



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 (27-28 June 2017). 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

The secretariat will also provide a list of relevant recommendations contained in UNECE environmental performance reviews against which countries might report on progress.

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 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, within the last year?

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	Air emission inventory (NFR) 2007-2016 (February 2018) - http://www.ceip.at/ms/ceip_home1/ceip_home/status_reporting/2018_submissions/
2	Informative Inventory Report on emissions of air pollutants 2007-2016 (March 2018) - http://www.ceip.at/ms/ceip_home1/ceip_home/status_reporting/2018_submissions
3	Monthly bulletins “Brief Overview on State of Environment of Georgia” was developed by LEPL National Environmental Agency (NEA) (12 in 2017, 6 in 2018)
4	Yearbook on soil quality 2016 was developed by NEA in 2017
5	Yearbook on air quality for 2016 and for 2017 was developed by NEA in 2016 and 2017 respectively
6	Yearbook on water quality 2016 was developed by NEA in 2017
7	Yearbook of background radiation for 2016 and for 2017 was developed by NEA in 2016 and 2017 respectively
8	Daily bulletins on air quality (data of automatic monitoring stations) was developed by NEA (365 in 2017; 232 in 2018)
9	Quarterly reports on air quality (data of passive sampling) was developed by NEA (4 in 2017; 2 in 2018); Link to last report: http://nea.gov.ge/uploads/slides/5b62eaefb4779.pdf
10	Global Forest Resources Assessments (FRA) - http://www.fao.org/forest-resources-assessment/en/ ; http://www.fao.org/3/a-i4808e.pdf ; http://www.fao.org/3/a-az219e.pdf
11	State of Forest Europe - https://foresteurope.org/state-europes-forests-2015-report/ ; https://www.foresteurope.org/docs/fullsoef2015.pdf ;

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 number of water monitoring points increased from 147 to 158. In 2018 it is planned to increase number of water quality monitoring points to 167. Groundwater monitoring was conducted by NEA on 40 points in 2017 and it is planned to increase the number to 51 in 2018. 530 drinking water samples were taken in 2017 (454 in 2016). 202 samples have been taken already in 2018.</p>
2	<p>In 2017 soil monitoring was conducted in 45 cities. In 2018 for soil monitoring it is planned to increase number of cities to 50.</p>
3	<p>In 2017 2 new automatic air quality monitoring stations were installed in Batumi and Kutaisi. In 2018 the first mobile automatic air quality monitoring was purchased. As a result, today 8 automatic air quality monitoring stations operates in Georgia.</p>
4	<p>The draft new Forest Code is elaborated that introduces National Forest Inventory in Georgia for the first time. National Forest Inventory activities will commence in ongoing year. Aforementioned activities are supported by the Federal Republic of Germany, under the framework of German Corporation for International Cooperation GmbH (GIZ) program “Integrated Biodiversity Management, South Caucasus”. The National Forest Inventory will serve as a powerful, objective information source and tool for forest related policy processes and strategic planning. The National Forest Inventory will cover the forest of the whole country independent of the management authority and protection status. The National Forest Inventory will provide scientifically reliable data about important economic characteristics of the forest, its development, degradation status and biodiversity;</p> <p>In recent decades, forest inventories have not been carried out in the majority of the State forest fund. Consequently, the State has almost no information about the actual condition of the State forest fund. Since 2013 regular Management Level Inventories/taxation have been started again. They are basis for the elaboration 10-year forest management plans for the individual forest districts.</p>

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
	The following improvements took place in the field of forestry: systematic sample plots assessment (permanently and invisibly marked plots);
2	digitalization of most of the forest relevant information; transformation of the excel files (in which the data was stored in previous years) in to the electronic systems.
3	<u>The Electronic Air Pollution Reporting System from Point Sources</u> significantly improved air quantity data
4	
5	

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 All data on environmental pollution monitoring is published on the website of the NEA (www.nea.gov.ge);
- 2 Order of the Minister of Environment and Natural Resources Protection of Georgia (N12; 27.03.2017) on proactive dissemination of public information, standard of requesting electronic public information and access to environmental information was approved in 2017 (currently, it operates at the level of the Ministry of Environmental Protection and Agriculture of Georgia).
- 3 Draft Decree of the Government of Georgia on the approval of the rule on the access to environmental information is elaborated and planned to be submitted to the Government for approval.
- 4 [Waste management electronic reporting system](#) was launched in 2018 and waste generators, transporters and recyclers now have opportunity to register their businesses and carry out record keeping/reporting on the amounts of generated, transported and recycled wastes electronically. Since 2019 waste related businesses will be obliged to provide annual quantitative report to state through the system.
- 5 Development and strengthening of national databases on water related issues for pilot river basins (Alazani-Iori and Khrami-Debeda) started in 2018 with support of EUWI+ project
- 6 On 27 July 2018 Government of Georgia adopted Governmental Decree # 383 on Air Quality Standards. The sub-law sets out legal requirements on dissemination of air quality data between interested parties (the public as well as appropriate organisations such as environmental organisations, consumer organisations, organisations representing the interests of sensitive populations, other relevant health-care bodies and the relevant industrial federations).
- 7 The [web-based Forest and Land-use Information and Decision Support \(FLUIDS\) system](#) was established. FLUIDS system is a data management tool that stores, organizes and integrates large amounts of forest and land-use

- related data from multiple sources, as well as, provides ability for performing required analysis;
- The draft new Forest Code is elaborated that introduces Forest Information and Monitoring System (FIMS) in Georgia. FIMS pools and systematizes all forest related information and should have the access to other relevant data bases of the country. FIMS aims to provide to forest related information to public as well as to support decision makers from various forest authorities. FIMS is currently under the development.
- Under the GEF funded project “Enhancing Environmental Monitoring and Reporting in Georgia” implemented by UNDP Environmental Information and Knowledge Management System (eims.eiec.gov.ge) is under development, covering the climate change, desertification and biodiversity related data and information. The system ensures exchange of environmental information between various stakeholders. The system will collect data against various indicators, including those required for reporting to the CBD, UNCCD and UNFCCC. Currently, the system is under test regime.
- Electronic monitoring system of industrial fishing has been introduced on the license-holders’ watercrafts in the Black Sea for live-feed control of extracted fish since 2017. The production of electronic fishing logbooks began from October 1st, 2017. The technical characteristics and terms of use of the electronic monitoring system were defined in the "Technical Regulation of Fishing and Fish Stock Protection".
- [The Electronic Air Pollution Reporting System from Point Sources](#) was developed and since 2017, information on annual emissions from stationary sources are reported by operators through this system.
- The Ministry of Environmental Protection and Agriculture also develops the Water Use State Accounting Online System, which will replace the existing outdated system.

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

Yes

No

If yes, please specify which changes.

Changes

- 1 Please, see above findings on improvements in data policy.
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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 (b)** "Rules of Planning and Implementation of Water Resources Monitoring" has 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 **Recommendation 1.3.1 (b)** "Regulation on Surface Water Quality Ecological Standards" has 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")
- 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 was identified during inventory. Monitoring and control of this 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 in regions as well as in Tbilisi non-automatic stations were replaced by modern automatic stations and new stations were installed. Namely, in 2016 in Tbilisi (3 stations), Chiatura and Batumi and in 2017 - in Kutaisi and Batumi. In 2018 the first mobile air quality monitoring station was purchased. Data from automatic stations is available for public as a daily bulletins on nea.gov.ge. From 2015 the passive sampling started in Georgian cities and nowadays it is conducted in 25 cities and SO₂, NO₂, O₃ and VOCs concentrations are measured. Measurements of PM₁₀, PM_{2.5} are conducted on all automatic stations. 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.

6 Recommendation 3.3.2 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

7 Recommendation 3.4.2 In 2017 number of water monitoring points increased from 147 to 158. Groundwater monitoring was conducted in 40 points. In 2018 it is planned to increase number of water quality monitoring points to 167 and number of groundwater monitoring points from to 51.

8 Recommendation 3.13.3 530 drinking water samples were taken in 2017 (454 in 2016) to check the compliance with existing norms. Out of these 156 samples (147 in 2016) were taken from centralized system of small-scale rural water supplies. 202 samples have been taken already in 2018 and 58 samples derives from rural water supplies.

9 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 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, biodiversity monitoring indicators are prepared and a process is ongoing to develop methodologies for indicators in active cooperation with international organisations.

10 Recommendation 3.3.2 (a) Interagency Commission on Atmospheric Air Pollution Reduction Issues was established in 2016. [The State Program on Measures to facilitate Reduction of Atmospheric Air Pollution in Tbilisi](#) was developed by the Commission and approved by the Decree of the Government of Georgia #1457 July 12, 2017. To support implementation of the State Program, the draft action plan on raising public awareness on air pollution and quality is elaborated and information campaigns are being conducted by the LEPL Environmental Information and Education Centre.

Recommendation 2.3.2 Letter of Intent between the Ministry of Environment and Natural Resources Protection of Georgia and the National Statistics Office of Georgia, on the one part and the European Environment Agency, on the other part on 6 November, 2017. The Letter of Intent was signed in the framework of ENI SEIS II project and aims to facilitate implementation of the project in Georgia.

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

[The Electronic Air Pollution Reporting System from Point Sources](#) was developed and since 2017, information on annual emissions from stationary sources are reported by operators through this system.

- 11** [Waste management electronic reporting system](#) was launched in 2018 and waste generators, transporters and recyclers now have opportunity to register their businesses and carry out record keeping/reporting on the amounts of generated, transported and recycled wastes electronically.

Interagency Commission on Atmospheric Air Pollution Reduction Issues was established in 2016. [The State Program on Measures to facilitate Reduction of Atmospheric Air Pollution in Tbilisi](#) was developed by the Commission and approved by the Decree of the Government of Georgia #1457 July 12, 2017.

The Ministry of Environmental Protection and Agriculture also develops the Water Use State Accounting Online System, which will replace the existing outdated system.

- 12** **Recommendation 2.3.2** The Government Decree “Rules for the Development of the National Report on the State of Environment” was approved on May 6, 2014. The Decree distributes all the responsibilities at the government level and obliges stakeholder government agencies, autonomous authorities and local self-governments to providing relevant information/data to the Ministry of Environmental Protection and Agriculture no later than 2 months after request. Also, the Decree sets procedures for public participation in the development of State of Environment Report. Based on Decree the State of Environment Report 2010-2013 was elaborated and become available for the public on the [web-page of the Ministry](#).

The topical environmental reports – yearbooks are developed by NEA and is available on nea.gov.ge

- 13** **Recommendation 3.11.1** The draft new Forest Code is elaborated 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.

- 14 Recommendation 3.3.4** Data from automatic air monitoring stations is available for public as a daily bulletins on nea.gov.ge. The information on annual emissions from stationary sources is available in user-friendly manner on maps (see [2016-2017 map of air emissions from stationary sources](#)). The data derived from the passive samplings is available in PDF format (see [last report of II quarter of 2018](#)) as well as it is integrated on maps (see [data of VII stage of passive samplings in Spring of 2017](#)).

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 network (lack of monitoring stations); Lack of necessary qualified staff to properly maintain air quality monitoring network all over the country; Live data from the automatic air quality monitoring stations are not available online; Air quality modelling and forecasting system doesn't exist;
- 2** Absence of legal framework for biodiversity monitoring (draft Law on Biodiversity is prepared). Lack of human and financial resources to conduct monitoring.
- 3** The responsibilities for maintaining and updating information in Forest Information and Monitoring System (FIMS) are not yet clarified; As well as Insufficient human capacity for establishing and maintaining the FIMS is another challenge. Regulatory framework is not fully in place (draft Forest Code is prepared waiting for submission to the parliament of Georgia);
- 4**
- 5**

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.

Additional Information:

International organizations such as GIZ, WRI, GEF, etc. are supporting the development of Forest Information and Monitoring System in Georgia. This financial and technical assistance is sufficient to address existing challenges in forest sector, in particular for:

1. Installation necessary hardware;
2. Development of appropriate software solutions;
3. Implementation of capacity building activities for the employees of responsible institutions.

Needs:

The Working Group can assist if possible in introduction of air quality modelling and forecasting system.