REPUBLIC OF ALBANIA · ALBANIAN ROAD AUTHORITY

PLANNING AND PREPARATION OF THE RESULTS-BASED ROAD MAINTENANCE AND SAFETY PROJECT (RRMSP)

Grant No. P13982 · Contract No. 1

DRAFT ENVIRONMENTAL MANAGEMENT PLAN (EMP)

Paper - Paulesh Segment

Place and Date: Tirana (Albania) · 06.10.2014







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Acronyms

ALL	Albanian Lek
ARA	Albanian Road Authority
ARAP	Abraviated Resettlement Action Plan
BAT	Best Available Techniques
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
ESFD	Environmental and Social Framework Document
ESMD	Environmental and Social Management Document
ESMF	Environmental and Social Management Framework
ESSD	Environmental and social Safeguard Document
ESIA	Environmental and Social Impact Assessment
EU	European Union
GOA	Government of Albania
IEE	Initial Environmental Examination
MOE	Ministry of Environment
MTI	Ministry of Transport and Infrastructure
NCL	National Center of Licensing
NEA	National Environmental Agency
NOs	Nitrogen Oxides
ОР	Operational Procedure
OPRC	Output and Performance based Road Contracts
PAP	Project Affected People
PM	Particulate Matter
PR	Performance requirements
RAP	Resettlement Action Plan
RDR	Regional Directorate of Roads
RRMSP	Results based Road Maintenance and Safety Project
REA	Regional Environmental Agency
RRA	Regional Road Authority
WB	World Bank
WOCs	Volatile Organic Compounds

1 INTRODUCTION

The RRMS Project has been classified under WB policies as Category B, and, since the exact locations of the project activities are unknown at the time of Project Appraisal, requires an Environmental Management Framework (EMF). Within the EMF sample Environmental Management Plans (EMPs) are prepared to showcase how the procedure within the EMF will be met for project locations. The EMPs are be developed for at least two types of activity that are anticipated under road maintenance/upgrading at this stage, respectively on the segment of Vidhas Paper and Paper Paulesh.

A set of proposed activities anticipated under road maintenance in this phase of the project have been identified and presented here. The objective is to set out a simple and realistic document which can serve to ARA as a template for screening and scooping, and management plan, in cases that the Albanian legislation doesn't requires a Preliminary or Profound EIA. This EMP, prepared in compliance with WB guidelines, will play an active role on environmental protection in cases of maintenance or rehabilitation works, during all operational phases.

The assumed activities refer to the road section identified an agreed with ARA, namely the section Paper Paulesh on National Road Sh7. This section, and the activities foreseen to be carried out in it, are deemed meaningful as they reflect features of the main maintenance activities that will be performed by ARA in the national road network, in order to ensure significant improvement in terms of service levels and user's safety.

The road was surveyed by the Consultant during the site visits carried out in September 2014.

The section under consideration represents damages caused by deterioration of road pavement, missing guardrails, insufficient lighting, etc. Other characteristics of this road are lack of proper accessibility for pedestrians or bikers. Such conditions have increased the risk of accidents, that sometimes have fatal results. This may be considered a typical situation where a proper planning and design of maintenance and upgrading could improve the situation in terms of both road service level and safety.

The simple EMP report provides the screening by environmental checklist/matrix and a management plan, where is included the mitigation measures and monitoring program.

2 PROJECT DESCRIPTION

The segment under the study is part of the national road Sh7, in Elbasan Region. It is 4.5 km long and runs from Paper to Paulesh. The road has 2 lanes, 3.75m wide each, in some parts 1.50m unpaved shoulder width, and is characterized by missing of lighting, absence of footpaths, etc. In most of its length the roads runs parallel to the Shkumbini river, while in the northern part planted pines are encountered along the 20% of road's length, planted in years 70s to control soil erosion in the close by hills. Within the road segment there are two gas stations on both sides of the road. The draining channels of the road are already blocked by native water resistant plants, and the pavement in some parts is damaged.

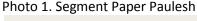
Description of works envisaged to be done for road maintenance:

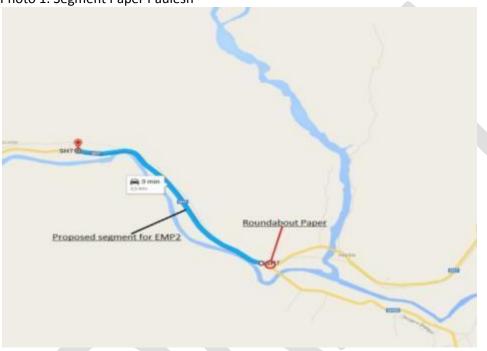
Routine maintenance works: cleanning of the draining channels and cutting of the vegetation, cleaning of tombines, paving of damaged pavement, cleanning of bridges, etc.

Maintenance of emergency works: changes on damaged barriers, cleaning of road and restoring the slopes after landslides or erosion, cleaning of the snow during winter season (even though this happens very rarely in this area), etc.

Rehabilitation works: consists of works needed to restore the road's conditions to defined standard levels.

Works related to road safety; guardrails, lighting, footpaths, etc.





IDENTIFICATION OF ENVIRONMENTAL ISSUES

The identification of environmental issues, is based on the procedures included in the EMF document, namely the screening checklist (first part of the table), followed by a general environmental evaluation matrix (second part of the following table).

The second part of the checklist is built in as a very simple matrix, based on 3 evaluation levels that represent the magnitude of negative impacts:

- 1 = Low level of impact
- 2 = Medium level of Impact
- 3 = High level of impact.

Prior to start of works and after completion of the necessary documents, the ARA team will communicate with NEA or Elbasan RED to ensure no environmental due diligence is needed to comply with the Albanian legislation.

Table 3.1 Screening criteria template related to Maintenance Activities performed on an Existing Road – Checklist matrix (to be used by ARA)

CRITERIA	YES	NO	Comments
Does the existing road have a valid operating permit, licenses, approvals etc.? If not, please explain. Permits to screen for include: - Construction Permit - Operational /Use Permit - Urbanistic Permit - Environmental Permit - Water Management Permit If not, will the investment be used to correct this condition?	Yes		
Does the existing road have or is awaiting (or is required by law to have) an environmental permit?		No	The law doesnt specify if a road maintenance requires an environmental permit
Is operation of the existing road mandated through special provisions of Albanian Environmental Regulations regarding protected areas or cultural heritage? If not, please explain.		No	Not any specific site (natural or heritage protected area) is affected by road operation or its maintenance. There is an obelisk from Second World War alongside the road, that shall not be in any way or form impacted by the works.
Are there any significant outstanding environmental fees, fines or penalties or any other environmental liabilities (e.g. pending legal proceedings involving environmental issues etc.) If so, please explain. If so, will the investment be used to correct this condition?		No	

Will the sub-project require procurement of substantial amounts of materials to be used – stone, aggregate, sand, asphalt or others that needs environmental permit?	Yes		Any kind of raw material to be used should be joined by the Environmental permit for its exploitation (ex. Permit for exploitation of open quarries, permits for exploitation of ground water etc.)
Will the subproject generate large quantities of construction waste that will need permission from the Commune to be disposed of?	Yes		The implementer should agree with local government on waste management ways and time/table, waste disposal, etc.
Will the sub-project be located within or close to officially protected areas or areas under consideration by the Government for official protection status?		No	About 7 km far from the closest specific site.
Will the sub-project potentially impact areas of known significance to local, regional or national cultural heritage? (During the public consultation, the local population should be asked to provide information about any sites or structures which are not on any official list, but which they consider to be of significance and which they think should be protected)		No	
Does the project negatively affect community assets or activities		No	
Proposed Sub-project	expected (1=low, 2:	existing or d impact =medium, gh) ¹⁾	Comment
Will the sub-project cause changes in the drainage patterns of the road and the immediate surrounding areas?	1		Unimportant changes caused by opening and cleaning of the road's drainage channels
Will the project cause air, land and/or water pollution by dusts, noises and/or vibrations.	-	1	During construction and operation phases
Will the subproject include activities that will require sanding, paints, or other potentially hazardous materials that will need to be properly stored and	<u>'</u>	1	Only filling material for the cracks and potholes, and painting for road marking (signage), which do not represent any environmental threat

Level of EIA study	Abl	breviated EMP should be prepared
Total of existing or expected impact value	11	
Is there any other aspect of the sub-project that would — through normal operations or under special conditions — cause a risk or have an impact on the environment, the population or could be considered as a nuisance?	1	No impacts that cannot be managed, or considered as a nuisance source, are found in the site area
Has the local population or any NGOs expressed concern about the sub-project environmental aspects or expressed opposition? Are expected public claims?	1	No concerns are expected for these type of activities, either by local population, or by NGOs
Does the project create problems on accessibility	2	During maintenance works traffic delays may be encountered
Will the project affect any species or population with specific status?	1	No species with specific status are observed in the road segment and close surroundings (excluding the amphibians living in the draining channels).
Doest the project create conditions for accidental pollution by leakages?	2	Accidental pollution by damaged cars or equipments, paint storage, etc. can happen, and should be managed to protect Shkumbini river waters
contained?		

¹⁾ Level of expected impact: 1 expresses the lowest negative impact, 2 the medium level, and 3 the highest one. In case that no impact is expected, please leave the cell empty.

Sums resulting from 8-12: All activities cause or are expected to cause minimal or medium negative impacts (levels 1 to 2). An EMP, as per WB guidelines is required. In case that one activity's impact is evaluated as level 3, a preliminary EIA is expected to be required by the National Environmental Agency. The ARA team will ensure all communication with the National Environmental Agency and/or the Regional Environmental Agency in Elbasan is carried out prior to start of works and that all of their requirements have also been met.

Sums resulting from 13 - 19: a preliminary EIA with EMP included should be prepared, in cases where the activities cause, or are expected to cause negative impacts that can be considered of medium level.

Sums resulting from 20 - 24: Profound EIA is required, or in case of uncertainties, it can be defined after the preparation of the preliminary EIA.

<u>The total number of the expected impacts for maintenance and/or rehabilitation works in Paper - Paulesh segment is equal to 11, therefore a simple EMP needs to be prepared.</u>

4 ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan considers the findings and characterization of impacts, and the preparation of the Environmental Mitigation Measures and Monitoring Program, as integral part of the detailed design document and implementation program.

4.1 Mitigation measures

The Environmental Mitigation Plan for maintenance and upgrading activities in Paper-Vidhas road section is an integral part of the EMP. The mitigation measures are separated into two parts, one for the management plan for maintenance and upgrading phase, and the second for the impacts that are encountered during the operational phase.

Notification, Worker and Citizens Safety, are considered as very important issues to be considered in realizing the public awareness, community support, and traffic facilitation. Mitigation measures for construction and rehabilitation activities are considered as very important. Water and land quality, waste management and traffic/road safety are taken into account for some general orientation on mitigation measures. All mitigation measures are in respect with Albanian construction and environmental legislation, and specifically with the Law No. 10431, dated 09.06.2011, "On Environmental Protection".

Table 4.1 Mitigation measures

	Issues u	Issues upon phases and Mitigation measures		Associated Costs I		ses and Mitigation measures Associated Costs Institutional Responsibility			(e.g. secondary impacts)
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate			
Maintenance/upgrading	The overall worker safety, and risks of unauthorized access to construction site of inhabitants	 The inhabitants leaving close to road under upgrading or rehabilitation will be notified of the works, objectives and temporary expected negative impacts through appropriate communication; public meetings, etc. All legally required permits will be acquired for construction and/or rehabilitation. Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. Including organization of transport to minimize impacts on neighborhood, and washing of vehicle tires to minimize spreading of debris on the roads. Workers will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses etc). Workers also will be contracted respecting Albanian legislation, and the developer should respect all hygienic and safety rules conditioned by Albanian legislation. Life insurance of workers etc will be provided by the employer. Technical security measures will be provided by the employer. Emergency safety kit should be placed close to the working place for intervention in case of accidents. Emergency contacts and numbers should be clearly posted on site. Appropriate warning signposting of the working sites, visual barriers etc., will be used to prevent accidents. 	Provision of safety equipment, safety kits and signs is included in contractor operating costs		Contractor	Supervised by Supervision company or engineer			
Maintenance/ upgrading	Use of raw materials may pose an additional stress on the natural environment	Use raw materials (sand, gravel, stone) only from suppliers that have valid licenses issued by the National Environmental Agency and/or Regional Environmental Agency of Elbasani.	No additional costs incurred		Contractor	Supervised by Supervision company or engineer	Exploitation of Natural resources		

Issues upon phases and Mitigation measures		Associated Costs		Institutional Responsibility		(e.g. secondary impacts)	
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate	
Maintenance/ upgrading	Noise generated during works may pose a threat or disturbance to the workers on site, animals and neighboring properties	Construction noise will be limited to restricted times agreed to in the permit in respect with Albanian Environmental Legislation During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed at station territory.	Covers for electric generators 200 EURO/unit		Contractor	Supervised by Supervision company or engineer	
Maintenance/ upgrading	Works done for cleaning of draining channels will permanently remove vegetation	 In case of unavoidable damage, re-plant same species on road peripheries. Ensure visually the same appearance as before works started. 	Depends on plant species. Proper planning can ensure plants are replaced rather than new ones bought		Contractor	Supervised by Supervision company or engineer	Temporary decrease of green cover efficiency
Maintenance/ upgrading	Traffic disturbances and slow down	 Ensure local community is aware of any major transport requirements and disruptions to the regular traffic pattern. Adequately manage traffic and use postings to warn others of possible congestion. In any cases one road line will be kept free to permit toad operation 	No additional costs incurred		Contractor	Supervised by Supervision company or engineer	

Issues u		upon phases and Mitigation measures	Associat	ed Costs	Institutiona	l Responsibility	(e.g. secondary impacts)
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate	
Maintenance/upgrading	Dust emissions from the site may impact air quality and pose a health threat to workers and neighbors	 In case of disposal of dredged or excavated materials the debris shall be kept in controlled area and sprayed with water mist to reduce debris dust During pneumatic drilling/compaction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site The surrounding environment (at last one road line) shall be kept free of debris to minimize dust There will be no open burning of construction / waste material at the site There will be no excessive idling of construction vehicles at sites All materials will be supplied/transported in a manner which minimizes dust – including covered truck loads or closed off truck loads, with dust suppressing measures through water spraying 	Cost of 1 m3 of clean water on site: 40 Euro DCM on Tax of Drinking water, No. 203, dated on 08.05.1997		Contractor	Supervised by Supervision company or engineer	All such measures will be in respect with DCM No. 435, dated 12.09.2002, "Concerning the Approval of the Norms for discharges in the air and the implementati on of these Norms And the law 9774, date 12.07.2007, on evaluation and management of noises on environment

	Issues u	ipon phases and Mitigation measures	Associat	ed Costs	Institutiona	Responsibility	Comments
							(e.g. secondary impacts)
Phase	Issue	Mitigating	For installation	For operation	Install	Operate	
		Measure					
Maintenance/upgrading	Improper waste management may cause pollution of soil, surface and groundwater, and pose a health risk	 Designated waste disposal areas will be allocated on site, including waste collection bins for smaller waste, and designated areas for bulkier waste All waste, including construction debris and excavated materials will be regularly and timely transported off site and managed through an authorized agency or disposed of at a site that was officially designated by the local authorities – Elbasani Municipality or Paper Commune Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. The records of waste disposal will be maintained as proof for proper management as designed. Whenever feasible the contractor will reuse and recycle appropriate and viable materials Removed vegetation on roundabouts may best be composted on site, at a designated and managed area. All oily wastes will be separately collected, in bins which are leak-proof, and will be handled over to the authorized management and disposal company, receipts for which shall be kept. Ensure agreements with community and services (cafeterias etc) to use their toilets for worker needs 	Cost of waste managemen t – per 1 truck to the designated site in compilation with other site disposals 70 Euro/Year Local Tax One container (bin) for solid municipal waste 130 EURO One container for hospital wastes 20 euro		Contractor	Supervised by Supervision company or engineer ARA staff	All measures will be in respect with existing legislation regarding waste management

	Issues upon phases and Mitigation measures		Associated Costs		Institutional Responsibility		Comments (e.g. secondary
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate	impacts)
Maintenance/ upgrading	Construction works on site may impact the quality of surface waters of Shkumbini River, subsequently ground water	 The site will establish appropriate water and sediment control measures such as e.g. silt fences to prevent water sediment from moving off site and causing excessive turbidity in the channel. Collectors will be temporary adapted to avoid surface water dispersion in case of watering of sand or gravel to control the dusts The approach to handling sanitary wastes and wastewater from working sites (installation or reconstruction) must be approved by the local authorities Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies, and will be adequately collected and managed 	Costs for collecting sanitary waters on site 1000 EURO Cost of plastic covers 50 EUR) Cost of barriers in collectors 50 EURO		Contractor	Supervised by Supervision company or engineer	DCM no. 177, date 31.03.2005 for environmenta I norms on liquid discharges and zoning of receiving environments
Maintenance/ upgrading	Improper material storage and use may cause pollution of air, soil or water	 Store all materials in original containers in adequate locations, which allow for leak-proof storage Do not dispose of paint and other waste containers except through adequate handling procedures Ensure workers are familiar with safety regulations and storage requirements for each product. 	No additional costs incurred		Contractor	Supervised by Supervision company or engineer	

Issues		Issues upon phases and Mitigation measures		phases and Mitigation measures Associated Costs		sindases and witigation measures			(e.g. secondary impacts)
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate			
Maintenance/ upgrading	Flooding of lands in surroundings of the road by maximum rainfalls in atmospheric events	Maintenance or restoration of draining system and related objects	Dredging and cleaning to be decided by the consultant/c ontractor (Approx cost 2 000 EURO)		Contractor	Supervised by Supervision company or engineer			
Maintenance/ upgrading	Accidents during construction works may cause unintentional damage to the local infrastructure or power supply net	 Ensure all adequate permits from local utilities have been obtained Ensure familiarity with networks in the proximity of the site In case of accidental disruption, immediately stop all works, notify proper authorities in Paper/Elbasani and emergency remediation of damaged network in line with the requirements of Law on civil emergencies No.8756, dated 26.3.2001 	No additional costs incurred, potential delay in works		Contractor	Supervised by Supervision company or engineer	Temporary delay the Project implementati on		
Maintenance/ upgrading	Chance findings of any cultural and historical artifacts	All works will be stopped, and responsible authorities contacted. Works will start again only once adequate clearances have been obtained.	Not defined		Contractor	Supervised by Supervision company or engineer			
Maintenance/ upgrading	Not appropriate health and hygienic condition for working staff	Ensure agreements with community and services (cafeterias etc) to use their toilets for worker needs	Not defined		Contractor	Supervised by Supervision company or engineer			

	Issues u	ipon phases and Mitigation measures	Associated	l Costs	Institutiona	l Responsibility	Comments
							(e.g. secondary impacts)
Phase	Issue	Mitigating Measure	For installation	For operation	Install	Operate	
Maintenance/ upgrading	Works in the road may pose a health risk to the workers due to uncontrolled releases of sewage and accidental leaks	Ensure workers are equipped with protective equipment Avoid direct contact with contaminated sites if they will be defined during the works	No additional costs incurred, contractor should have proper protection equipment		Contractor	Supervised by Supervision company or engineer	
	g mitigation measure vironmental protect	es are related to the operational phase of the road and serve as a ion.	a guideline for tl	he ARA to ii	mprove the	ir performance	with the
Operation	Outdated of signals and lighting	Refresh the signal system periodically	To be defined by ARA			ARA	
Operation	Road damage or consuming of pavement	Rehabilitate the road periodically	To be defined by ARA			ARA	
Operation	High level of air pollution	 Green barriers in road sites (using two belts, the first with evergreen, dens crown autochthon shrubs and the second with evergreen, dens crown and autochthon trees 	To be defined			ARA	
Operation	Improper solid waste collection and management may pose a threat to soil and water quality	 Set up proper waste management procedures, including separation of waste into oily and hazardous waste, regular municipal and green waste which can be composted in collaboration with Elbasan or Paper government authorities Ensure sufficient waste collection bins are available on site and that regular collection of wastes is ensured 	Costs of authorized waste collection per year 70 EURO			local waste collection utility	
Operation	Leaks and spills in road can pollute the surface water	 Have in place leak control action plan Provide leak proof collectors of oily wastes or equipment which can drip oil Ensure waste is adequately managed 	No additional costs			ARA RDR	

4.2 Monitoring Program

The environmental monitoring program will be focused on following elements:

- Respecting of the Management Plan orientation
- Respecting of technical specifications
- Respecting of Albanian legislation for worker safety (health, insurance, etc)
- Safeguard of workers and inhabitants, and
- Materials discharge provisions.

The monitoring process will be focused on the working space and surrounding territories, as well as in the roads that will be used for transport of materials from the sources to the working space, or from the working space to the disposal sites. Technical actions, environmental and safety specifications, as well as other procedures defined running the implementation can be checked or justified by the following table (4.2).

The monitoring table considers the parameter to be monitored, where will be monitored, how, when, and why will be monitored, the cost and monitoring responsibility.

The costs are given with approximate amounts considering present free market prices. It is the interested party that selects the monitoring consultant, and involves it on the monitoring process only after approval by NEA/RED.

Additional monitoring actions will be prepared after a detailed design regarding maintenance and upgrading activities is finalized for the Paper-Paulesh segment.

Tabe4.2 Environmental Monitoring Program

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
Before Maintenance/u pgrading	The places to be used for disposal of working materials, garbage bins, hospital waste bins, office and emergency box etc	In sides of the Paper Vidhas road	Verification on maps or plans of detailed design	Only once-before implementation	To ensure that waste management and life safety instruments are already planned to be placed	Not additional cost	Detailled design consultant
Before Maintenance/u pgrading	Awareness and information of the community and decision makers	In Paper Commune and expected affected villages	Meetings with interested parties	Once-before the implementation	To ensure that the community is well informed and decision makers involved	Not additional cost	ARA
During Maintenance/u pgrading	Notification, Worker and community safety and health	On working sites	Maintain a log of neighbor notification, all permits obtained, supervisor will provide regular reports on EMP compliance, worker safety, and on possible complaints Appropriate signs will be inspected visually	Continuously during maintenance/upgra ding works	To ensure works are conducted as per the utmost safety and environmental protection standards	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on
During Maintenance/u pgrading	Air and Soil quality	On working sites and surrounding areas	Visually inspect dust generation and control. Inspect presence and if any smell is emitted from the septic tank on site. Visually inspect presence of clandestine waste on site and in	Continuously during construction works	To ensure works are conducted as per the utmost safety and environmental protection standards	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
			surroundings. Visually inspect for leaks of oily materials. Keeps proof of waste being collected by authorized entity. Visually inspect signs of open burning of wastes.				
During Maintenance/u pgrading	Noise levels	On working site and surrounding areas	Ensure compliance with permit as per Albanian law. Measurements on complaints from neighbors.	Continuously during construction works	To ensure noise levels do not exceed permissible	Should be include d in costs for supervisor, no additional measurement costs envisaged – in case of complaints, set of noise measurement is approximately 500 Euro per sampling point.	Contractor to implement, Supervisor to review and report on
During Maintenance/u pgrading	Water Quality	On construction site and surrounding areas	Visually and upon complaints of increased turbidity, waste materials in canals, spills or leaks.	Continuously during construction works	To ensure there is no pollution caused to the waters	Should be included in costs for supervisor, no additional measurement costs envisaged. In case of public compliance measurements should be done with a cost of 500 Euro	Contractor to implement, Supervisor to review and report on

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
						per sampling point	
During Maintenance/u pgrading	Waste management	On working site and surrounding areas	Visually for separation of wastes, review receipts from the collection company, or notification from the commune on the proper site of the disposal	Continuously during construction works	To ensure there is no risk of environmental pollution caused by construction works	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on
During Maintenance/u pgrading	Damage to vegetation in road sides	On road sides	Site log and visual inspection	Continuously during construction works	To ensure no damage to vegetation	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on
During Maintenance/u pgrading	Storage of paint, oil or other hazardous materials	On road	Visually ensure proper storage, and no leaks or spills	Continuously during construction works	To minimize risks of pollution of hazardous materials	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on
During Maintenance/u pgrading	Chance findings	On road	Through site log	Regularly through construction works	To ensure adequate management of chance findings	Should be included in costs for supervisor, no additional measurement costs envisaged	Contractor to implement, Supervisor to review and report on
During operation	Road and artefacts conditions	On road	Visually	Continuously	To ensure proper working	Not additional cost	ARA, Paper

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
					of the road		Commune
During operation	Road signals and lighting	On Road	Visually	Continuously	To ensure proper safety measures	Not additional cost	ARA Paper Commune
During operation	Pollution by discharges or leaks	On road	Visually, if needed monitoring	continuously	To ensure proper environmental quality	Not additional cost	REA of Elbasan, Paper Commune

Public Consultations

The date and location of the public consultation was announced by "....." newspaper (see Annex 1), including the location and web-sites where the interested subjects can obtain and view the summarized management plan.

During the consultations meeting, the environmental consultant explained to the participants the importance of the investment, its focus, and the provisions and measures that would help mitigate any of the identified negative impacts from the project. After the presentation, the consultant has opened the session to questions and comments.

Some of the important issues raised were on:.....

Annexes



6 ANNEX 1 – Public consultation minutes of meeting and list of attendees

To be completed once consultations are completed.

