The European Union’s ENPI Programme

« Support to improvement of environmental governance in Georgia »

Letter of Contract N«2009/223790 - Version 1»

Inception Report

Prepared by:

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Lia Todua

January 2010
“The contents of this publication are the sole responsibility of the contractor and can in no way be taken to reflect the views of the European Union.”
**TOR Project Objectives:**

The objective of the work under this assignment is to implement Capacity Building (CB) activities on State of the environment reporting:

1. **Rules for development of the National Report on the State of Environment**
   - The new Rules should be as detailed as possible, clear and directly applicable. They should contain a set of key environmental indicators.

2. **National Report on the State of Environment**
   - The Report should contain key information on the state of the environment in terms of:
     a. its current condition;
     b. the pressures on it and the drivers of those pressures;
     c. the extent to which these pressures are significant;
     d. initiatives carried out to address environmental concerns, both by the Government and by the donor community, as well as by the civil society and the private sector;
     e. impacts of those initiatives, etc.
     f. It should also identify gaps where financing and/or technical assistance would be required.
     g. The Report should be user friendly and should be considered for a wide range of readers - high level decision makers, government officials, NGOs, experts and public. It should cover the period of 4 years (2006-2009).

3. **Report on recommendations for future EU assistance to the environmental sector**
   - The financing gaps identified shall be analysed and matched with existing EU co-operation instruments. A special attention will be paid to a possible sector policy support programme (SPSP) for the environment. An assessment of the environmental sector shall be carried out to determine to what extent it is ready for a possible SPSP and what still has to be done. Besides others, the seven key elements of an SPSP as defined in the EuropeAid’s guidelines on “Support to sector programmes” shall be used for this purpose. The priorities and plans of other donors in the environmental sector will also be taken into consideration, in order to avoid overlaps and create synergies. Practical recommendations with detailed proposals on the areas for a further EU intervention and relevant aid modalities should be presented.
Outline Project Plan for Project Deliverables

The key tasks and milestones identified for delivery of the State of the Environment Report are provided in Table 1 and the proposed timeline provided in Figure 1. The timeframe and dates are incredibly ambitious and do not allow for any slippage.

In broad terms the work is divided into three missions for the International expert with the National expert providing ongoing support over the lifetime of the project up-to a maximum of 70 days.

Mission 1:
- Agree structure and content of the SOE Report with Ministry and other stakeholders.
- Meet with chapter authors and discuss structure and content of chapters.
- Put in place administrative framework for producing report including information management, report design and production.

Intermission work: Chapters drafted and initial internal review, chapters translated

Mission 2:
- Review draft chapters and comment (Editorial Process)
- Agree main findings of and Key Messages of the report with Ministry.
- Begin drafting rules for future SOE reports based on project experience.

Intermission work: Chapters revised, translation updated, chapters put into final (DTP) layout.

Mission 3:
- Review the proposed amendments for other Ministries
- Meeting with working group to discuss progress
- Finalise Rules for State of the Environment Preparation in Georgia
- Draft Final Report

It must be reiterated that this project cannot prepare the State of the Environment Report in isolation and indeed is dependent to a large extent on Ministry personnel to write chapters for the report and to provide input into the conclusions and recommendations drawn by the report. The contribution by Ministry staff in this regard is seen as a possible risk to achieving the timelines outlined in this plan.
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Proposed Structure and content for State of The Environment 2010

The current proposed report structure and outline content of the report are provided in Annex 1.

The content and structure of the report may be amended during the drafting as chapters may be amalgamated or split based on the level of information available on the particular topic.

Dr Tom Stafford  Ms. Lia Todua
International Expert  Local Expert
Section 1. Introduction

Chapter 1: Background & Introduction

Introduction
Regulatory and Policy Framework
International obligations with regards to environment
  International Conventions, (H2)
  Access to Information on the Environment (Arhus)
Conclusion
References

Chapter 2: Socio-economic Developments

The Socioeconomic Context
Introduction
Population
  Population increase & distribution
  Population density
  Urbanisation and consequent impacts
Households (H1)
  Growth in number of households
  Consumer behaviour and contribution to pressures on the environment
  Household expenditure and ensuing environmental pressures
Economy
  Georgia’s economic growth per capita GDP
  GDP share by sector Energy, Industry, Agriculture etc...
  Impact of Georgia’s exceptional economic growth – positive impacts and less positive impacts of same.
  Employment figures and trends
Infrastructure
  Expenditure earmarked for environmental infrastructure - wwtp, waste management facilities.
Key Challenges/Issues
Section 2 Air Pollution

Chapter 3: Ambient Air Quality

Introduction
Importance of good air quality (1 paragraph)
Normative basis (permitted pollution levels, comparison with EU/WHO norms) -

Air Quality in Georgia
Description of air monitoring (how many stations, in which cities, what is measured, how often, background monitoring station)
Map of Monitoring Stations
Air quality data (to be compared with PAC and EU/WHO allowable levels):
Particulate Matter Total
  Short description of the pollutant and its effects
  Number of exceedences of relevant standard per year
  Annual mean concentrations, Time Series
Nitrogen Oxides
  Short description of the pollutant and its effects
  Number of exceedences of relevant standard per year
  Annual mean concentrations, Time Series
Sulphur Dioxide -
  Short description of the pollutant and its effects
  Number of exceedences of relevant standard per year
  Annual mean concentrations, Time Series
Lead -
  Short description of the pollutant and its effects
  Number of exceedences of relevant standard per year
  Annual mean concentrations, Time Series
Carbon Monoxide
  Short description of the pollutant and its effects
  Number of exceedences of relevant standard per year
  Annual mean concentrations, Time Series

Causes -
Main air polluting sectors of economy and their effect on air quality (diffuse and point sources).
Diagrams of annual emissions from main sectors, time series

Key Challenges/Issues
Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.
Chapter 4: Climate Change

Introduction
Short information about the causes – effects of climate change
Short story about the international process of IFCCC and latest developments, status of Georgia, obligations/opportunities

The Current Situation in Georgia -
Observations and projections
Air Temperature
Precipitation
Impacts (3 cases described in second national communication: sea level rise, desertification, increased geohazards in mountains)

Causes
GHG Emissions -
Trends (graphs for sectors and gases) –
share of Georgia in world emissions

Key Challenges/Issues
Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.
Section 3: Water

Chapter 5: Groundwater

Introduction (background information)

Current Situation in Georgia

Classification of groundwater, comparison with EU approach

Quality of groundwater: Availability of data on quality and quantity of groundwater (lack of recent data, availability of data from 20 years ago?present the old data _ where were the substantial exceedances of norms)

Use of groundwater by:

- drinking water supply systems
- enterprises

share of population using the unprocessed groundwater for drinking purposes

Sources of groundwater contamination: description of groundwater pollution from: industry, agriculture, landfills/waste dumps, septic tanks/toilets, etc.

Map of groundwaters/aquifers (and their vulnerability), main polluters (sectors) in each aquifer?

Key Issues/Challenges (H1)

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

Chapter 6: Rivers

Introduction/background information

Current Situation in Georgia

Brief description of existing river monitoring (how many rivers, how many points, how frequently, what parameters, brief info about planned bio-monitoring)

Monitoring data (diagrams for: N, BOD, Metals, phosphate – annual means for 10 years, for main rivers)

Map of Georgia’s main Rivers with monitoring points indicated (size of the point proportional to the pollution in specific year) –

Map of river catchments. (some text on main water polluter sectors in each catchment?)

Causes of Pollution

Main polluting sectors, major polluters (municipalities/enterprises)

Occurences of large fish kills

Key Challenges/Issues

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

Chapter 7: Lakes

Introduction/background information

Current Situation:
How many lakes monitored
Monitoring data for the monitored lakes (diagrams, N, BOD, for recreational lakes – microbiology)

**Causes of Pollution**

some description of main causes

**Key Challenges/Issues** -
Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 8: Coastal Waters**

**Introduction/background information**

**Current Situation**

Data on quality of coastal waters:
Characterization of phyto-zoo-plankton
nutrients (N, BOD, etc)
Bathing water quality (lack of regular monitoring, existing data on microbiological contamination)

**Causes of Pollution**

Description/numbers of:

- Oil Pollution Incidents
- Litter and Unauthorised Dumping on the Coast
- Urban Waste Water Discharges –
- Industrial Discharges

**Key Challenges/Issues**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 9: Water Use**

**Introduction/background information**

**Current Situation**

Data on water abstraction, use for different purposes, water loses
Drinking water quality
Description of monitoring (number of samples, map of sampling points, measured parameters,
Monitoring data (for 3 last years)

**Key Challenges/Issues**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 10: Discharges to Waters**

**Introduction/background information**
Current Situation

Most important discharges (in terms of sensitivity of water object or in terms of hazardous substances discharged)

Description of level of treatment of discharged waters. Share of treated waters.

Key Challenges/Issues

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.
Section 4: Land and Mineral Resources

Chapter 11: Land Use and Soils

Introduction

Current Situation

The way the existing information on land use has been collected. When it stopped. What are future projections.

Land use figures and changes during 1989-2004 (diagrams). (urban territories, different types of agricultural lands, forestry, erosion, loss of soils etc)

Dynamics of coastal erosion

Dynamics of desertification (due to abolishment of irrigation systems) for 1989-2004

Map of soils

Approaches to soil contamination monitoring

Key Challenges/Issues

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

Chapter 12: Geohazards

Introduction

Current Situation

General description of geohazards in Georgia

Map of sensitive areas (whole country and regions)

Diagrams showing changes in annual numbers of natural disasters (for 1995-2009)

Key Challenges/Issues

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

Chapter 13: Mineral Resources

Introduction

Current Situation

Short description of mineral resources

map of mineral resources

Main environmental problems resulting from mining

Amounts/share of annual use, life expectancy of mines

Geological map of Georgia

Key Challenges/Issues -

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.
Section 5: Biodiversity and Biological Resources

Chapter 14: Biodiversity

Introduction
Legislative and Policy Framework
International Frameworks and Conventions -
Current Situation -
Habitats
   Terrestrial
   Wetlands
   Inland Waters
   Marine and Coastal
Protected Areas
Species
Flora
   Lower Plants
   Vascular Plants
Fauna
   Invertebrates
   Fishes
   Amphibians
   Reptiles
   Birds
   Mammals
Protected Species -
Key Challenges/Issues
Sectoral Pressures (Fisheries, Agriculture, Forestry, Hunting)
Invasive Alien Species
Loss of Habitats and Species

Chapter 15: Biological Resources Management -

Introduction
Current Situation
Fisheries
Hunting
Forestry
Agriculture

**Key Challenges/Issues**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Section 5: Pressures**

**Chapter 16: Wastes**

**Introduction**

**The Current Situation -**

- Waste Generation
  - estimates for:
    - Municipal Waste
    - Industrial Waste
    - Medical Waste
- Data on waste recycling (existing facilities, types and volumes of recycled wastes)
- Waste Disposal -
  - number of landfills, short description
  - map of existing landfills
- Data on existing medical waste incinerators (numbers, capacity, location)
- Short description of transboundary of hazardous wastes

**Waste Management Infrastructure -**

Short explanation of situation with waste collection, transportation, disposal and future plans/projections.

**Key Challenges/Issues**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 17: Chemicals and Other Environmental Issues**

**Chemicals -**

- Short information about POPs in the country, undertaken and planned activities with this regards
- Consumption of Ozone Depleting Substances -

**Radioactivity -**

- Naturally Occurring Sources of Radioactivity -
  - Radon
  - Thoron
- Cosmic Radiation
- External Gamma Radiation
- Occupational
- Man-made Sources of Radioactivity
  - Artificial Radioactivity

"Support to improvement of environmental governance in Georgia"
Radioactivity Monitoring of the Georgian Environment

**Key Challenges/Issues -**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 18: Transport**

**Introduction:**

Importance of transport to the economy

**Current situation:**

Increase in vehicle numbers, cars, commercial (vans, trucks, busses etc)
Composition and age of national fleet
Numbers using public transport (Busses, metro)
Public transport as a share or overall passenger movement
Freight transport
Use of fuel in transport sector (move from one fuel type to another?)
Main emissions from transport

**Key Challenges/Issues**

Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

**Chapter 19: Industry and Energy**

**Introduction**

Importance of Industry as a sector contribution to economy.
Importance of Energy as a sector contribution to economy.

**Industry**

**Current Situation**

Main industrial sectors. Trends in production, sectoral changes.
Main pressures of industry on the environment
   - Air pollution
   - Waste generation
   - Surface water pollution
   - Groundwater pollution
   - Green house gas emissions

**Energy**

**Current Situation**

Main energy generation sectors, sectoral changes.
Energy Balance/Energy efficiency
Main pressures of industry on the environment
Air pollution
Waste generation
Surface water pollution
Groundwater pollution
Green house gas emissions

Key Challenges/Issues
Main issues, our response, its effectiveness, gaps, what needs to be done, what challenges lie ahead.

Section 6: Managing Our Environment

Chapter 20: Environmental Policy and Regulation
Organisational Responsibilities
Funding of Environmental Programmes -
International Co-operation -

Chapter 21: Environmental Permitting and Enforcement

Chapter 22: Research, Education and Awareness Raising

Chapter 23: Main Challenges – Summary