



United Nations Economic Commission for Europe
Working Group on Environmental
Monitoring and Assessment

Reporting to the progress made in Environmental
Monitoring and Assessment at the national level

This questionnaire has been designed to collect information on the results of major actions taken by the countries in environmental monitoring and assessment since the previous meeting of the Working Group (6-7 May 2019). The objective is to evaluate to which extent and how your country progressed in environmental monitoring and assessment, including through using the Shared Environmental Information System (SEIS) and the regular production of quality environmental indicators at the national level. The Working Group could then identify the needs of your country to be addressed in the future to underpin regular reporting and assessments, in accordance with international monitoring and assessment requirements and obligations.

The main aims of the questionnaire are to:

- Determine if the countries regularly produce environmental reports, analyses and assessments, including through using environmental indicators and SEIS
- Ensure that monitoring networks are upgraded or modernized, and that data quality assurance and control mechanisms and data management are in place or improved where needed, in particular for water, air and soil monitoring and data management
- Follow improvements in national environmental policy reflecting all three SEIS pillars (content, infrastructure and cooperation)
- Capture the implementation status of relevant recommendations made in national environmental performance reviews (EPRs)
- Foresee the challenges to be addressed by the Working Group in the years to come regarding institutional, regulatory mechanisms and infrastructure at the national level

If you wish to receive further information, or if you have any questions, please do not hesitate to contact us on WGEMASec@un.org.

Information on the person filling in the form

Ms. Mr.

First name: Maia	Family name: Javakhishvili
Function / Position: Deputy Head of Environment and Climate Change Department	
Organization: The Ministry of Environmental Protection and Agriculture of Georgia	
Address: Tbilisi, Marshal Gelovani Avenue 6	
Country: Georgia	Postal Code: 0159
Email: maia.javakhishvili@mepa.gov.ge	Telephone: +995595119751

Has your country produced any environmental report, analysis or assessment on environmental information and indicators, including via the use of SEIS, since May 2019?

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please specify which environmental report, analysis or assessment has been produced and provide the link to the website if available.

Environmental report, analysis or assessment	
1	The State of Environment Report of Georgia 2014-2017 https://mepa.gov.ge/En/Files/ViewFile/35552
2	Air emission inventory (NFR) 2007-2018 (June, 2020) https://webdab01.umweltbundesamt.at/download/submissions2020/GE_NFR2020.zip?cgiproxy_skip=1
3	Informative Inventory Report on emissions of air pollutants 2007-2018 (June, 2020) - will be available here: https://www.ceip.at/status-of-reporting-and-review-results/2020-submissions
4	Monthly bulletins “Brief Overview on State of Environment of Georgia” was developed by LEPL National Environmental Agency (NEA) (12 in 2019, 6 in 2020)
5	Yearbook of background radiation for 2018 was developed by NEA

Please note the main changes that have been made to improve the work of national monitoring networks, in particular on air, water and soil.

Changes	
1	<p>In 2017 the number of water monitoring points increased from 147 to 158. In 2018 to 167, in 2019 to 171 and in 2020 is planned in 176 points. Groundwater monitoring was conducted by NEA on 40 points in 2017, on 51 points in 2018, on 55 points in 2019. 530 drinking water samples were taken in 2017 (454 in 2016). 576 and 577 samples have been taken in 2018 and 2019 respectively.</p>
2	<p>In 2017 soil monitoring was conducted in 45 cities. In 2018 number of soil monitoring to 50. In 2019 in 53 and in 2020 is planned in 55 cities.</p>
3	<p>2 new automatic air quality monitoring stations were installed in Tbilisi and Rustavi in the first half of 2019. As a result, today 8 automatic air quality monitoring stations operate in Georgia, where concentration of NO₂, SO₂, CO, PM_{2.5}, PM₁₀ and Ozone are being measured. Despite the challenges due to Covid19 outbreak 3 stages out of 4 indicative measurements campaigns have been conducted in 25 cities of Georgia in 2020 and concentration of Ozone, Benzene and NO₂ have been measured. Measurement of Cd and Ni are already measured since August in three cities together with lead, while estimation of As and Benzo[a]pyrene content in the air is planned to commence from 2021 after the allocation of necessary equipment by the NEA.</p>
	<p>In 2018 new laboratory building for the Air, Water and Soil Analyses Laboratory were constructed which fully met international standards and requirements.</p>
4	<p>The draft by-law introducing requirements for air quality assessment criteria including air quality observation points, allocation and rules of operation in line with European standards of ambient air quality assessment has been developed. The by-law together with the new ambient air quality standards, which is in force since 2018, serve as a basis for the improvement of air quality monitoring and assessment systems.</p>
5	<p>The draft Georgia's Air Quality Monitoring Network Development Plan (Roadmap) has been developed. The Roadmap suggests that 21 automatic air quality monitoring stations are the minimum number for complying legislation requirements and the EU's best practices, and also it identifies</p>

28 stations as an optimal number. The Roadmap provides a first outline of zones and agglomeration for air quality assessment.

What types of improvements have been made in your country to enhance data quality assurance, control and data management?

Improvements	
1	Installation of air quality monitoring automatic stations significantly improved air quality data
2	Capacity of the NEA has been strengthened for the introduction of European data verification and validation system. In particular, relevant employees of NEA were trained by Italian expert in quality assurance of air quality data, which was very informative and productive. This will serve as a milestone in the transition from very limited validation procedures to much broader and precise ones.
3	The draft emission projection system and estimates for 2025 and 2030 has been developed and in being reviewed by the Ministry. Calculation of past emission inventory data is also foreseen by the end of 2020. These will serve to improve national air emission inventory data and relevant reports.

Which improvements in data policy, institutional and regulatory mechanisms and technical solutions have been applied in your country to facilitate and improve data exchange between the parties concerned (ministries of environment, environment agencies and ministries of agriculture, energy, health, industry, transport and water) and with other users, including the public?

Mechanisms and solutions

- 1 Memorandum of Understanding between the Ministry of Environmental Protection and Agriculture of Georgia and the National Statistics Office of Georgia (GEOSTAT) that lists data profiles for exchange and its exchange schedule has been updated in 2020.
- 2 Draft Decree of the Government of Georgia on the approval of the rule on the access to environmental information is elaborated and planned to submit to the Government for approval. Based on the list given in the draft decree all state administrative bodies are getting obliged to disseminate information / data through the Environmental Information and Knowledge Management System.
- 3 [National Strategy for the Development of Statistics in Georgia \(2020-2023\)](#) was approved, which includes development of environment statistics as one of the directions. At least one additional United Nations Economic Commission for Europe (UNECE) indicator should be calculated and published by 2023 according to the document.
- 4 Ambient Air Quality Portal – air.gov.ge - has been launched in 2019 to provide up to date information to the public on near real-time ambient air quality and emission reduction measures in a user-friendly manner.
- 5 The Water Information System of Georgia (WIS-Georgia) - wis.mepa.gov.ge - has been developed, which will be launched by the end of the year. The System enables the user to easily access the water resources related information and data including certain water-related indicators (e.g. Nutrients in Freshwater). It is bilingual and has been produced through a close collaboration between the key institutions. The responsibilities are distributed accordingly between the institutions to renew and update the indicators in the future.

6 The new website of the National Statistical Office of Georgia (www.geostat.ge) with improved interface was launched in 2019. The environmental indicators available on the website have been updated.

7 LEPL National Sustainable Land Management and Land Use Monitoring Agency was established. One of the main functions of the Agency will be an inventory of land resources, the creation of a land information system, and setting up an annual land balance.

8 The new Forest Code was adopted that introduces the Forest Information and Monitoring System (FIMS) in Georgia. FIMS pools and systematizes all forest related information and should have the access to other relevant databases of the country. FIMS aims to provide forest related information to the public as well as to support decision makers from various forest authorities. FIMS is currently under development.

Has your country made any changes in data policy within the last year?

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

If yes, please specify which changes.

Changes

The amendments to the Law of Georgia “on Ambient Air Protection” was adopted by the Parliament of Georgia on May 22 2020. Based on the amendments Georgia will fully switch to the European ambient air quality management system in line with appropriate EU directives. The amendment includes significant provisions on the access of air quality related data and information.

- In particular, according to the updated Law, the public must be regularly informed about the latest information on the concentration of harmful substances in the ambient air in a timely manner. Public information on the concentration of harmful substances in the ambient air should include at least data on the level of overdose, including the threshold value, alarm threshold, notification threshold or long-term tasks for regulated pollutants. Public information on the concentration of harmful substances in the ambient air should be accompanied by a brief assessment of the concentration of the air quality standard and relevant health information. The strict periodicity of information dissemination is also defined for major pollutants.

According to the amendment, Georgia is committed to provide air quality forecasts to the public from 2027.

- Please, see other findings on improvements in data policy above.

Please provide a list of activities undertaken by your country to implement the recommendations on environmental monitoring and assessment made in previous national environmental performance reviews (EPRs).

Recommendations

1 Recommendation 1.3.1 (a) Annual Air, Water, and Soil Monitoring Programme for 2020 was approved by NEA and relevant funding was also allocated.

Recommendation 1.3.1 (b) "Rules of Planning and Implementation of Water Resources Monitoring" and "Regulation on Surface Water Quality Ecological Standards" have been drafted in accordance with WFD requirements and will be submitted for adoption to the Government in 2019 (after adoption of the new "Law on Water Resources Management").

2 The new ambient air quality standard was approved in 2018, which is in line with the respective EU directives. The draft by-law introducing requirements for air quality assessment criteria including air quality observation points, allocation and rules of operation in line with European standards of ambient air quality assessment has been developed. The by-law together with the new ambient air quality standards serve as a basis for the improvement of air quality monitoring and assessment systems.

A draft resolution of the Government of Georgia "On Approval of the Technical Regulation on Soil Pollution Quality" was prepared. The draft Resolution will update the maximum permissible concentrations of soil heavy metal contamination and determine the hygienic requirements of soil protection against adverse impacts of various activities that may limit their use for agricultural and / or domestic purposes and / or adversely affect On the health of the present. The technical regulations also set out the rules for soil quality control;

3 Recommendation 1.3.1 (a) and 3.5.4 In the framework of the Environment and Security (ENVSEC) Initiative Project "Inventory and Assessment of Hazardous Waste Hotspots in Armenia and Georgia" inventory and assessment of hazardous waste hotspots was carried out in Georgia. 18 hotspots were identified during inventory. Monitoring and control of these sites is being implemented by NEA.

4 **Recommendation 3.5.4** With assistance of the United Nations Development Programme (UNDP) and Global Environment Facility (GEF) the National Inventory of Mercury was carried out in Georgia in 2016 and 2017 that assessed the policy/regulatory and institutional frameworks for the ratification and implementation of the Minamata Convention. The [report](#) was elaborated based on the outcomes of the project.

5 **Recommendation 2.3.1 (a, b, c)** In 2012 the first automatic monitoring station was installed in Tbilisi. Since 2016 non-automatic stations were replaced by modern automatic stations and new stations were installed in Tbilisi as well as in regions. At this stage 8 automatic monitoring stations in 4 cities are in place, where concentrations of NO₂, SO₂, CO, PM_{2.5}, PM₁₀ and Ozone are being measured. Measurement of Cd and Ni are already measured since August in three cities together with lead, while estimation of As and Benzo[a]pyrene content in the air is planned to commence from 2021 after the allocation of necessary equipment by the NEA. Near real time data from automatic stations is available for the public in a friendly manner at air.gov.ge. From 2015 the passive sampling started in Georgian cities and nowadays it is conducted in 25 cities and NO₂, O₃ and Benzene concentrations are measured. Measurements of PM₁₀, PM_{2.5} are conducted on all automatic stations. According to the draft Georgia's Air Quality Monitoring Network Development Plan (Roadmap) 21 automatic air quality monitoring stations are the minimum number for complying legislation requirements and the EU's best practices, and also it identifies 28 stations as an optimal number. For the matter, an assistance request was submitted to the EU for the allocation of appropriate funds in the frame of a planned new project.

Measurement of E.coli, T.coli, s.faecolis in Aragvi River has been started in 2015 and monitoring points have been increased to 4 by 2017. Monitoring of microbiological parameters has launched on 4 additional lakes of Georgia in 2017, in 2018, 2019 and 2020 microbiological monitoring was conducted in 4 rivers and 4 lakes.

Recommendation 3.3.2 (a)

6 Ambient Air Quality Portal – air.gov.ge - has been launched in 2019 to provide up to date information to the public on near real-time ambient air quality and emission reduction measures in a user-friendly manner.

An Interagency Commission for Studying Air Quality Improvement Issues was created on July 24, 2020. The main goals of the commission is

to develop local and national policy documents in the field of ambient air protection in line with bilateral and international commitments.

Recommendation 3.3.2 (b)

Georgia develops Air Emission Inventory (NFR) and Informative Inventory Report (IIR) on emissions of air pollutants and submits to the EMEP secretariat annually. Last NFR is available here:

https://webdab01.umweltbundesamt.at/download/submissions2020/GE_NFR2020.zip?cgiproxy_skip=1 and IIR will be available here:

7 <https://www.ceip.at/status-of-reporting-and-review-results/2020-submissions>

Development of air quality modelling for particular cities is requested within the planned EU funded project.

The National Environmental Agency (NEA) produces yearly assessment reports based on air quality monitoring data which is published on the Agency's website: www.nea.gov.ge

8 **Recommendation 3.4.2** In 2017 the number of water monitoring points increased from 147 to 158. In 2018 to 167, in 2019 to 171 and in 2020 is planned to 176 points. Groundwater monitoring was conducted by NEA on 40 points in 2017, on 51 points in 2018, on 55 points in 2019.

Recommendation 3.13.4:

9 Monitoring of water quality in some selected lakes is conducted during the bathing season from May till October.

10 **Recommendation 3.13.3** 530 drinking water samples were taken in 2017 (454 in 2016) to check the compliance with existing norms. 576 and 577 samples have been taken in 2018 and 2019 respectively.

11 **Recommendation 3.6.1** The draft Law on Biodiversity has been prepared which covers various aspects of biodiversity conservation. At the same time, the draft law sets an obligation to establish the National Biodiversity Monitoring System. The aim of the biodiversity monitoring is to assess the status and trends of biodiversity (including species and their habitats), identification of causes of biodiversity degradation to ensure that relevant policy and response actions are undertaken. The priority species and habitats for the National Monitoring System will be those listed in the protected and strictly protected species lists. The draft law also authorizes the Ministry to receive information required for the monitoring system from the various organizations such as governmental,

non-governmental, research and educational institutions, as well as citizens. The structure and rule of functioning of the System will be determined by the Provision on National Biodiversity Monitoring System that will be elaborated after the adoption of draft Law on Biodiversity.

In addition, the development of the fact sheets of the selected indicators for the National Biodiversity Monitoring System is at the final stage within the Ministry. Current process will be followed by communicating the results to the general public. The Ministry plans to continue publishing the results as a series of BioTrends as they were produced several years ago.

- 12 Recommendation 2.3.2** Draft Decree of the Government of Georgia on the approval of the rule on the access to environmental information is elaborated and planned to submit to the Government for approval. Based on the list given in the draft decree all state administrative bodies are getting obliged to disseminate information / data through the Environmental Information and Knowledge Management System.

[National Data against UNECE environmental indicators](#) are available on the web-page of the National Statistics Office of Georgia.

- 13 Recommendation 2.3.3** The Government Decree “Rules for the Development of the National Report on the State of Environment” was updated on December 3, 2019 based on which the last state of environment report was elaborated and approved on December 30, 2019. The State of Environment Report 2014-2017 is available on the website of the Ministry of Environmental Protection and Agriculture: mepa.gov.ge. The updated decree revised the structure of the SoER taking into consideration the experience of Slovak Republic. The new structure of the report and its chapters ensure that the report is more reader-friendly. The decree also guarantees right for the public to participate in the preparation and consideration of the draft report obligating the ministry to conduct public hearing of the document.

- 14 Recommendation 3.11.1** The new Forest Code was adopted on May 22, 200 that introduces a completely new rule of forest categorization. The category of any forest will be established based on its functional purpose. The relevant by-law will be elaborated after the adoption of the Forest Code to define the details of regulation.

- 15 Recommendation 3.3.4** Ambient Air Quality Portal – air.gov.ge - has been launched in 2019 to provide up to date information to the public on
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near real-time ambient air quality and emission reduction measures in a user-friendly manner. Air emissions inventory data is also available on the portal.

The information on annual emissions from stationary sources is available in a user-friendly manner on interactive maps at map.emoe.gov.ge.

What do you think are the main challenges for your country with regard to institutional, regulatory mechanisms and infrastructure at the national level?

Challenges	
1	Insufficient air quality monitoring stations; Lack of qualified staff and financial resources to properly maintain air quality monitoring stations all over the country; Absence of air quality modelling and forecasting system. Lack of established procedures for air quality data verification and validation.
2	Development of regulation for compliance of water monitoring system in line with the Water Framework Directive, including introduction of a water classification system.
3	Update of soil pollution monitoring and assessment system is needed
4	Currently, the maintaining and updating information in the Forest Information and Monitoring System (FIMS) is the responsibility of the Ministry (Biodiversity and Forestry Department). The instructions and the regulatory framework of the System are under development and will be adopted by the Minister's Decree. Regulatory framework is not fully in place;
5	Absence of legal framework for biodiversity monitoring (draft Law on Biodiversity is prepared, which will define subsidiary legislation for the National Biodiversity Monitoring System responsibilities and roles of various agencies). Lack of human and financial resources to conduct monitoring.

Please indicate any other information you think may be relevant. Please also indicate how the Working Group could assist in facilitating environmental monitoring and assessment in your country and region.

Provide information on best examples of affordable, but effective methodology used for biodiversity indicators, data systematization and methodology for further analysis.