

Environmental Assessment and Review Framework

April 2015

GEO: Sustainable Urban Transport Investment Program

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Environmental Safeguard Framework

Environmental Assessment and Review Framework
Project Number: P42414

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Georgia: Sustainable Urban Transport Investment Program

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ABBREVIATIONS

ADB	-	Asian Development Bank
AM	-	Accountability Mechanizm
AP	-	Affected Person
CWRD	-	Central and West Asia Region Department
EA	-	Executing Agency
ERU	-	Environmental and Resettlement Unit
EARF	-	Environmental Assessment and Review Framework
EIA	-	Environmental Impact Assessment
EMP	-	Environmental Management Plan
GRC	-	Grievance Redress Committee
GRP	-	Grievance Redress Procedure
IA	-	Implementing Agency
IEE	-	Initial Environmental Examination
MDDP	-	Municipal Development and Decentralization Project
MDF	-	Municipal Development Fund
MFF	-	Multi-tranche Financing Facility
MLARO	-	Municipal Land Acquisition and Resettlement Office
MoE	-	Ministry of Environmental Protection and Natural Resources
NGO	-	Non-Governmental Organization
REA	-	Rapid Environmental Assessment

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. This document is the Environmental Assessment and Review Framework (EARF) for the Georgia Sustainable Urban Transport Investment Program -SUTIP (the Program). The Program was developed as the Government's response to the transportation problems in urban areas, which include large traffic volumes causing increasing delays, as a result of previous under-investment in infrastructure maintenance and expansion.
2. This paper is prepared to adequately address the ADB Safeguard Policy Statement (2009) requirements and is fully endorsed by the Georgian government. The objective of preparing this EARF is to provide a formal structure through which the environmental impacts of new and amended subprojects can be assessed and mitigated by the Executing Agency in the future, in compliance with the ADB policy.
3. The Program is financed by the Asian Development Bank (ADB) under a Multi- tranche Financing Facility (MFF), and is aimed at promoting a sustainable, integrated, socially- affordable and cost-efficient urban transport system in cities of Georgia, to energize the economy and improve the quality of life of citizens. Projects will involve rehabilitation and repair of existing infrastructure (mainly roads and the underground railway), provision of new facilities (roads, tunnels, junctions, bridges, a Metro extension, etc) and capacity building.
4. The impact of the Investment Program is improved urban environment, local economy, and living conditions within urban areas. It will expand economic growth, create job opportunities, and improve environmental sustainability. The expected outcome is to improve the efficiency, reliability, and affordability of urban transport services in relevant cities.
5. The outputs of the Program are:
 - (i) urban transport infrastructure extended, rehabilitated, and improved by MDF and relevant municipalities;
 - (ii) institutional and management capacity of MDF and relevant municipalities strengthened; and
 - (iii) skilled and experienced units established to oversee the management and the implementation of the program in MDF and the relevant municipalities.
6. Investment Program consists of four Tranches -1, 2,3 and 4;
7. **Tranche 1 (Approved):** - On 05 August, 2010 MFF - Sustainable Urban Transport Investment Program Tranche 1 Loan and Project agreements were signed between Georgia and Asian Development Bank. The Tranche 1 will improve urban environment, local economy and living conditions within urban areas. Main outcomes of the program will be improved efficiency, reliability and affordability of urban transport infrastructures and services in relevant cities.
8. The following sub-projects are active under the Tranche 1 currently:¹

¹ Sub-project Road improvements in Mestia has been completed.

- **Extension of Tbilisi Metro Line 2 and Creation of University Station'**
- **Anaklia coastal improvement -Phase 1.**

9. **Tranche 2, (Approved):** On 24 July, 2012 MFF - Sustainable Urban Transport Investment Program Tranche 2 Loan and Project agreements were signed between Georgia and Asian Development Bank. Tranche 2 will: Improve urban environment and local economy; create better living conditions within urban areas. At loan approval, Project 2 comprised two subprojects: (i) the section 1 (km 0-4) and section 3 (km 10.5-17.1) of the international standard Tbilisi-Rustavi Urban Road Link.

10. Currently only one project is active under this Tranche:

- **Modernization of Tbilisi-Rustavi Urban Road Link – (sections 1 and 3);**

11. **Tranche 3, (Approved):** On 19 December, 2013 - Sustainable Urban Transport Investment Program Tranche 3 Loan and Project agreements were signed between Georgia and Asian Development Bank. The Tranche 3 will improve the urban transport system and infrastructure in urban areas and comprises two subprojects: (i) section 2 (km 4.0-10.8) of the international standard Tbilisi-Rustavi Urban Road Link; and (ii) phase 2 of Anaklia Coastal Improvement; both of which are in line with components of the Investment Program. These investments will improve the urban environment, strengthen economic and tourism development, and regional integration.

12. The following sub-projects are active under the Tranche 3 currently:

- **Anaklia Coastal Improvmenet Project – Phase II;**
- **Modernization of Tbilisi-Rustavi Urban Road Link – Section 2;**

13. **Tranche 4 (Not approved yet):** Tranche 4 is anticipated to be approved in Q2, 2015 and will consist of 3 components: (a) urban infrastructures (Batumi Coastal Improvement), (b) institutional effectiveness, and (c) program management facility (consulting services for capacity building, individual consultants and audit).

14. Municipal Development Fund of Georgia (MDF) is the Executing Agency (EA) implementing the Program and is therefore responsible for compliance with ADB procedures, including environmental and social safeguards. This EARF assesses the requirements of Georgian environmental law and ADB safeguards policy, and describes the procedures MDF will follow to ensure that projects comply with both. It also provides guidance on various related matters including: anticipated impacts of project activities; procedures for stakeholder consultation; information disclosure and grievance redress; accountability mechanism; institutional arrangements and responsibilities; and monitoring and reporting. Before Program appraisal this EARF will be translated into Georgian and distributed to all interested stakeholders; and the English version will be posted on the ADB website.

II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

A. National legislation and ADB policy

1. National Legislation

1. Framework Legislation

15. The basic legal document is “**The Constitution of Georgia**”, which was adopted in 1995. While the Constitution of Georgia does not directly address environmental matters, it does lay down the legal framework that guarantees environmental protection and public access to information with regard to environmental conditions.

16. According to the requirements set forth in the framework law, numerous laws and normative–legal documents were adopted to regulate specific environmental issues in Georgia. Further below the environmental regulations most relevant to the project – and first of all, to the permitting process - are described.

2. Legislation Related to Environmental Permitting

17. At present, the environmental permitting procedure in Georgia is set out in three laws and a project proponent must comply with:

The Law on Licenses and Permits (2005);

The Law on Environmental Impact Permits (EIP) 2008, and,

The Law on Ecological Examination (EE) 2008.

18. The EIA process and required content of an EIA document is described in the **Regulation on EIA** adopted by the Decree No. 31 of MoE of May 15, 2013

19. The Law on Licenses and Permits was adopted by Parliament of Georgia, on June 24, 2005. The Law regulates legally organized activities posing certain threats to human life and health, and addresses specific state or public interests, including usage of state resources. It also regulates activities requiring licenses or permits, determines types of licenses and permits, and defines the procedures for issuing, revising and canceling of licenses and permits (Article 1, Paragraph 1). This is more generic law and for the details of Environmental Permitting Procedures it refers to the Laws on Environmental Impact Permit and Ecological Examination, published on 14.12.2007 and in force since 01.01.2008.

20. The Law of Georgia on Environmental Impact Permits, determines the list of the activities and projects subject to the ecological examination (clause 4 p.1) and the legal basis for public participation in the process of issuing an environmental impact permit. According to this law, construction of 220kV and 500 kV transmission lines and substations requires preparation of EIA and obtaining of the Environmental Impact Permit through the procedure of Ecological Examination. Below we provide very brief description of EIA process as defined by the aforementioned laws.

21. Where a project needs an Environmental Impact Permit and at the same time requires a Construction Permit, the administrative body responsible for issuance of the Construction Permit ensures involvement of MoE. MoE issues its Conclusions with respect to the Ecological Examination of the project to the the administrative body issuing the Permit (in the case of highways, the Department of Roads). The Conclusion on the Ecological Examination of the MoE and compliance with any condition is obligatory for the project proponent and the conditions become part of the Construction Permit. Where a project requires ecological examination but does not require Construction Permit, the MoE will issue the Environmental Impact Permit with any conditions.

22. The aforementioned laws do not provide details of screening procedure and do not define the responsibilities of parties. Screening of project proposals, preliminary assessment of environmental impact and proposed mitigation measures (scoping) are carried out by the project proponent in consultation with the MoE.

Public Consultation Procedures

23. Clause 6 of the Law on Environmental Impact Permits provides detailed requirements and procedures for conducting public consultations and establishes timeframes for information disclosure and discussion.

24. According to Article 6, the developer is obliged to carry out public discussion of the EIA before its submission to an administrative body responsible for issuing a permit. Where an activity requires a construction permit this must be done before initiating stage 2 of the process for issuing a construction permit. The detailed description of Public Disclosure requirements is discussed more fully in this document in Chapter 7 on Public Consultation.

Procedure of Official Submission of EIA to MoE

25. Article 8 of the Law on Environmental Impact Permits specifies the documents which must be submitted by an operator to obtain a permit:

26. A written statement to the Ministry under the rules established by 'Law of Georgia on Licenses and Permits'.

27. The following information:

- a) An EIA report drawn up under the standards specified by the legislation of Georgia [in 5 hard copies and 1 soft copy]
- b) A situation plan of the planned activity (with the indication of distances)
- c) Volume and types of the expected emissions (a technical report of inventory of the stationery sources of pollution and emitted/discharged harmful substances and project of maximum permissible concentrations of emitted/discharged harmful substances [in 4 copies])
- d) A brief description of the activity (as a technical summary)

28. A statement about the confidential part of the submitted statement.

29. An operator is obliged to submit a full diagram of the technological cycle to the permit issuing body even if the given activity contains a commercial and/or state secret. This part of the

statement, according to sub-clause 'e' of clause 2 of the given Article should be submitted separately by the operator.

Issuance of the Permit on Environmental Impact

30. Article 9 of the Law on Environmental Impact Permits describes the procedures for issuing an Environmental Impact Permit. The issue is also addressed in the laws of Georgia on "Licenses and Permits" (2005) and "on Ecological Examination" (2008).

31. According to the law on "Licenses and Permits," the MoE takes a decision on issuing Permit within the 20 days of the permit request by the project proponent.

32. MoE, in accordance with the law on Ecological Examination, ensures the quality of the submitted documentation and the Issuance of Conclusion on Ecological Examination.

33. Either the Environmental Permit, or Construction Permit (when the latest is required) is issued only in case of the positive conclusion of the Ecological Examination.

Regulation on EIA 15 May 2013

34. The Provision is proved by Decree No. 31 of May 15, 2013 of the Minister of Environment and Natural Resources Protection and regulates the legal relations associated with the assessment of environmental impacts.

35. The procedure to assess the environmental impact includes drafting the confirmatory documentation and permits for the businesses on the legally established list, identifying any source of expected environmental impact, its nature and degree and integrated assessment of their environmental, social and economic outcomes in obtaining the environmental expert conclusion.

36. The given Provision defines the procedure to draft the environmental assessment report by a business actor to ensure the environmental and social-economic balance of future economic development. It precedes the decision of the Ministry of Environmental Protection of Georgia about the purposefulness of the business and relevant project to be implemented by the business actor.

37. The objects of environmental assessment are the activities on the list under clause 1 of article 4 of the Georgian Law "On Environmental Permit".

3. Other Environmental Laws

38. The Law on Environmental Inspectorate has been adopted in 04.05.2010. This Law has been abolished in 2011, however its provisions are in force until the relevant authorized bodies will issue new regulations. This Law authorized Environmental Inspectorate to conduct post EIA monitoring on compliance with the Conditions of Environmental Permit and conditions of licenses for exploration of natural resources. For the moment of issuing of this law, the Environmental Inspectorate was under the MoE. Currently, as we have described in p. 2.1, the Environmental Inspectorate has been moved to the Ministry of Energy and Natural Resources.

Department of Permits of MoE and Environmental Inspectorate of MoENR are sharing responsibilities for the post EIA monitoring.

The “Georgian Law on Ambient Air Protection” was put into effect from 1 January 2000.

39. The scope of the “Georgian law on Ambient Air Protection” is to protect ambient air on the whole territory of Georgia from harmful human impact. This law does not govern the field of air protection in work places. Main competences of governmental authorities in the field of ambient air protection (a) Development of environmental monitoring (observation) system; (b) Development and implementation of common policies and strategies; and (c) Development of integrated ambient air pollution control.
40. According to the Article 291, the inventory on emissions of air pollutants from stationary pollution sources is obligatory for physical and legal entities. The special inventory report is to be prepared for 5 years for each source of the atmospheric air pollution and each type of a harmful substance.
41. At preparing the EIA project, a full inventory on emissions (in case of existence) is to be carried out and maximum permissible concentrations or temporarily agreed permissible concentrations of the emitted harmful substances for stationary pollution sites are to be set. Maximum permissible concentration is an amount of permitted emissions of air pollutants from stationary pollution sources. Temporarily agreed permission concentrations can be approved for five years (maximum) without prolongation. The Maximum permissible concentration of the emitted harmful substances for stationary pollution sites is approved for 5 years for each source of the atmospheric air pollution and each type of a harmful substance.
42. State emission registration system is a system of compilation, processing and analysis of emission reporting documentation. The Ministry of Environment Protection and Natural Resources of Georgia conducts state registration of emissions.

The Law of Minerals of 1996

43. Provides provisions for the mineral resource exploration and management and establishes the requirement to obtain a license according to the procedures established under this law. The Law on Licensing and Permits (June 25, 2005) establishes the most recent regulations for licensing. According to the current legislation all quarries and borrow pits require to obtain a license.

The Wildlife Law of 1996

44. Mandates the MoE to regulate wildlife use and protection on the whole territory of the country. The law empowers the MoE to issue hunting permits and licenses, declare hunting areas, control poaching etc. Potential poaching by the workers should be controlled also during construction works, especially in such a sensitive ecological areas as Borjomi-Bakuriani.

Forestry Code of Georgia (1999, including effective amendments)

45. The Forestry Code of Georgia regulates the legal relations connected to looking after, protection, restoration and application of the forest fund and its resources. The aims of the Forestry Code of Georgia are as follows:
46. Looking after, protection and rehabilitation of forests aiming at conserving and improving their climatic, water-regulating, protective, cultural, health, medicinal and other mineral wealth, conservation and protection of original natural and cultural environment and its individual components, including the vegetation cover and fauna, bio-diversity, landscape, cultural and natural monuments in the forests, rare and endangered plant species and others and regulation of their interaction in the benefit of the future generation.

Law of Georgia 'On the system of the protected areas' (1996)

The Law defines the categories of 'protected areas' and specifies the frames of activities admissible in the given areas. The permitted actions are defined by considering the designation of the areas and in accordance with the management plans and provisions of the international conventions and agreements to which Georgia is a party. **Law of Georgia 'On the Red List and Red Book' (2003)**

47. The Law regulates the legal relations in the field of developing the Red List and Red Book, protecting and using the endangered species, except the legal issues of the international trade with endangered wild animals and wild plants, which within the limits of the jurisdiction of Georgia are regulated by virtue of the Convention 'On the international trade with the endangered species of wild fauna and flora' concluded on March 3 of 1973 in the city of Washington.
48. According to Article 10 of the Law, any activity, including hunting, fishing, extraction, cutting down and hay-mowing, except particular cases envisaged by the present Law, Law of Georgia 'On animal life' and legislation of Georgia, which may result in the reduction in number of the endangered species, deterioration of the breeding area or living conditions, is prohibited.
49. Possible harmful effect of anthropogenization on the endangered species should be taken into account when issuing the permit on environmental impact during the ecological expertise.
50. The Red List of Georgia was approved by the Presidential Decree No. 303 'On approving the **Red List of Georgia' (May 2, 2006)**

The Law of Georgia on Soil Protection (1994. Amended in 1997, 2002)

51. The aim of the Law is to protect the soil from the contamination and sets the limits for the hazardous substances concentration in it.
52. The regulates the usage of fertile soils for non agricultural purposes and strictly prohibits to undertake any kind of activity without removal of the fertile soil layer and makes compulsory to reinstate sites after open mining. It regulates uncontrolled pasturing of animals and protects forest as a mean to maintain the soil in a favourable condition. Prohibits and regulates any

kind of activity related to the storage of chemicals and hazardous substances could pollute or damage the soil properties.

The Law of Georgia on Water 1998 as amended on 6.09.2013

53. This Act governs the legal relations: Between state authorities and natural and legal persons (regardless of the form of ownership and the legal-organizational status) in the sphere of water protection, study and use;
54. In the sphere of water protection, restoration and use on the land, in the continental shelf, territorial waters and in the special economic zone;
55. In the sphere of commercial water production and international trade in water;
56. Under the current law requirements no license is required for water abstraction from surface water. However, license is needed for abstraction of groundwater. In case of discharge of the water the developer by Environmental Impact Permit might be required to submit Maximum Permissible Discharge Documents calculating the volumes of the discharge and impact on environment.

The 'Law of Georgia on Cultural Heritage'

57. Was approved in May of 2007. Article 14 of the Law specifies the requirements for 'large-scale' construction works. According to this Article, a decision on career treatment and ore extraction on the whole territory of Georgia, as well as on construction of an object of a special importance as it may be defined under the legislation of Georgia, is made by a body designated by the legislation of Georgia based on the positive decision of the Ministry of Culture, Monument Protection and Sport of Georgia. The basis for the conclusion is the archeological research of the proper territory to be carried out by the entity wishing to accomplish the ground works. The entity wishing to do the ground works is obliged submit the Ministry the documentation about the archeological research of the territory in question. The preliminary research should include field-research and laboratory works. In case of identifying an archeological object on the territory to study, the conclusion of the archeological research should contain the following information: (a) a thorough field study of the archeological layers and objects identified on the study territory by using modern methodologies, (b) recommendations about the problem of conservation of the identified objects and planning of the building activity on the design territory, on the basis of the archeological research.

Georgian Law on Regulation and Engineering Protection of Coasts of Sea, Water Reservoirs and Rivers of Georgia (27.12.2006, No. 4131)

58. Article 9. Rules regulating the economic activity within the coast protection zone
 - (1) The body issuing a building permit within the zone of coast engineering protection is obliged to engage the Ministry in the permit issuing process as a concerned administrative body and send it proper documentation for the obligatory conclusion.

- (2) The construction project of buildings and premises within the zone of coast engineering protection should envisage the compensation amounts for the expected coastal damage.
- (3) Extraction of inert material within the zones of strict supervision of sea, water reservoir or river is prohibited, unless this is done for the purposes of coast-formation or control of streams
59. The Georgian system of environmental assessment is therefore different from ADB requirements (as set out in the Safeguard Policy Statement of 2009), as ADB classifies projects into three categories (A, B and C) depending on the nature and scale of the expected impacts, and requires a different level of environmental study for each category. This includes EIA and Initial Environmental Examination (IEE), which is a shorter form of environmental assessment that is not represented in the Georgian system.
60. The MoE receives the application, organizes Ecological Expertise, makes the final decision on the permit (if required), and informs the proponent accordingly, within 20 days of submission of the EIA. A permit cannot be granted without a positive Ecological Expertise conclusion, and any recommendations made in the conclusion are normally incorporated as permit conditions, with which the proponent must comply. A proponent may appeal against a negative decision through the law courts.

ADB Policy

61. ADB has adopted a comprehensive Safeguard Policy Statement in 2009 (SPS, 2009). This Statement describes common objectives of ADB's safeguards, lays out policy principles, and outlines the delivery process for ADB's safeguard policy. It applies to all ADB-financed, ADB-administered projects, and their components including investment projects funded by a loan, grant or other means.
62. With the goal to promote sustainability of project outcomes by protecting the environment and people from projects' potential adverse impacts, the objectives of ADB's safeguards are to:
- (i) avoid adverse impacts of projects on the environment and affected people, where possible;
 - (ii) minimize, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible; and
 - (iii) help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.
63. ADB's SPS 2009, sets out the policy objectives, scope and triggers, and principles for three key safeguard areas: (i) environmental safeguards, (ii) involuntary resettlement safeguards, and (iii) indigenous peoples safeguards.
64. **Environmental Safeguards.** The objective of environmental safeguards is to ensure the environmental soundness and sustainability of projects and to support the integration of

environmental considerations into the project decision-making process. All ADB funded projects are screened at initial stages of preparation and categorized according to significance of a project's potential environmental impacts. Projects are assigned to one of the following three categories:

- (i) **Category A** - if project is likely to have significant adverse environmental impacts; therefore requires an environmental impact assessment (EIA).
- (ii) **Category B** – less significant impacts than Category A; requires or Initial Environmental Examination (IEE or limited EIA).
- (iii) **Category C** - likely to have minimal or no adverse environmental impacts; EIA not requires.

65. ADB's environmental assessment requirement is thus different from the Georgian system of environmental assessment. While Environment Impact Permit as per the Georgian Law is required only for notified activities, ADB SPS 2009 applies to all projects and its environmental assessment requirement varies according to the category of the project depending on the nature and scale of the anticipated impacts.

B. Institutional capacity and development

66. MDF is a financially autonomous legal entity established under Georgian law, whose purpose is to mobilize financial resources from donors (including international and domestic financial institutions, development partners and government agencies) for investments in local infrastructure and services. MDF was established by a presidential decree for the purpose of managing the investment component of the World Bank's First Municipal Development and Decentralization Project (MDDP I) and its remit was subsequently extended to MDDP II and other development-agency funded project. In carrying out its activities, MDF acts in accordance with the provisions of the Law on Legal Entities of Public Law (1999) and other relevant laws, orders and decrees of the president of Georgia; agreements between the government and international financial institutions; MDF's charter; and the procedures and instructions contained in the MDF operations manual.

67. The MDF has an overall responsibility for the Projects' implementation. The MDF is the projects executing, implementing and disbursing agency. MDF undertook a structural reorganization from 2013 to 2015, in consultation with the donor community. The reorganization included rationalization of units and appointment of new staff with relevant background and experience to reinforce the pre-existing teams.

68. In October 2014, Environmental and Resettlement Unit was established at MDF. The number of Environmental and Resettlement team members has increased from 6 to 9 and currently consists of: Head of Unit, 3 environmental safeguards specialists, one safety specialist, one social safeguards specialist, 2 resettlement specialists and one ADB's individual consultant on resettlement issues, who is also the member of Environmental and Resettlement Unit. Until October, Environmental and resettlement safeguards team was consisting of 3 environmental safeguards and 2 resettlement specialists, one of which was the ADB's national consultant on

resettlement issues. Environmental and Social Safeguards team had a Team Leader who was an advisor to Executive Director of MDF on environmental and social safeguards issues.

69. MDF is responsible for general management, planning and supervision of the projects. MDF ensures that potential adverse environmental impacts arising from the projects are minimized by implementing all the mitigation measures presented in the environmental impact assessment ("EIA") or Initial Environmental Examination (IEE), including EMPs, as applicable. The Environmental and Resettlement Unit is involved in addressing of environmental and social safeguard issues throughout the entire projects' cycles. Environmental Specialist (designated to supervise ADB projects) reviews the EIAs, EMPs, and SSEMPs of projects and carries out supervision of the performance based on approved EMPs, EIAs, and environmental standards in accordance with ADB "Safeguard Policy Statement" (2009) requirements' and acting Georgian Legislation

III. ANTICIPATED ENVIRONMENTAL IMPACTS

70. While there would be numerous positive benefits in terms of improving quality of life of people as well as raising standards of both individual and public health, the subprojects implemented under the Investment Program may also induce certain negative impacts. It is therefore required that environmental impacts are identified and assessed as part of the planning and design process, and that action is taken to reduce those impacts to acceptable levels. This is done through the environmental assessment process, which is an integral part of ADB's lending operations and project development and implementation process.
71. ADB Environmental Assessment Guidelines (EAG), 2003, prescribes that an environmental assessment should evaluate impacts due to the location, design, construction and operation of the project. Construction and operation are the two activities in which the project interacts physically with the environment, so they are the two activities during which the environmental impacts occur. In many projects there are certain effects that, although they will occur during either the construction or operation stage, should be considered as impacts primarily due to the location or design of the project, as they would not occur if an alternative location or design was chosen. For example, if a groundwater resource was depleted by excessive abstraction this would be an impact of both the location and design, because groundwater may not be depleted if the design had used surface water to augment the supply, and the specific aquifer would not have been depleted if the well field was located elsewhere.
72. ADB's Rapid Environmental Assessment (REA) Checklists are used to identify impacts, assess their likely significance and examine how negative impacts may be mitigated. The checklists comprise a series of questions regarding the location and potential impacts of a project, which are derived from ADB experience in implementing projects in the sector. Impacts are identified and assessed in the responses to each question. Template is provided in Appendix 1.
73. Rapid Environmental Assessment (REA) checklists determine the project environmental category, presents anticipated environmental impacts and broad mitigation measures of the

Investment Program subprojects. Most impacts will result from considerable construction activities in urban and heavily populated areas. Almost all of the design impacts can generally be mitigated while there can be significant impacts if the components are located in environmentally sensitive areas. Therefore it is important that the Investment Program avoids encroachment into such sensitive areas.

74. The checklists indicate that the most of the environmental and social risks occur during the construction stage, which is as expected as these are major construction projects, conducted in heavily populated urban areas, often in locations where there are already traffic and transportation problems. Most construction impacts are however temporary, related to the construction process itself, and can be mitigated by relatively straightforward measures that are common practice at sites of urban construction. These include:

- (i) Reducing dust by using wheel washes, watering site roads and covering loose material when carried on trucks (including removal of waste soil and delivery of sand);
- (ii) Reducing noise, dust and visual intrusion by retention of existing mature trees and erecting barrier fences around sites;
- (iii) Preparing and implementing pollution prevention and abatement plans to reduce risks of accidental spills of toxic materials and to contain and treat any spills that do occur;
- (iv) Preparing and implementing traffic management plans to avoid exacerbating congestion problems and maintain vehicle and pedestrian safety in the vicinity of sites; etc.
- (v) Preparing waste management plan ensuring proper management of produced waste-avoid any access to drainage water, immediate removal from the working sites, placement of the waste in secondary protective basins, transferring produced waste only to a certified contractor.

75. There are certain other construction impacts that are related to a particular project for example Coastal Protection, which may require more site-specific mitigation measures. Anticipated Site-specific Environmental Impacts related to the construction and operational phase of the coastal protection projects and their mitigation measures are briefly described below:

- (i) Clean up any oil based products in or near the waterways to avoid water contamination;
- (ii) Preparing and using Contingency plans in case of spills,
- (iii) Presence of spill containment and clean-up equipment during all fueling and fluid replacement or top-up activities;
- (iv) Fuelling of vessels and equipments at shore mooring locations where spill containment equipment is present before the start of fueling;
- (v) Monitoring of sensitive sites and species during construction phase and no works implementation during sensitive periods to avoid stress of migratory bird species during autumn migration and wintering;
- (vi) Monitoring turbidity of the water during the extraction/nourishment period, in order to verify the absence of impact on seawater quality.

76. Construction impacts that are related to other projects of the Program, which also may

require site-specific mitigation measures include:

- (i) Amending designs where necessary to retain as many of the existing mature roadside trees as possible, because of their ecological and aesthetic value;
- (ii) Reducing waste disposal by re-using excavated material where possible and planning routes to disposal sites to limit disturbance to road-side residents;
- (iii) Careful site selection and design to avoid or minimize the acquisition of privately-owned land, demolition of occupied buildings and relocation of households and businesses.

77. Once the schemes are operating, they should all have beneficial environmental and social impacts by improving particular elements of the transportation system of the city, and thus contributing to overall reductions in: travel times; traffic congestion; economic losses; exposure to noise and exhaust gases, etc. There may also be certain negative impacts, which will need to be reduced by action in the design and procedures for operation of the facilities. These include:

- (i) Increased noise and vibration from new roads and metro lines, so routes will need to avoid susceptible buildings, historical locations and other sensitive areas (e.g. schools, hospitals);
- (ii) Increased numbers of pedestrians at transportation hubs, so designs should include safety features such as aerial walkways, subways, roadside barriers and effective signage;

IV. ENVIRONMENTAL ASSESSMENT FOR PROJECTS AND COMPONENTS

A. Existing MDF procedure

78. Subprojects prepared for investment under the Investment Program must comply with Georgia national legislation and ADB SPS 2009. If the environmental criteria shown in table 1 below are followed in the selection and development of subprojects, then most should have relatively minor environmental impacts, and the procedure for environmental assessment should then be straightforward and can be modeled on the approach adopted during projects implementation. The principal steps in each process are described below.

79. MDF presently conducts environmental assessment at three stages in a typical project cycle: identification; appraisal; and implementation.

80. **Project Identification: Preliminary Environmental Assessment.** Projects proposed for MDF funding are screened to ensure that those with adverse impacts that cannot be effectively mitigated are excluded from financing. The process consists of three steps as follows:

- (i) A desk-study is conducted using available documents to examine whether the likely area of impact of the project is near any protected areas, resorts, or other restricted or highly sensitive locations;
- (ii) Evidence is collected to determine whether the project violates any environmental laws or regulations;
- (iii) The potential impacts of the project are then examined along with design alternatives and mitigation measures, to determine whether there are any adverse impacts that cannot be avoided or mitigated. If that is the case or mitigation is deemed unfeasible at a reasonable cost within the limits set by the local government's borrowing capacity, the

project is declared ineligible or local government is directed to other possible financing sources.

81. The results of the environmental screening are summarized via statements such as “no significant environmental impacts are anticipated”, possible adverse impacts can be effectively mitigated”, “the proposed subproject would violate existing environmental regulations”, “the project will lead to positive environmental impacts”, etc. The written comments of the evaluation include a brief description of the affected environment, potential impacts, and recommendations on:

- (i) the involvement of environmental consultants;
- (ii) the need to consider alternative locations, technical approaches and/or other solutions; (iii) the need for specific prevention and mitigation measures; and
- (iii) the desired level of environmental assessment and public involvement in future stages.

82. **Final Appraisal: Environmental Assessment.** During the appraisal stage, MDF conducts a more detailed assessment of the impacts of projects, which involves the following:

- (i) Visiting the project site to conduct a field assessment, and participating in public hearings and consultations;
- (ii) Comparing results and recommendations of the preliminary environmental assessment with the final project documentation and ascertaining that all necessary environmental permits (land use, resources use, waste disposal, sanitary inspection, etc) and approvals have been or can be obtained;
- (iii) Preparing the environmental assessment including, where needed, an environmental management plan (EMP);
- (iv) Consulting stakeholders and disclosing relevant information on the project’s environmental impacts in a form and manner that is understandable to those consulted;
- (v) Examining project documentation to ensure that: (a) the environmental assessment was performed in accordance with regulations and that it followed the recommendations of the preliminary environmental assessment; (b) the documentation includes all necessary permits and approvals required at appraisal stage; (c) appropriate prevention and mitigation measures have been planned and necessary resources have been allocated; and (d) project documentation and the findings of site visits have been disclosed to the public and the project does not draw public objections;
- (vi) Making recommendations on the level and mechanisms of environmental monitoring to be conducted during construction and subsequent operation of the project facilities.

83. **Project Implementation: Environmental Management Plan.** The Environmental Management Plan (EMP) documents the impacts identified in the IEE report, the actions required to mitigate those impacts to acceptable levels in accordance with the Georgian legal requirements and the ADB safeguard policy, and the monitoring activities that are to be undertaken as part of the project to confirm that the mitigation actions have been effective in achieving their objectives or to initiate corrective actions required.

84. The EMP also details the institutional arrangements and capacities that currently exist, or that will be put in place as part of the project implementation, to ensure that the environmental due diligence (including the EMP) has comprehensively considered both the national and ADB requirements for environmental protection, has identified all likely environmental impacts and proposed appropriate mitigation measures, and has the systems in place to ensure that effective procedures for environmental monitoring and control of the project impacts and mitigation

measures are implemented throughout the life of the project.

85. The main institutions that are involved in implementation of the EMP/SEMPs and monitoring are the executing agency (EA), the Supervision Consultant (SC) the Contractor and to a lesser extent the Ministry of Environmental and Natural Resources Protection and Municipal Authorities. Ministry of Environmental and Natural Resources Protection has the authority for periodic audits but should not be considered as a party responsible for monitoring according to this IEE and EMPs;

86. The Environmental and Social Specialists of the MDF are responsible for management of the environmental and social aspects associated with development of all donor funded projects for which MDF is the responsible Executing Agency (EA).

87. The MDF's Environmental and Social Specialists responsibilities in respect of implementation of the EMP/SEMP are as follows:

- (i) Ensure that all relevant SEMP requirements (including environmental designs and mitigation measures) are duly incorporated into the project bidding documents.
- (ii) Obtain necessary permits and/or clearance, as required, from any relevant government agencies (NEA, etc), ensuring that all necessary regulatory clearances are obtained before commencing any civil work on the project.
- (iii) Ensure that contractors have access to the EMP and IEE report.
- (i) Ensure that contractors understand their responsibilities to mitigate environmental problems associated with their construction activities and facilitate training of their staff in implementation of the EMP.
- (ii) Approve the Site-Specific Environmental Management Plan (SEMP) prepared by the Contractor before he takes possession of construction site.
- (iii) Monitor the contractor's implementation of the SEMP in accordance with the environmental monitoring plan.
- (iv) Prepare and submit semi-annual Environmental Monitoring Reports to ADB.
- (v) In case unpredicted environmental impacts occur during the project implementation, prepare and implement as necessary an environmental emergency program in consultation with MoEP, any other relevant government agencies, and ADB.

88. The Supervisor Company (SC) of works commissioned by MDF is responsible to establish strong field presence in the Project area and keep a close eye on the course of works. Along with ensuring consistency with the design and ensuring quality of works, the supervisor is mandated to track implementation of EMP by the contractor and reveal any deviations from the prescribed actions.

89. Construction contractor is obligated to follow EMP and good construction practice. In order to meet this obligation, a contractor shall establish environmental management team and procedures. Key responsibilities of the Contractor (through the EM) are as follows:

- (i) Preparing the Site-specific environmental management plan (SEMP) for approval by the Employer (EA) prior to the Contractors taking possession of the construction site (see below);
- (ii) Ensuring the SEMP is implemented effectively throughout the construction period;

- (iii) Coordinating community relations issues through acting as the Contractor's community relations focal point (proactive community consultation, complaints investigation and grievance resolution);
- (iv) Establishing and maintaining site records of:
 - weekly site inspections using checklists based on SEMP;
 - environmental accidents/incidents including resolution activities;
 - environmental monitoring data;
 - non-compliance notifications issued by the SC;
 - Corrective action plans issued to the SC in response to non-compliance notices;
 - Community relations activities including maintaining complaints register;
 - Monitoring reports;
 - Routine reporting of SEMP compliance and community liaison activities;
 - Adhoc reporting to the Employer's Engineer of environmental incidents/spillages including actions taken to resolve issues.

B. Environmental Assessment procedure for this Program

90. The existing MDF environmental assessment procedure was designed to comply with both national law and the safeguard policies of the major lenders (including the World Bank and ADB). It therefore requires only minor adjustment to comply with the updated ADB procedure as described in the Safeguard Policy Statement (2009). The approach to environmental assessment to be adopted in this program is thus as follows.

91. The avoidance of negative impacts (by sensitive site selection, amending features of the design, etc) is a key facet of environmental assessment, as it both protects the environment and can save considerable time, effort and cost downstream in a project, by avoiding the need for difficult and costly environmental mitigation and compensation measures. It is important therefore that environmental impacts are taken into account throughout the development of projects/subprojects, beginning in the earliest stages and that the decisions are made on the basis of environmental criteria, as well as feasibility and cost. The following guidelines or criteria are formulated, such that if they are taken into account in selecting and developing subprojects, it should reduce their environmental impacts.

92. **Environmental criteria for project/subproject selection.** Projects and subprojects will be selected based on compliance with the criteria set out in Table 1, which are derived from the preliminary environmental assessment of proposed Tranche 1 projects in Appendix 1. Additional criteria will be added if IEE/EIA studies or preliminary assessments of other projects identify additional environmental or social risks.

93. **Exclusion Criteria for all projects:** Following projects cannot be implemented under the Investment Program:

- (i) Projects likely to violate (non-conformity with) the national legislations in general, and particularly the environmental Laws including norms, guidelines, standards, etc. during the project life cycle (design, construction and operation);
- (ii) Projects located in notified Protected Areas (Strict Nature Reserves, National Parks, Managed Nature Reserves, Natural Monuments and Protected Landscapes);
- (iii) Projects leading or likely to lead to any damage/loss to protected monuments;

- (iv) Projects with irreversible impacts which cannot be mitigated to acceptable levels;
- (v) Projects involving water abstraction/waste water disposal into water bodies/ivers that are in any international dispute.

94. Following guidelines and selection criteria shall be followed in implementation of projects to avoid/minimize likely impacts:

- (i) Avoid private land acquisition and involuntary resettlement by using government land and/or taking all possible measures in design and selection of site or alignment
 - If unavoidable, minimize the impacts by reducing the land requirement through alternative design or technology, or select site with less affected persons and where impacts will be less significant.
- (ii) Avoid cutting of trees by appropriate site selection and best site layout design
 - If unavoidable, select site with less tree cover and without mature trees Consult the Ministry of Sports, Culture and Heritage when the project is located near places of historical significance to ensure that the project sites are located where there is a low risk of chance finds

Table 1: Environmental criteria for project selection

Project Selection Criteria

<ul style="list-style-type: none">• Projects should be located entirely on Government-owned land wherever possible, to avoid impacts related to involuntary resettlement;• If it is not possible to locate all project components or construction activities on Government land, designs should minimize the acquisition of privately-owned land, buildings and businesses;• Projects that involve significant resettlement impacts (where 200 or more people are physically displaced from housing and/or lose 10% or more of their income-generating assets) should first be avoided wherever possible with alternative design;• Projects, project components or construction activities should be as much as possible avoided or mitigated when they are located in areas that are protected under Georgian law (e.g. for their importance to biodiversity or physical cultural resources) or areas that are sensitive for other reasons (e.g. cemeteries, buildings for religious worship, etc);• Projects must not subject buildings and their inhabitants to unacceptable levels of noise or vibration during either construction or operation (unacceptable noise would be levels above ambient noise standards; unacceptable vibration is vibration with the potential to cause structural damage);• Projects must not damage any nationally protected monuments or other important locations or artefacts and designs must ensure that any such items that are located in or near the project area are retained in an appropriate context (in terms of appearance, access, noise/vibration, etc) when the project is operating;• Designs should incorporate measures to re-use waste (from excavation and demolition) in project construction to the maximum extent possible;• Designs should also incorporate measures to avoid the loss of mature trees by retaining as many existing trees as possible.• If, during the implementation of a project, the contractor encounters chance-finds, such chance-finds shall be dealt with according to Ministry of Culture regulations.
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95. **Screening and classification.** MDF will screen all potential projects using REA checklists provided by ADB (see Appendix 1); and on the basis of the screening will classify projects according to the categorization given in ADB's Safeguard Policy Statement (2009). This is as follows:

Category A: Projects likely to have significant adverse environmental impacts, which are irreversible, diverse or unprecedented and may affect an area larger than the location subject to physical works. An Environmental Impact Assessment (EIA) is required;

Category B: Projects with adverse environmental impacts that are less significant than those of Category A projects, are site-specific, generally not irreversible, and in most cases can be mitigated more readily than for Category A projects. An Initial Environmental Examination (IEE) is required;

Category C: Projects with minimal or no adverse environmental impacts. No environmental assessment is required, although environmental implications are reviewed.

96. **Preparation of Initial Environmental Examinations (IEE).** For Category B projects an IEE will be prepared in accordance with the requirements of ADB's Safeguard Policy Statement (2009). The IEE will be undertaken as part of the Feasibility Study and the environmental assessment team will work closely with the technical planning and design group to ensure that environmental considerations are integrated into the project design.

97. An IEE study deals with the same issues as an EIA (see below), but is narrower in scope and issues may be covered in less detail. An IEE examines the project's potential negative and positive impacts and recommends measures needed to prevent, minimize, mitigate or compensate for adverse impacts and improve environmental performance. As mitigation is relatively straightforward the IEE may not require a comprehensive analysis of project alternatives or as detailed an Environmental Management Plan (EMP) as an EIA, and may involve less public consultation. Stakeholders will however be consulted at least once (when the draft final IEE report has been produced), and may be involved at an earlier stage if deemed necessary by MDF and/or ADB.

98. Preparation of Environmental Impact Assessments (EIA). If Category A projects are approved for financing, an EIA will be conducted of each, in accordance with the requirements of ADB's Safeguard Policy Statement (2009). The EIA will be undertaken in the Detailed Design stage, or if carried out earlier during the Feasibility Study, the assessment and its findings will be reviewed during the detailed design and revised if necessary to reflect any changes in the project or to revise interpretations as a result of more information becoming available.

99. An EIA examines the project's potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the "without project" situation), and recommends measures needed to prevent, minimize, mitigate or compensate for adverse impacts and improve environmental performance. The EIA is a more comprehensive and detailed study than an IEE and as mitigation is generally more complex, an EIA should always include an Environmental Management Plan (EMP) setting out in detail how each mitigation measure will be provided and monitored. An EIA also requires a greater degree of consultation, as stakeholders are involved at an early stage in deciding the scope of the EIA study, as well as determining its outcome and the nature of the mitigation at draft final report stage.

IV. CONSULTATION, DISCLOSURE AND GRIEVANCE REDRESS

100. For both Category A and B investments, MDF will consult with persons and groups likely to be affected by the proposed development, plus local non-governmental organizations and other stakeholders. For category B projects at least one consultation will be conducted, when the draft IEE has been prepared, with the aim of informing stakeholders about the project, its potential impacts and likely mitigation. For Category A projects there will be at least one further consultation at the beginning of the EIA study, to involve stakeholders in determining the scope of the EIA and allow them to raise any issues of particular local concern. In all cases, additional consultations will be held (with particular groups or individuals, or with all stakeholder representatives) if considered necessary by MDF and/or ADB. The consultation process and its

outcome will be documented in the environmental assessment report, which will explain how relevant comments from stakeholders were addressed in project design and will give a justification for any comments not acted upon.

101. Relevant project documents will be disclosed to the public following ADB requirements and normal MDF procedure. For Category B investments the final IEE report will be posted on MDF and ADB websites, and hard copies will be available for consultation at the MDF office. For Category A investments the draft EIA (including the draft EMP) will be posted on ADB and MDF websites and hard copies will be available at the MDF office and at the project site, at least 120 days before the loan is considered by the ADB board. These documents will be substituted by the final EIA when completed, and new or updated EIA reports if prepared to reflect significant changes in the project during design or implementation. Environmental monitoring reports (prepared during project implementation, see below) will also be added in due course. All documents provided locally will be in the Georgian language.

102. All efforts will be made to avoid dissatisfaction by stakeholders (in particular persons affected directly by the project) by sensitive site selection applying the criteria set out in Table 1, effective consultation and disclosure as described above, and by responding promptly and appropriately to stakeholder concerns. Stakeholders may still wish to raise concerns and complaints about the project's environmental performance, so MDF has established a grievance redress procedure (GRP) to enable them to do so.

103. MDF has the overall responsibility for the project implementation and environmental compliance. The administrative bodies responsible for the environmental protection are the Ministry of Environmental Protection and Natural Resources and the City Hall. The affected population and stakeholders may send their grievances, related to the project induced environmental impacts and nuisance to PIU or directly to the administrative bodies responsible for the environmental protection.

104. The MoE and city hall are obliged to respond on the grievances, which have been received from population or other interested parties in accordance with the requirements of the Administrative Code of Georgia.

105. However, the PIU will facilitate the response through implementing following grievance redress mechanism. During the public consultation process, the PIU will inform the stakeholders and public that PIU is responsible for environmental compliance and grievance redress. PIU will provide on the public consultation meetings and dispose on the MDF web-site the contact details of the persons responsible for grievance collection and response. Upon the receiving the grievance (in written or oral communication) the PIU will execute following actions:

- (i) send its representatives to check the claims and monitor the situation
- (ii) involves MoE and City Hall when and where appropriate
- (iii) receives expert's conclusion (from MDF personnel, independent experts or MoE/City Hall experts)
- (iv) Submits to the constructing company and operator request on corrective measures
- (v) during 10 days after receiving the grievance informs the affected person or persons about the expert's decision and applied corrective measures
- (vi) In case if the affected stakeholder or person is not satisfied by the response of PIU or administrative bodies, the grievance may be directed to the court.

- (vii) If the complainant is dissatisfied with the decision, they may present further information in support of their case, the subsequent decision of the PIU/MoE and participating municipality is considered final.

V. ACCOUNTABILITY MECHANISM²

106. The Asian Development Bank (ADB) created the Inspection Function in 1995 to provide an open forum for public scrutiny to ensure that ADB complies with its operational policies and procedures. Building on the Inspection Function and benefiting from intensive public consultations, ADB introduced the Accountability Mechanism 2003. The Accountability Mechanism encompasses two mutually supportive functions: problem solving and compliance review. An effective Accountability Mechanism to address the grievances of people adversely affected by ADB-financed projects and ensure compliance with ADB operational policies and procedures is fundamental to equitable and sustainable development.

107. The objectives of the Accountability Mechanism is to provide an independent and effective forum for people adversely affected by ADB-assisted projects to voice their concerns and seek solutions to their problems, and to request compliance review of the alleged noncompliance by ADB with its operational policies and procedures that may have caused, or is likely to cause, them direct and material harm.

108. The Accountability Mechanism complements other problem solving and compliance systems at ADB. It reflects ADB's philosophy that problem prevention and compliance should be maximized in its operations, and also that once problems and noncompliance occur, they should be addressed promptly at the project and operational levels. The Accountability Mechanism is the "last resort" for dealing with problems and noncompliance that were not prevented or solved at the project and operational levels. The design of the Accountability Mechanism also recognizes that ADB has several well developed audit, evaluation, and learning systems to ensure that its operations are conducted in accordance with operational policies and procedures, and deliver the intended results. The Accountability Mechanism complements these systems by serving as a focused mechanism for project-affected people, thereby enhancing ADB's development effectiveness.

109. The Accountability Mechanism is designed to:

- Increase ADB's development effectiveness and project quality;
- Be responsive to the concerns of project-affected people and fair to all stakeholders;
- Reflect the highest professional and technical standards in its staffing and operations;
- Be as independent and transparent as possible;
- Be cost-effective and efficient; and
- Be complementary to the other supervision, audit, quality control, and evaluation systems at ADB.

VI. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES A. RESPONSIBILITIES AND AUTHORITIES

110. MDF the Executing Agency for the program will bear the overall responsibility of ensuring that all funded projects comply with Georgian environmental law and ADB policy and procedure throughout planning, design and implementation stages. This includes:

² ADB's Accountability Mechanism Policy 2012 is available at: <http://www.adb.org/documents/accountability-mechanism-policy-2012>

- (i) Selecting projects for support based on the environmental criteria listed above and any others that may subsequently be added;
- (ii) Preparing the potential impacts of each project using the REA checklists provided in Appendix 1 below, and categorizing each scheme based on the ADB classification system outlined above;
- (iii) Engaging qualified consultants to conduct the environmental assessment during project design or feasibility study, including public consultation, and an EMP if required;
- (iv) Ensuring and reporting that the appropriate level of environmental assessment is conducted and that the assessment is carried out and presented according to ADB requirements;
- (v) Ensuring that all necessary environmental permits and approvals are obtained;
- (vi) Monitoring during construction to ensure that the EMP is fully implemented and that an appropriate response is provided to any unexpected impacts that may occur;
- (vii) Coordinating throughout with ADB's Central and West Asia Department (CWRD) in applying ADB's environmental safeguard procedures.

111. The MoE and its regional offices (within their competence and in cases determined by the Law on Environmental Impact Permit), will be responsible for reviewing EIA documents and environmental permit applications and issuing permits for projects when all conditions are met. MoE may also participate in the environmental monitoring conducted by MDF during project implementation, with the purpose of ensuring compliance with any conditions imposed by the permit.

112. ADB, via CWRD will be responsible for the following:

- (i) Screening and categorizing the potential impacts of each project using the REA Checklists prepared by MDF;
- (ii) Advising borrowers/clients about ADB's SPS requirements;
- (iii) Determining the feasibility of ADB financing to carry out due diligence and review;
- (iv) Reviewing and approving all EIA reports for Category A projects and selected IEE reports for Category B projects;
- (v) Monitoring, supervising and conducting review missions to monitor implementation of the EMP during project construction and operation;
- (vi) Providing technical guidance and capacity building support to MDF in the implementation of ADB safeguards policy and procedures as necessary;
- (vii) Disclosing all relevant information applying to ADB's environmental safeguard procedures.

B. Staffing and budget

113. ADB and MoE will fulfill their responsibilities outlined above as part of their normal work schedule and require no additional provision from the Program in terms of budget or manpower.

114. MDF will also perform their responsibilities as part of their normal work schedule. Some financial support from the Program can be allocated to finance assistance and incremental administration. EIA and IEE studies will be conducted by consultants funded by the Program, so budgetary provision will also be needed for this key activity. Support will also be required to enable MDF to monitor implementation of the Environmental Management Plans during the construction stage of each project.

115. The table 3 shows some of the main items which are necessary for the IEE preparation and EMP implementation for projects classified as Category B, requiring IEE studies:

Table 3: Main Items for IEE preparation and EMP implementation

Items	Responsible Organization	Funding
Mitigation measures	Construction Contractor	ADB Loan
Monitoring	Construction Contractor	ADB Loan
Supervision Monitoring	Supervision Consultant	ADB Loan
Environmental Monitoring During Operation	Facility Operator	Government
Capacity building	MDF	ADB Loan

VII. MONITORING AND REPORTING

116. During project implementation MDF monitors execution of the EMP as well as the mitigation of any unexpected adverse environmental impacts. If there is a significant change in project scope, MDF ensures that an environmental assessment is triggered, undertaken by the project proponent. MDF prepares a semi-annual monitoring report, which describes EMP implementation and results, compliance with loan covenants and applicable national environmental legislation, and the overall performance of MDF's environmental management system and any required improvements. Finally MDF ensures that the EMP is included in tender and contract documents for project.

117. MDF through ERU monitors the performance of consultants conducting the EIA and IEE studies during feasibility study and detailed design stages. MDF submits draft EIA and IEE reports of subprojects to ADB for review and ensures that the consultants address all comments in producing final versions:

- (i) EIA Reports of all Category A subprojects;
- (ii) IEE Reports from each sector (water supply and sewerage) in follow-on tranches;
- (iii) All updated or revised IEEs of Tranche 1 subprojects.

118. MDF also submits EIA and IEE reports and environmental permit applications to MoEPNR when required by Georgian law.

119. MDF monitors the performance of consultants conducting the EIA and IEE studies during feasibility study and design stages, and also monitors implementation of the EMP (mainly by contractors) when the projects are constructed. The status of implementation and outcome of monitoring will be submitted to ADB regularly through biannual Environmental Monitoring Reports (EMRs);

120. **Review and update of EARF.** Prior to the preparation of each PFR, the applicability and relevance of EARF shall be reviewed and updated by ERU to ensure consistency with the country

legal framework and ADB's safeguards policies, as amended from time to time. As the Investment Program progresses, this periodic revision or update shall also reflect lessons learnt from the subproject implementation and if required the subproject selection criteria shall be modified to avoid significance impacts. ADB will review the revised EARF, after which it will be formally adopted by the EA.

APPENDICES

Rapid Environmental Assessment (REA) Checklist

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES) for endorsement by the Director, RSES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:

Sector Division:

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area...			
▪ Densely populated?			
▪ Heavy with development activities?			
▪ Adjacent to or within any environmentally sensitive areas?			
• Cultural heritage site			
• Protected Area			
• Wetland			
• Mangrove			
• Estuarine			
• Buffer zone of protected area			
• Special area for protecting biodiversity			

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> Bay 			
B. Potential Environmental Impacts Will the Project cause...			
<ul style="list-style-type: none"> impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other urban services. 			
<ul style="list-style-type: none"> deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed? 			
<ul style="list-style-type: none"> degradation of land and ecosystems (e.g. loss of wetlands and wild lands, coastal zones, watersheds and forests)? 			
<ul style="list-style-type: none"> dislocation or involuntary resettlement of people? 			
<ul style="list-style-type: none"> disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable group? 			
<ul style="list-style-type: none"> degradation of cultural property, and loss of cultural heritage and tourism revenues? 			
<ul style="list-style-type: none"> occupation of low-lying lands, floodplains and steep hillsides by squatters and low-income groups, and their exposure to increased health hazards and risks due to pollutive industries? 			
<ul style="list-style-type: none"> water resource problems (e.g. depletion/degradation of available water supply, deterioration for surface and ground water quality , and pollution of receiving waters? 			
<ul style="list-style-type: none"> air pollution due to urban emissions? 			
<ul style="list-style-type: none"> risks and vulnerabilities related to occupational health and safety due to physical, chemical and biological hazards during project construction and operation? 			
<ul style="list-style-type: none"> road blocking and temporary flooding due to land excavation during rainy season? 			
<ul style="list-style-type: none"> noise and dust from construction activities? 			
<ul style="list-style-type: none"> traffic disturbances due to construction material transport and wastes? 			

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ temporary silt runoff due to construction? 			
<ul style="list-style-type: none"> ▪ hazards to public health due to ambient, household and occupational pollution, thermal inversion, and smog formation? 			
<ul style="list-style-type: none"> ▪ water depletion and/or degradation? 			
<ul style="list-style-type: none"> ▪ overpaying of ground water, leading to land subsidence, lowered ground water table, and salinization? 			
<ul style="list-style-type: none"> ▪ contamination of surface and ground waters due to improper waste disposal? 			
<ul style="list-style-type: none"> ▪ pollution of receiving waters resulting in amenity losses, fisheries and marine resource depletion, and health problems? 			
<ul style="list-style-type: none"> ▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)? 			
<ul style="list-style-type: none"> ▪ social conflicts if workers from other regions or countries are hired? 			
<ul style="list-style-type: none"> ▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation and construction? 			
<ul style="list-style-type: none"> ▪ community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning? 			

A Checklist for Preliminary Climate Risk Screening

Country/Project Title:

Sector :

Subsector:

Division/Department:

Screening Questions		Score	Remarks ³
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?		
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?		
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?		
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s) ?		
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?		

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

Result of Initial Screening (Low, Medium, High): _____

Other Comments: _____

Prepared by: _____

³ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

APPENDIX 2: OUTLINE OF AN ENVIRONMENTAL IMPACT ASSESSMENT REPORT

This outline is part of the Safeguard Requirements 1. An environmental assessment report is required for all environment category A and B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks. A typical EIA report contains the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental impact assessment reports, although not necessarily in the order shown.

A. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

B. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

C. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

D. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

E. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media [Appendix 2, para. 6]), and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

F. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation—including the no project alternative—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

G. Information Disclosure, Consultation, and Participation

This section:

- (i) describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
- (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
- (iii) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

H. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

I. Environmental Management Plan

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

- (i) Mitigation:
 - (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
 - (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
 - (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.

- (ii) Monitoring:
 - (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
 - (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.

- (iii) Implementation arrangements:
 - (a) specifies the implementation schedule showing phasing and coordination with overall project implementation;
 - (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
 - (c) estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.

- (iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

J. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides recommendations.

**APPENDIX 3:
OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES
FOR ENVIRONMENTAL ASSESSMENT**

A. Objectives

1. The objectives of the services are (i) to conduct an initial environmental examination (IEE) and/or environmental impact assessment (EIA) of the proposed project to identify potential environmental impacts on physical, environmental, ecological, social, cultural, and economic resources, and (ii) to prepare IEE/EIA report(s) along with environmental management and monitoring plans. The duration of an IEE study is about three months and an EIA study about five months.

B. Scope of Work

2. The consultant's scope of work will include the following tasks:

- (i) review prevailing government regulations and donor guidelines governing the assessment and management of environmental impacts of road projects;
- (ii) prepare a scoping document for the environmental studies to be carried out under the project;
- (iii) undertake the IEE/EIA⁵ study to assess the direct and indirect environmental impacts of the project including, as necessary (a) ecological impacts (plants and wildlife); (b) soil erosion and desertification; (c) protection of wetland habitat; (d) impact of quarry sites; (e) impact of construction camps on local environment (natural and social); (f) operational traffic safety measures; (g) areas with known archaeological value; and (h) potential spills of hazardous or toxic chemicals and an appropriate response plan for the project;
- (iv) prepare the IEE/EIA report in accordance with ADB's *Safeguard Policy Statement* (2009) and *Public Communications Policy* (2005);
- (v) assess all potential direct and indirect environmental impacts of the project in the IEE/EIA study and present the assessment and appropriate mitigation and monitoring measures together with their costs in the order of project cycle: pre-construction, construction, and operation;
- (vi) conduct formal public consultations with affected people (at least two consultations for EIA and at least one consultation for IEE). The first consultation aims to gather environmental concerns from affected people and the final consultation aims to share the result of the assessment and the proposed mitigation measures;
- (vii) record in systematic manner the list of people who attended the consultation, the time and locations, and the subjects discussed during consultation and attach the record in the IEE/EIA report as an appendix;
- (viii) solicit and incorporate comments on the draft IEE/EIA reports from ADB, MNP, NGOs, civil society, and other stakeholders and finalize the reports to accommodate inputs from all the stakeholders; and
- (ix) submit the reports to MNP and make presentations as required by MNP to obtain environmental impact clearance certificates or equivalent.

⁵ ADB requires the preparation of and EIA for environment category "A" projects. Environment category "B" projects require an IEE followed by an EIA only if the IEE concludes that an EIA is necessary.

C. Organization and Staffing

3. The services are expected to be provided by a team comprising one international environmental specialist and national specialists in appropriate disciplines to suit each project and corresponding IEE/EIA.

4. **The International Environmental Specialist** shall at least be graduate of a recognized university in environmental science, environmental engineering, geological science, engineering hydrology, biology, or related discipline and have at least 15 years experience and familiarity with all aspects of environmental management and with significant experience in environmental management and monitoring of projects, environmental assessment and / or implementation of environmental mitigation measures on construction projects. The specialist shall also have experience working in teams of multi-discipline experts and leading a national team of consultants. Candidates with higher degrees in environmental engineering or environmental science or environment management are preferred.

5. Each **National Specialist** shall at least be a graduate of a recognized university in environmental science, environmental engineering, geological science, engineering hydrology, biology, or related discipline with significant experience in environmental management and monitoring of projects, environmental assessment, and/or design and implementation of environmental mitigation measures. A reasonable command of the English language, both spoken and written, is required.