required by authorities.	Soil, streams, wells and underground water pollution.	Albanian laws EBRD PR 3 Best practice	Throughout project construction.	During construction: <ul style="list-style-type: none"> ○ No unauthorized discharge. ○ No releases of untreated sanitary wastes. ○ Report to Bank on any accidental releases/discharges. 	<ul style="list-style-type: none"> ○ Contractor
4	PR 4 - Community health, safety and security					
4.1	Develop and implement (GRD should also require Contractor to implement) procedures to protect public health, safety and well being, to include (but not limited to): <ul style="list-style-type: none"> ○ Traffic management plan to be followed by all drivers and equipment operators (speed limits, training and location of quarries and borrow pits, routes of construction traffic, volume and type of construction vehicles, sensitive areas to be avoided, etc...). ○ Public notice of construction operation near neighbourhoods, or other area open to the public. ○ Security as needed to prevent unauthorized access to project locations, with appropriate training to guards. ○ Notice to local authorities and nearby residents before major construction activities (such as blasting) and traffic. 	Construction hazards, health problems and other nuisances affecting neighbouring communities and general public.	EBRD PR 4 Best practice	Develop prior to construction and implement throughout project construction.	At early phase of construction phase: <ul style="list-style-type: none"> ○ Consultations with local authorities on traffic, public notices, etc. ○ Submission of traffic management plan in first ESHS report to Bank. ○ Report to Bank on traffic management, security, other activities, including any incidents, accidents involving the public. 	<ul style="list-style-type: none"> ○ GRD and Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
	<ul style="list-style-type: none"> ○ Hazard notices/signs/barriers to prevent access to dangerous areas. ○ Best effort to minimize disruption and closure of public roads, interference with local community water and electricity networks as well as with irrigation channels. 					
4.2	Establish and enforce rules for worker behaviour when dealing with local residents and visitors in order to prevent adverse impacts. Location of construction camps to be approved by local authority and camps to be fenced and screened.	Conflicts between workers and local population. Unauthorized access of general public into workers' camp(s).	EBRD PR 4 Best practice	Throughout life of work camps and employment of non-resident workers.	During construction: <ul style="list-style-type: none"> ○ No serious incidents between workers and local population. ○ If necessary, consultation(s) with local authorities concerning appropriate behaviours and controls. ○ Fences and screen around workers' camp(s). ○ Report to bank on all incidents. 	<ul style="list-style-type: none"> ○ Contractor
4.3	Minimize the amount of work done after daylight hours wherever possible, particularly work that can cause noise or require bright light.	Neighbouring communities being affected by noise and bright light disturbances.	EBRD PRs 3, 4 Best practice	Throughout construction and operation.	<ul style="list-style-type: none"> ○ Notice to local authorities when works are to take place after hours. ○ Compliance with Albanian regulation on Noise related to infrastructures. 	<ul style="list-style-type: none"> ○ Contractor
4.4	Safety campaign in schools located in settlements near the highway.	Prevention of injuries and fatalities related to the highway.	Best practice	Prior road operation.	School campaign being held.	<ul style="list-style-type: none"> ○ GRD
4.5	Implement the findings of the Traffic	Improvement of	Best practice	During design	Revised design in accordance with	<ul style="list-style-type: none"> ○ GRD

<i>No.</i>	<i>Action</i>	<i>Environmental Risks, Liability, Benefits</i>	<i>Source of requirement</i>	<i>Timetable</i>	<i>Target and Evaluation Criteria for Successful implementation</i>	<i>Responsibility</i>
	Safety Audit given under Annex 1.	traffic safety and prevention of road accidents		and construction	the recommendations	

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
PR 5 - Land acquisition, involuntary resettlement and economic displacement						
5.1	Implement the Resettlement Action Plan which sets out the principles to be applied in the case of loss of land, access to land (temporary or permanent), assets and /or livelihood due to land acquisition or imposition of restrictions on resources. People entitled to compensation include those who may not have a formal title to their land. Objectives and actions related to land acquisition, involuntary resettlement and economic displacement are presented in the Resettlement Action Plan.	Fair compensation to affected persons for property and economic losses.	Albanian laws EBRD PR 5	Prior to economic losses, unless for compensation for damages. Before start of works.	<ul style="list-style-type: none"> ○ Objectives and actions described in the resettlement plan have been respected and followed. ○ All replacement and compensation at fair market value. ○ Report to Bank on all economic losses due to protect and any compensation or replacement paid. 	<ul style="list-style-type: none"> ○ GRD
6 PR 6 - Biodiversity conservation and sustainable management of living natural resources						
6.1	<p>During construction:</p> <ul style="list-style-type: none"> ○ Conduct a field survey to insure no Critically Endangered (CE), Endangered (E), Vulnerable (V), Near Threatened (NT) species are present in the project right of way or in the vicinity. ○ Develop and implement program of monitoring of CE, E, V, NT during breeding and resident seasons. Data must be sufficient to verify or refine understanding of field survey and then identify any changes. <p>During operation:</p> <ul style="list-style-type: none"> ○ Implement road signage at specific location to increase motorist's awareness. 	Casualties of threaten or endangered animal species.	Albanian laws EBRD PR 6	The field survey is to be conducted and the program is to be developed prior to construction and implemented at the beginning of works.	<p>During construction:</p> <ul style="list-style-type: none"> ○ Review and approval by Albanian independent experts of program of monitoring of threaten or endangered animal species. ○ If threatened (CE, E, V, NT) species are identified during the pre-construction survey, site specific mitigation measures will be defined on a case by case basis so as to avoid any fatality and priority should be given to avoidance. <p>During operation:</p> <ul style="list-style-type: none"> ○ Road signage at specific location being implemented. 	<ul style="list-style-type: none"> ○ Contractor and GRD

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
6.2	Establish and enforce rules for workers to prohibit hunting, fishing, wood cutting except as allowed with lawful permits.	Unnecessary destruction of natural habitats.	EBRD PR 6	Throughout construction and operation.	<ul style="list-style-type: none"> ○ No violations of hunting, fishing, wood-cutting rules. ○ Report to Bank on actions taken to control worker behaviour, including incidents 	○ Contractor
6.3	As part of the detail design, prepare and implement a landscaping plan to implement mitigation measures presented in the ESIA, including protection of valuable existing vegetation, rehabilitation of construction sites and worker's camp, use of natural looking material (gabion, stones and natural coloured concrete) for visible retaining walls.	Integration of the project into the landscape and unnecessary destruction of existing landscape amenities.	EBRD PR 6 Good practice	Complete detail design of landscaping works of a section before completion of the construction of that section.	<ul style="list-style-type: none"> ○ Valuable riverine forests and large trees identified and protected. ○ Construction sites and workers' camp(s) rehabilitated. ○ Visible retaining walls build with natural looking material. ○ Landscaping plan completed. ○ Report to Bank on completion of plans and status of implementation. 	○ Contractor
7	PR 8 - Cultural heritage					
7.1	In collaboration with Minister of Culture and/or regional representatives, conduct pre-construction surveys in sensitive areas described in the ESIA for archaeological and develop and implement chance find procedures, including training of all workers.	<p>Destruction or modification of valuable buried archaeological artefacts.</p> <p>Archaeological site reburial.</p>	Albanian laws EBRD PR 8	<p>Survey(s) conducted prior to construction.</p> <p>Training conducted prior to worker activities.</p>	<ul style="list-style-type: none"> ○ Report to Bank on surveys and chance find procedures, and on any discoveries made. 	○ GRD and Contractor

No.	Action	Environmental Risks, Liability, Benefits	Source of requirement	Timetable	Target and Evaluation Criteria for Successful implementation	Responsibility
8	PR 10 - Stakeholder engagement					
8.1	Implement a Stakeholder Engagement Plan, including stakeholder grievance mechanism and notice to authorities and residents of major construction events.	Disclosure of negative impacts of construction works and taking into account grievance related to expropriation and other matters related to the project.	EBRD PR 10 Best practice	Throughout construction and operation.	<ul style="list-style-type: none"> ○ Report to Bank on consultation activities, including notices given. ○ Report to Bank all grievances received and how they were addressed and resolved. 	○ GRD
8.2	Report on a regular basis to the impacted communities about project status. Prior notice should be given to public before start of construction activities close to their communities	Information of population about the project status.	EBRD PR 10 Best practice	Twice a year during construction.	<ul style="list-style-type: none"> ○ Report to Bank on consultation activities. ○ Report to community on status. 	○ GRD

3 ANNEX 1 RECOMMENDATIONS OF SAFETY AUDIT REPORT

The Complete Safety Audit Report is attached as Annex 12 to the ESIA Main Report.

Safety Issue	Audit Recommendation
GENERAL	
The typical cross-section for a three lane road identifies that the nearside lane width would be 3.25m and the overtaking lane would be 3.5m.	<p>It would be much safer to have the nearside lane, which will contain the slower moving heavy goods vehicles, with a width of 3.5m. Then the overtaking lane can be 3.25m, since this will contain mainly the overtaking lighter vehicles.</p> <p>Reverse the width of the two lanes for the uphill section; i.e. 3.5m nearside lane and 3.25m overtaking lane.</p>
A third road cross-section variant is required which should offer a section of road with four lanes. The cross-section would apply to the two hill crests, which are in the middle of three-lane sections.	Where climbing lanes are introduced on both sides of the hill, then for safety reasons the climbing lanes should be continued over the crest of the hill. Thereby requiring four lanes over the crest.
Bearing in mind the steeper road gradients and the alternating curvature of the road alignment, then there is a high potential for substantial amounts of road surface water to transfer from one side of the carriageway to the other when the road camber switches from one direction to the other.	During the detailed design phase, the designer should carefully consider the positions of channels and gullies to prevent this hazard.
Location of lay-bys	<p>The designer should carefully consider the lay-by locations. It is especially important that they are not positioned such that they affect the line of sight of vehicles on the carriageway.</p> <p>Similarly it is important that on sections of road with only two lanes, pairs of lay-bys should be positioned such that vehicles exiting the lay-bys travel away from each other, or else separate the lay-byes.</p>
Consider the introduction of 'Arrester beds'	Arrester beds would be positioned on the downhill slopes on the road sections on either side of the hill which crests at Km 15+900. The Auditor concurs with the designers regarding the introduction of these safety features and recommends that the introduction of arrester beds should be addressed during the detailed design process, taking into consideration suitable locations for them.
ROAD ALIGNMENT	
Check for visibility	During the detailed design phase, the designer should check that the forward stopping sight distance is available across the verge and any necessary earthworks, especially cuttings, on the inside of the

Safety Issue	Audit Recommendation
	curve. This is especially important where road safety barriers will be required. The designer should check that the stopping sight distance is available in front of the barriers.
Check for visibility of road markings at the start of tapers	In view of the curving alignment, the designer, during the detailed design process, should ensure that the road markings indicating the start of the tapers for lane narrowing are visible within the forward stopping sight distance. Additionally compatible road traffic signs should also be installed.
Check the forward visibility on the approach to the proposed roundabout at Km 7+150.	The designer should check the forward visibility on the approach to the proposed roundabout at Km 7+150, which is at the top of a hill when approached from the north. The designer should ensure that at least the required stopping sight distance is available for drivers to observe the roundabout when approaching from this direction
At Km 22+750 there appears to be a change in road gradient from 1.6% to 2.6% without any visible vertical curve connecting the two gradients.	During the detailed design phase, the designer needs to check whether a vertical curve is required. Apply a vertical curve, of sufficient length, if the difference between gradients is greater than 0.5%.
Consider the provision of a climbing lane for the northbound traffic from Km 3+750 to 4+300, where the gradient is 6%.	The designer should reconsider this road section during the detailed design phase.
The drawings indicate that a climbing lane will commence at Km 6+500 and also at Km 26+000. But these locations are already on the vertical gradients.	In the opinion of the Auditor the first climbing lane should start at approximately Km 6+100 or possibly even earlier and the second should start at approx. Km 26+700. The designer should review the start location of the climbing lanes as currently indicated.
JUNCTIONS AND ACCESSES	
At Km 4+600 a roundabout or possibly a cross-road junction is proposed. Visibility is not a problem. However there is potential for a problem with vehicles overtaking at this junction location if a cross-roads junction is provided.	If a cross-roads junction is provided, the designer should carefully consider the road traffic signs and markings to be used. The use of 'No-overtaking' signs and road markings is highly recommended to reduce the potential for collisions at this junction.
Traffic travelling southbound, towards the proposed roundabout at Km 7+150, approaches on an uphill gradient with a climbing lane ending just prior to the junction. This creates two safety issues. The first is whether there is adequate forward stopping sight distance to the roundabout on the final approach for vehicles. The second is whether the climbing lane should be continued to the roundabout entry.	The designer should check that there is forward stopping sight distance to the roundabout on the final approach for vehicles. Secondly the designer should consider whether the climbing lane should be continued to the roundabout entry.
Two T-junctions are proposed for the village of Kanina; one at Km 10+500 and the second at Km 12+150. An additional T-junction, to a quarry, is proposed at Km 12+800. All of these junctions will provide for left-turning manoeuvres on uphill gradients, where a climbing lane is situated. Traffic will be required to locate into the central overtaking lane. This will be unsafe, since faster moving traffic will also be utilising the central lane for carrying out the overtaking	Overtaking in the central lane should be restricted throughout the junctions. Introduce lane closure traffic signs instructing vehicles in the centre lane to move across to the nearside lane in advance of the junctions. The centre lane should be controlled using road markings to direct traffic to the nearside lane. Then, closer to the junction, the centre lane should be opened up, with suitable road markings, to permit vehicles carrying out the left-turn manoeuvre to enter the centre lane and execute the turn across the

Safety Issue	Audit Recommendation
manoeuvre.	downhill lane. After the junctions the overtaking-lane can be reopened. For safety reasons, it is recommended that the lane control at these junctions is only executed using road markings.
There is a second problem involved with the T-junction at Km 10+500. This junction is also located close to the crest of the hill, which crests at Km 10+625.	The designer needs to check the visibility over the crest of the hill. It is essential that, as a minimum, full forward stopping sight distance is provided for vehicles waiting to turn across the downhill traffic lane.
Other T-junctions are proposed to be located at Km 10+070 and Km 19+675, which will provide for traffic wishing to carry out the left-turn manoeuvre from the downhill direction. Traffic wishing to carry out such a manoeuvre at these junctions will be required to locate into the central lane in order that it only has to cross one lane. This means that uphill overtaking in the central lane has to be prevented throughout the junctions.	As part of the detailed design, the designer should introduce lane closure traffic signs instructing vehicles in the centre lane to move across to the nearside lane in advance of the junction. In this case, for safety reasons, the centre lane should be controlled using kerbs and road markings to direct traffic to the nearside lane. This is to prevent vehicles meeting head-on in the centre lane. Then, closer to the junction, the centre lane should be opened up for the downhill traffic to permit vehicles carrying out the left-turn manoeuvre to enter the centre lane and execute the turn across the uphill lane. After the junction locations, the overtaking-lane can be reopened for the uphill traffic.
At the commencement of the bypass road scheme, the proposed road will connect into the roundabout, which is being constructed at the end of the Levan-Vlora road project. From a study of the drawing for this location, it is apparent that there is a local side road which crosses the bypass at approximately Km 0+100.	The designer should consider the possibility of re-routing this side road to run parallel with the proposed bypass and to create a new entrance onto the roundabout at the start of the project.
NON-MOTORISED USER PROVISION	
The inception report states that in the semi-urban areas the road will be provided with footways for pedestrians. Additionally lay-bys will be provided at selected locations to allow for local stopping of public transport. However neither of these provisions is indicated presently on the preliminary drawings.	Where lay-bys are to be provided for public transport, then the designer needs to consider footways to these facilities for pedestrians to reach the lay-bys. Also the pedestrian footways, if provided, need to be identified on a typical road cross-section, since these will affect the right-of-way width required for the proposed road and will need to be included on the land expropriation plans.
ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING	
Provision of street lighting.	The designer should carefully consider the provision of lighting for any roundabouts which are to be included in the project.
The inception report mentions that an additional lane for the descending traffic may also be added. But the preliminary design, as presented, does not include for this provision.	<p>If the additional lane for descending traffic is not to be provided, then the designer must consider the overtaking opportunities for the faster vehicles travelling downhill. Wherever the proposed road has the climbing lane introduced, then the designer must introduce a double line marking system between the downhill lane and uphill climbing lane, to prevent downhill vehicles encroaching into the climbing lane.</p> <p>ARDM 6 permits the use of a centre double line marking system, including a broken permissive line. Therefore the designer should consider where a broken</p>

Safety Issue	Audit Recommendation
	<p>line can be provided on the side of the downhill lane to permit vehicles using this lane to overtake where it is safe to do so. That is where more than full overtaking sight distance is available in the downhill direction, dependent upon the design speed for that section of road.</p> <p>Additionally, in accordance with ARDM 6, two deflection arrows should be provided in the centre lane as the end of the overtaking section approaches, to warn drivers to return to the downhill single lane.</p>
Road Studs	<p>The designer should consider the use of road studs, which are capable of permitting a snowplough vehicle to pass over.</p>