



**Roads Department of the Ministry of Regional
Development and Infrastructure of Georgia**

**Environmental and Social Management
Framework
for Implementing
Secondary and Local Roads Project-II**

Tbilisi 2012

1. INTRODUCTION

1. The following Policy framework for Environmental and Social Assessment and Protection has been prepared for the purposes of implementing the Georgia Secondary and Local Roads Project - II (SLRP-II) supported by the World Bank. The project will rehabilitate high priority sections of the existing roads which are classified as secondary and local roads. The project triggers two safeguard policies of the World Bank: OP/BP 4.01 Environmental Assessment, and OP/BP 4.12 Involuntary Resettlement. According to the World Bank OP/BP E4.01, the project is classified as environmental Category B. Present Environmental and Social Management Framework (ESMF) formulates the main principles of environmental management applicable to the project and provides guidance for carrying out site-specific environmental work required for individual investments as well as for the public disclosure and stakeholder consultation on the potential impacts of the project. The national legislation of Georgia does not require any type of environmental assessment, management planning, review and permitting for the types of activities included in the project design. Therefore, the World Bank safeguard policies will shape environmental due diligence in the course of the project implementation.

According to the World Bank OP/BP E4.12, a Resettlement Policy Framework (RPF) is developed, which outlines the main principles of fair compensation for property or user rights to any assets involuntarily given up by affected people due to the project implementation. Site-specific Resettlement Action Plans (RAPs) will be prepared for those individual investments to which OP/BP 4.12 is applicable. Such cases are expected to be rare, but arrangements shall be in place to handle them properly if and as necessary.

II. WORLD BANK ENVIRONMENTAL AND SOCIAL MANAGEMENT GUIDELINES

2.1 Main Principles

All projects funded by the World Bank must comply with the World Bank's environmental and social guidelines. The purpose of these guidelines is to establish an environmental and social review process to ensure that the projects undertaken as part of programs funded under the World Bank loans are environmentally and socially sound, are designed to operate in compliance with applicable regulatory requirements, and, as required by the regulations of the Bank, are not likely to cause a significant environmental, health, or safety hazards or to aggravate social impacts and risks to stakeholders.

The World Bank is committed to program design that reflects results of public participation in host countries during all phases of the program, integrating governmental interests with those of private businesses and civil society. In this spirit, the Roads Department of the Ministry of Regional Development and Infrastructure (RD MRDI), which is the implementing entity for SLRP-II, will ensure that the preparation of site-specific EMPs and RAPs for individual investments includes public disclosure and consultation with affected parties.

The World Bank is committed to the principles of host-country ownership of a compact, including host-country responsibility for measures to mitigate adverse environmental and social impacts. The Bank-funded projects shall, therefore, comply with host-country laws, regulations and standards, as well as with requirements by which the host country is bound under international agreements. Although the Georgian legislation does not require environmental assessment, expertise, and permitting for the types of activities supported by SLRP-II, any other rules, norms or standards which may apply to various aspects of the project implementation, must be followed and complied with.

2.2 Environmental Management for Small Scale Road Construction or Rehabilitation

Although the tentative list of the individual road sections to be rehabilitated under the SLRP-II may be updated as implementation progresses and despite the fact that detailed designs are not finalized for all sections currently on the work program list, the nature, scope, and potential impacts of upcoming works are well known upfront. Potential negative impacts are typical for the small road rehabilitation projects and pretty similar for all intended individual investments. Therefore, the Environmental Management Checklist for Small Scale Road Construction or Rehabilitation will be used as a tool for planning, implementing, and monitoring site-specific environmental management work. Checklists to be completed for each section of road included in the project will carry: brief description of a site, technical outline of planned works, potential environmental and social risks of such works, set of measures for their mitigation, and a plan for monitoring application of mitigation measures. Completed environmental management checklists will be subject to the World Bank's review and approval.

2.3 Public Consultation

RD MRDI will ensure public disclosure of draft site-specific EMPs and RAPs (whenever required) through the media and in the language convenient for the affected local communities, and will organize stakeholder consultation meetings for receiving feedback on the draft EMPs. Minutes of such consultation meetings will be documented and kept on file.

2.4 Monitoring

Environmental and social monitoring will be an integral part of the RD MRDI's technical supervision of works under the SLRP-II. RD MRDI will be responsible for to ensure that monthly snapshot reports on environmental and social compliance are being delivered from all active work sites. Based on site-specific data, status reports on environmental management and any emerging social risks will be developed and included into the general monthly progress reports shared with the World Bank. Any accidents, contingencies, unexpected environmental issues or ad-hoc problems shall be communicated to the World Bank immediately, regardless the timeline of regular reporting.

III. ENVIRONMENTAL AND SOCIAL SAFETY PROCEDURES APPLIED BY RD MRDI

RD MRDI is responsible for due application of environmental and social safeguards. Due environmental and social diligence of RD MRDI will include assuring (i) presence of satisfactory site-specific EMPs for all sections of roads under rehabilitation and RAPs if and as required; (ii) presence of the required permits for waste disposal, quarrying and borrowing, operation of asphalt/concrete plants, etc. as applicable; (iii) proper application of mitigation measures provided in the site-specific EMPs and RAPS in the course of works and upon their completion; and (iv) observance of occupational safety rules as well as safety of traffic and pedestrian movement in and around work sites. For meeting such standards RD MRDI will develop site-specific EMPs for the sections of roads selected for rehabilitation, exercise quality control of EMPs for the road asset management areas prepared by contractors under performance-based contractual (PBC) arrangements, guarantee inclusion of EMPs in the bidding documents for rehabilitation works and their incorporation into the works contracts, maintain efficient mechanism of field environmental monitoring of works, and evaluate environmental performance of PBC contractors as part of their payment release clearance procedure. RD MRDI will be capable of performing these functions through strengthening its institutional capacity for environmental management by maintaining an environmental unit comprising five staff members of RD with relevant education and professional skills, as well as hiring of an external highly qualified environmental specialist. These arrangements are intended to serve critical institutional needs of RD MRDI in general, as well as to ensure smooth implementation of SLRP II and other ongoing operations being implemented by RD MRDI with the Bank support.

IV. EXPECTED RISKS AND THEIR MITIGATION

4.1 Potential Environmental Impacts

SLRP II will support rehabilitation works of the existing roads in the current right-of way, without tangible widening or re-routing of the carriageways. Most of these roads pass through significantly transformed landscape, away from important habitats and biodiversity hotspots. Three of the road sections considered for rehabilitation stand out from the tentative list of target sites: two – leading to the cultural heritage sites of Shio Mgvime and David Garevi, and one – passing through difficult mountainous terrain in Tusheti. Works on these roads will require more caution as compared to others. Rehabilitation of sections of road leading towards Shio Mgvime and David Gareji will not directly affect these historical monuments, though, being an access road to these tourist destinations, their rehabilitation will require particular attention to clean-up and landscape harmonization upon completion of works, so that aesthetic features of the sites are not compromised. Works in the critical sections of the narrow mountainous road to Tusheti will be aimed at improving safety of driving in the locations prone to slope erosion and avalanches. Organization of works in this area will require smart solutions for traffic management, careful operation of construction vehicles and machinery, and strict adherence to workers' personal safety rules. For all other sections of roads the potential environmental issues are expected to be minor and typical for small-scale rehabilitation works on roads, mainly comprising: construction waste management, sourcing of natural construction materials (soil/gravel/sand), running of

small asphalt/concrete plants, and maintaining/servicing construction machinery. These will be described in detail in the site-specific EMPs to be prepared, reviewed, and approved for individual investments.

4.2 Potential Social Impacts

No major land acquisition or physical displacement of residents is expected to be required under the project; the project will not finance new road construction and maintenance works will be carried out within the existing alignment of roads. Nevertheless experience from SLRP I shows that minor land acquisition along existing rights-of-way may contribute to the improvement of geometric standards of the existing right-of-way, provide adequate space for drainage, and enhance add road safety solutions such as sidewalks, road crossings, guardrails, and safety barriers. In addition, land acquisition may be necessitated in response to unforeseen events such as landslides whereby previous alignments are no longer feasible and the optimum design for a modified road stretch requires additional and an increased land foot print. For all these reasons, and largely as a precautionary measure, the project triggers OP4.12. A Resettlement Policy Framework (RPF) is prepared by the RD MRDI and approved by the World Bank. Site-specific RAPs will be developed - if and as necessary - in the course of the project implementation. The RPF and RAP will ensure the proper calculation and recording of the amount land to be acquired as well as identification and mitigation of the impacts of land acquisition for the affected people. The purpose of the RPF and implementation of the RAP is to ensure that there is no adverse effect on the living conditions and livelihoods of the affected people as a result of loss of land.

Environmental Management Plan (EMP) Checklist for Small Scale Road Construction or Rehabilitation

General Guidelines for use of EMP checklist:

For low-risk construction projects, such as minor roads rehabilitation works or the construction of bicycle paths, the ECA (Europe and Central Asia) safeguards team developed an alternative EMP (environmental management plan) format to provide an opportunity for a more streamlined approach to mainstreaming the World Bank's environmental safeguards requirements into projects which (a) are small in scale or by the nature of the planned activities have a low potential environmental impact, (b) are located in countries with well functioning country systems for environmental assessment and management. The checklist-type format has been developed to ensure that basic good practice measures are recognized and implemented, while designed to be both user friendly and compatible with the World Bank's safeguards requirements.

The EMP checklist-type format attempts to cover typical key mitigation measures to civil works contracts with small, localized impacts or of a simple, low risk nature. This format provides the key elements of an Environmental Management Plan (EMP) to meet the minimum World Bank Environmental Assessment requirements for Category B projects under OP 4.01. The intention of this checklist is that it offers practical, concrete and implementable guidance to Contractors and supervising Engineers for simple civil works contracts. It should be completed during the final design phase and, either freestanding or in combination with any environmental documentation produced under national law (e.g. EIA reports), constitute an integral part of the bidding documents and eventually the works contracts.

The checklist EMP has the following sections:

Part 1 includes a descriptive part that characterizes the project, specifies institutional and regulatory aspects, describes technical project content, outlines any potential need for capacity building and briefly characterizes the public consultation process. This section should indicatively be up to two pages long. Attachments for additional information may be supplemented as needed.

Part 2 includes a screening checklist of potential environmental and social impacts, where activities and potential environmental issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking "yes", a reference to the appropriate section in the table in the subsequent Part C can be followed, which contains clearly formulated environmental and social management and mitigation measures.

Part 3 represents the environmental mitigation plan to follow up proper implementation of the measures triggered under Part B. It has the same format as required for MPs produced under standard safeguards requirements for Category B projects.

Part 4 contains a simple monitoring plan to enable both the Contractor as well as authorities and the World Bank specialists to monitor due implementation of environmental management and protection measures and detect deviations and shortcomings in a timely manner.

Part B and C have been structured in a way to provide concrete and enforceable environmental and social measures, which are understandable to non-specialists (such as Contractor's site managers) and are easy to check and enforce. The EMP should be included in the BoQ (bill of quantities) and the implementation priced by the bidders. Part D has also been designed intentionally simple to enable monitoring of key parameters with simple means and non-specialist staff.

CONTENTS

- A) General Project and Site Information**
- B) Safeguards Information**
- C) Mitigation Measures**
- D) Monitoring Plan**

PART 1: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE				
Country				
Project title				
Scope of project and activity				
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contractor
SITE DESCRIPTION				
Name of site				
Describe site location	Attachment 1: Site Map []Y [] N			
Who owns the land?				
Description of geographic, physical, biological, geological, hydrographic and socio-economic context				
Locations and distance for material sourcing, especially aggregates, water, stones?				
LEGISLATION				
Identify national & local legislation & permits that apply to project activity				
PUBLIC CONSULTATION				
Identify when / where the public consultation process took place				
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	[] N or []Y if Yes, Attachment 2 includes the capacity building program			

PART 2: SAFEGUARDS SCREENING AND TRIGGERS

ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following??	A. Roads rehabilitation	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A below
	B. New construction of small traffic infrastructure	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A below
	C. Impacts on surface drainage system	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section B below
	D. Historic building(s) and districts	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section C below
	E. Acquisition of land ¹	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section D below
	F. Hazardous or toxic materials ²	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section E below
	G. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section F below
	H. Risk of unexploded ordinance (UXO)	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section G below
	I. Traffic and Pedestrian Safety	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section H below

¹ Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

² Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

PART 3: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
O. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> (a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits have been acquired for construction and/or rehabilitation (d) The 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. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (a) During excavation works dust control measures shall be employed, e.g. by spraying and moistening the ground (b) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust (c) During pneumatic drilling or breaking of pavement and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site (d) The surrounding environment (side walks, roads) shall be kept free of soil and debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) All machinery will comply with Polish emission regulations, shall well maintained and serviced and there will be no excessive idling of construction vehicles at sites
	Noise	<ul style="list-style-type: none"> (a) Construction noise will be limited to restricted times agreed to in the permit (b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible
	Water Quality	<ul style="list-style-type: none"> (a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in canalization and nearby streams and rivers
	Waste management	<ul style="list-style-type: none"> (a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from excavation, demolition and construction activities. (b) 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. (c) Construction waste will be collected and disposed properly by licensed collectors (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible Contractor will reuse and recycle appropriate and viable materials (except when containing asbestos)
B. Impacts on surface drainage system	Water Quality	<ul style="list-style-type: none"> (a) There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers; the Contractor will obtain all necessary licenses and permits for water extraction and regulated discharge into the public wastewater system. (b) There will be proper storm water drainage systems installed and care taken not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by construction activities (c) There will be procedures for prevention of and response to accidental spills of fuels, lubricants and other toxic or noxious substances (d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
C. Historic building(s)	Cultural Heritage	<p>(a) If construction works take place close to a designated historic structure, or are located in a designated historic district, notification shall be made and approvals/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national legislation.</p> <p>(b) It shall be ensured that provisions are put in place so that artifacts or other possible “chance finds” encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified to account for such finds.</p>
D. Acquisition of land	Land Acquisition Plan/Framework	<p>(c) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank’s Task Team Leader shall be immediately consulted.</p> <p>(d) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented</p>
E. Toxic materials	Asbestos management	<p>(a) If asbestos is located on the project site, it shall be marked clearly as hazardous material</p> <p>(b) When possible the asbestos will be appropriately contained and sealed to minimize exposure</p> <p>(c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust</p> <p>(d) Asbestos will be handled and disposed by skilled & experienced professionals</p> <p>(e) If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately. Security measures will be taken against unauthorized removal from the site.</p> <p>(f) The removed asbestos will not be reused</p>
	Toxic / hazardous waste management	<p>(a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information</p> <p>(b) The containers of hazardous substances shall be placed in an leak-proof container to prevent spillage</p> <p>(c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.</p> <p>(d) Paints with toxic ingredients or solvents or lead-based paints will not be used</p>
F. Affected forests, wetlands and/or protected areas	Ecosystem protection	<p>(a) All recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.</p> <p>(b) A survey and an inventory shall be made of large trees in the vicinity of the construction activity, large trees shall be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided</p> <p>(c) Adjacent wetlands and streams shall be protected from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences</p> <p>(d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.</p>
G. Risk of unexploded ordinance (UXO)	Hazard to human health and safety	<p>(a) Before start of any excavation works the Contractor will verify that the construction area has been checked and cleared regarding UXO by the appropriate authorities</p>
H Traffic and pedestrian safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>(b) In compliance with national regulations the Contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to</p> <ul style="list-style-type: none"> ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement ▪ If required, active traffic management by trained and visible staff at the site for safe passage for the public ▪ Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction

PART 4: MONITORING PLAN

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?)
During activity preparation							
During activity supervision							

Monthly Field Environmental Monitoring Form

General information	DD/MM/YY			
	Report prepared by			
	Name and location of construction site			
	Name of contractor/ subcontractor			
Permits, agreements	Permit for quarry opening during construction	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Agreement for disposal of construction waste	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Permit for operating asphalt/concrete plant	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Management of construction sites	Proper location and maintenance of construction site/camp	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Proper storage for fuel, oil and construction materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Proper maintenance of construction machinery and equipment (prevent leakage of fuel, oil, lubricants, etc.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Availability of places of preliminary accumulation of excavated and demolished materials and construction wastes within the work site	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Timely removal of excavated and demolished materials and construction waste from the places of preliminary accumulation and disposal to planned and agreed places	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Use covered trucks for transportation of construction materials and waste	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Clean the surrounding area from dust by water sprinkling in construction zone (when necessary)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Implementation of works at the established time (e.g. work during daytime)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Installation of alerting signs in construction sites, camps and along access roads	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Proper sanitary/ hygienic conditions for workers at the construction site	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Restoration of the area of construction sites and camps when the construction works are over	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Safety measures	Workers are provided with necessary safety uniform (e.g. helmets, high boots, gloves, respirators, glasses, etc.) and use them	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

**Minutes of Consultation Meeting
with the Project Stakeholders on the Preset ESMF**