WORKING GROUP ON ENVIRONMENTAL MONITORING and ASSESSMENT (WGEMA)

Issue 3, March 2017



UNECE

Newsletter for the Working Group on Environmental Monitoring and Assessment



Content

- Twenty-Second Session of the Committee on Environmental Policy
- New Mandate and ToR for the Working Group
- New Chief of Section
- ENI SEIS II East
- Environmental Performance Reviews
- Nexus assessments of the Sava and Syr Darya River Basins
- Impact of air pollution on natural vegetation and crops
- Russian language resources in support of Environment Statistics
- Environmental indicators in the former Yugoslav Republic of Macedonia
- Third twining project for air quality in the former Yugoslav Republic of Macedonia
- Upcoming Events

Twenty-Second Session of the Committee on Environmental Policy

The twenty-second session of the UNECE Committee on Environmental Policy (CEP-22) took place in Geneva between 25 and 27 January in Palais des Nations. Delegations from most of the member States of the United Nations Economic Commission for Europe (ECE) attended the meeting.

The CEP-22 addressed several questions and events that have followed after CEP-21 in 2015. One of the main focuses was the follow-up of the Eighth EfE Ministerial Conference and preparation of the mid-term review of the Conference's main outcomes. Several countries including Germany, Switzerland and Moldova shared their experiences on implementing the BIG-E commitments.

Other items on the CEP-22 agenda included presentations on the recently published Environmental Performance Reviews (EPRs) of Bulgaria and Tajikistan (see p. 4 for more information). The agenda item on the EPRs considered cooperation between countries and the international

community based on previous EPRs, and the role of the EPRs in achieving the SDGs in the pan-European region.

The CEP-22 furthermore included an update from all the ECE multilateral environmental agreements as well as considering cross-sectoral activities, such as education for sustainable development, transport, the health and environment pan-European programme, the environment and security initiative and green building developments, to note a few. Furthermore, CEP-22 considered the programme of work of the environment subprogramme, including a discussion on the role of gender in environmental activities and an overview of resources for environmental activities. Lastly, there was a presentation and exchange of views about the second and third sessions of the United Nations Environment Assembly (UNEA).

All documents and presentations from session can be found here: http://www.unece.org/index.php? id=42766#/



New **Mandate** and **Terms of Reference** for the Working Group on Environmental Monitoring and Assessment

The recent CEP-22 included an agenda item on environmental monitoring, assessment and reporting (agenda item 6). The main purpose for this agenda item was to consider the proposed new terms of reference and mandate for the Working Group on Environmental Monitoring and Assessment.

During the course of the meeting, the secretariat presented the proposal for a renewal of the mandate and terms of reference of the Working Group. The session also included a presentation on the progress of work of the Working Group and of the Joint Task Force on Environmental Statistics and Indicators as well as a presentation by a representative from the Group on Earth Observations (GEO) secretariat and an update on environment-related activities by the UNECE Statistical Division.

We are happy to announce that the new terms of reference were approved by the Committee and we now have a running mandate leading up to 2021. The secretariat would also like to take this opportunity to thank everyone for their contributions to this process.

Inputs from our members provided the foundation for the new mandate and terms of reference and has helped to set a pathway for our continued work together.

The renewed mandate for the Working Group takes into consideration three main points: (a) Inputs provided by the members of the Committee on Environmental Policy during its twenty-first session; (b) The Batumi Ministerial Declaration "Greener, cleaner, smarter!" and to have SEIS in place in the countries of Europe and Central Asia by 2021; and (c) The Working Group's request to engage in a consultative process.

The mandate outlines the objectives of the Working Group, planned activities, timetable, methods of works, membership and secretariat support and resources.

More information as well as a copy of the renewed mandate and terms of reference can be found here: http://www.unece.org/index.php?id=42766#/

New Chief for the **Operational Activities and Review Section**in the Environment Division

We are delighted to announce that Nicholas Bonvoisin has been selected to become the new Chief of the Operational Activities and Review Section in the UNECE Environment Division.

Mr. Bonvoisin has been with the Environment Division, in various functions, since 2002. He is familiar with many of our areas of work, including the Espoo Convention, the Industrial Accidents Convention, the Water Convention, and he has been acting temporarily as Chief of Section of the Operational Activities and Review Section as well as of the Transboundary Cooperation Section in the past.



We are happy to congratulate Mr. Bonvoisin on his new appointment and wish him success as the new Chief of Section. We also look forward to welcoming Mr. Bonvoisin at our next Working Group meeting in June, 2017.

ENI SEIS II East

The European Environment Agency (EEA) is implementing the EU funded ENI SEIS II East project that promotes the principles of a Shared Environmental Information System (SEIS) in the six Eastern Partnership countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. The project is managed by the EEA because of its extensive experience in facilitating cooperation and developing expertise through the European Environmental Information System and Observation Network (Eionet).

The outcome of the inception phase was discussed at the first regional Steering Committee (November 2016). To address the "cooperation" dimension of SEIS, the establishment of SEIS National Implementation Teams (NIT) is seen as key.

These teams will facilitate the communication and coordination between institutions and ensure that data policies and inter-institutional agreements are in place to allow the operationalisation of national environmental information systems.



The project's first year focused on developing a regional and national work plans. These work emphasise the production of the regionally agreed set of environmental indicators, their use in national State of Environment (SoE) reports and indicatorbased assessments. Capacity building and technical assistance are foreseen on practices and methodologies applied within the Eionet and the EEA. Alignment to the requirements of the internationally accepted methodologies and statistical standards in support of SEIS concept such as United Nations System of Environmental-Economic Accounting (SEEA) and UN Framework for the Development of Environment Statistics (FDES). The ENI SEIS II East project will promote the use of the European environmental knowledge platforms, such as the Water Information System for Europe (WISE) and the Biodiversity Information System for Europe (BISE) to develop regional and national actions in the Eastern Partnership region leading to establishment and/or development of comparable thematic information systems at country level.

A common EEA-UNECE-UNEP approach to support national, regional and global reporting on the state of the environment has been agreed and promoted since 2015. Regular high-level discussions between EEA, UNECE and UNEP Regional Office for Europe reflect a shared understanding of the challenges and opportunities to establish a regular assessment and reporting process across the region in support of SEIS. The ENI SEIS II East project builds on the synergies between the three partners.

More information:

http://eni-seis.eionet.europa.eu/east

Environmental Performance Reviews (EPR)

The Environmental Performance Review Programme assesses progress made by individual countries in reconciling their economic and social development with environmental protection, as well as in meeting international commitments on environment and sustainable development.



Third EPR of Bulgaria

The third Environmental Performance Review of Bulgaria was carried out in 2016, and recommendations to the country on how it can improve its environmental governance were adopted by the ECE Committee on Environmental Policy in January 2017. The third review examines the progress made by Bulgaria in the management of its environment since the second review in 2000.

It covers legal and policymaking framework and its practical implementation, economic instruments for environmental protection and the financing of environmental expenditures, environmental monitoring, information and education, implementation of international agreements and commitments.

It addresses climate change issues, air protection, water management, waste management, biodiversity and national ecological networks areas and discusses integrating environmental concerns into energy sector. It makes suggestions for strengthening efforts towards a comprehensive and systematic response to sustainable development challenges.

Third EPR of Tajikistan

The second Environmental Performance Review (EPR) of Tajikistan was carried out in 2010. This third review assess the progress made by Tajikistan in managing its environment since the second EPR and in addressing new environmental challenges.

The second Environmental Performance Review (EPR) of Tajikistan was carried out in 2010. This third review assessed the progress made by Tajikistan in managing its environment since the second EPR and in addressing new environmental challenges.

The timing of this review coincides with the finalization of work on the Millennium Development Goals (MDGs). The review describes progress made by Tajikistan in achieving MDGs. Moreover, it aims to assist Tajikistan in developing an aspirational national agenda for implementation of the global Sustainable Development Goals.

In addition to environmental governance and financing, the third review of Tajikistan evaluates the country's efforts to abate air pollution, enhance the management of water resources, reduce waste, preserve biodiversity and improve environmental monitoring and information. It addresses the integration of environmental considerations in the agriculture, industry, energy, transport, housing and health sectors, as well as risk management of natural and technological hazards.

The outcomes of the third EPR of Tajikistan, including recommendations to the country, was discussed by the UNECE Committee on Environmental Policy at its meeting in Geneva in January 2017, with the participation of high-level officials from the Government of Tajikistan.

Environmental Performance Reviews are available online at: http://www.unece.org/env/epr/



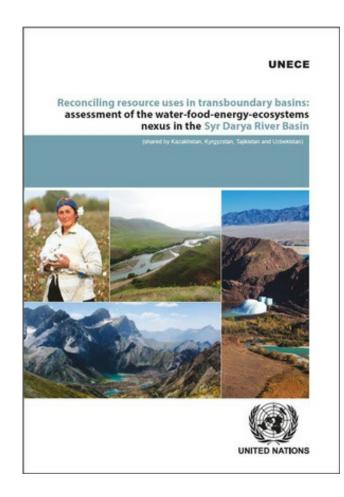
Nexus assessments of the Sava and Syr Darya River Basins

The "nexus approach" to managing interlinked resources has emerged as a way to enhance water, energy and food security by increasing efficiency, reducing trade-offs, building synergies and improving governance, while protecting ecosystems.

Publications containing the results of a nexus assessment of the Syr Darya River Basin, shared by Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan and of the Sava River Basin shared by Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia are now available. These assessments were carried out in the framework of the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes. The methodology employed was developed specifically for assessing intersectoral links, trade-offs and benefits in transboundary basins with multi-disciplinary expertise.

The assessments aimed to foster transboundary cooperation by jointly identifying intersectoral synergies and determining measures that could reduce tensions about the use of common resources. The process looked to generate relevant information to support decision-making, and it engaged diverse expertise and key actors in the basins.

The participatory assessment process for the Syr Darya and the Sava River Basin involved intersectoral workshops to identify key issues and solutions; detailed by a subsequent analysis, and followed by consultations of the various sectoral authorities concerned.



The nexus assessments will include the identification of solutions and recommendations to improve the management of the basin's land, water, energy and ecosystems. Both in the Syr Darya and the Sava Basins, improving basin-wide monitoring, data verification and exchange, and knowledge-sharing, including joint monitoring of water quantity, quality and

hazards will allow for better development planning. Valuable to that end would also be joint forecasting, including demands (e.g. energy). Importance of timely sharing of information and adequate transparency and accessibility to key stakeholders should also be underlined.

The Syr Darya River Basin Assessment: http://www.unece.org/index.php?id=45042

The Sava River Basin Assessment: http://www.unece.org/index.php?id=45241

New evidence shows **impact of air pollution** on natural vegetation and crops

While there is increasing awareness about the health effects of air pollution, its impact on ecosystems and crops is sometimes overlooked. Recent air pollution peaks in Warsaw, Krakow and other cities in Poland and other parts of Europe also have significant effects on plant life. This, in turn, impacts on agricultural yields and food production and can lead to significant economic losses.

An international group of scientists held their annual meeting, hosted by the Poznan University of Life Sciences and the Institute of Botany, Poland, from 14 to 17 February 2017, to review new evidence of the impacts of certain air pollutants on vegetation and discuss the consequences for biodiversity.

The meeting was attended by some 100 experts from 25 countries. The group of scientists, known as the International Cooperative Programme on Effects of Air Pollution on Natural Vegetation and Crops (ICP Vegetation), established within the framework of the UNECE Convention on Long-range Transboundary Air Pollution, has worked to improve the understanding of the impacts of air pollution on crops and other vegetation for the past 30 years. ICP Vegetation is led by the Centre for Ecology & Hydrology in the United Kingdom.

Impact on food production and economic consequences

Some crops have been found to be particularly sensitive to certain types of air pollution. Ground-level ozone — formed when emissions from cars (e.g., nitrogen oxides) react with other pollutants in sunlight — affects plant growth and is estimated to cause relative global crop losses for staple foods like soy (6%-16%), wheat (7%-12%) and maize (3%-5%).

At the European level, studies have estimated that the economic losses owing to the impact of ozone on 23 crops amounted to €6.7 billion, with global losses estimated at up to US\$ 26 billion. Scientists at the meeting in Poznan considered new critical ozone levels for sensitive plant species to quantify the risks to vegetation posed by ozone pollution.

Mosses as monitors of pollution.

Since 1990, naturally growing mosses have been sampled every five years in the framework of ICP Vegetation. Mosses are used as so-called biomonitors of atmospheric deposition of pollutants, such as heavy metals and nitrogen, to assess spatial pollution concentration patterns and temporal trends across Europe and beyond. Mosses thus provide a good indication of areas at risk from high pollutant deposition. Participants at the meeting discussed progress within the 2015/16 moss monitoring survey, welcomed the contributions of many scientists from countries in Eastern Europe, the Caucasus and Central Asia and encouraged further contributions from countries in Asia, Africa and South America in ICP Vegetation's work.

United Nations Statistics Division's **Russian language resources** in support of Environment Statistics

The United Nations Statistics Division (UNSD) continues to work with the Working Group on Environmental Monitoring and Assessment and the Joint Task Force on Environmental Statistics and Indicators in areas of common interest. UNSD has the following resources available in both English and Russian to support UN member states' development of environment statistics.

The *Basic Set of Environment Statistics**: This is a comprehensive, but not exhaustive, set of statistics designed to support countries developing national environment statistics programmes by helping them make decisions on priorities for statistical development. It is embedded in the Framework for the Development of Environment Statistics 2013 (FDES) and consists of 458 individual statistics organized into the structure of the FDES (components, sub-components and topics). https://unstats.un.org/unsd/environment/FDES/BasicSet.htm

Introduction, Part I and Part II of *The Environment Statistics Self-Assessment Tool (ESSAT)**: UNSD, in collaboration with the Expert Group on Environment Statistics, has developed the ESSAT in support of the FDES 2013. The purpose of the ESSAT is to assist countries in both developing their environment statistics programmes and collecting their own data on the environment, and to assess the state of environment statistics and the needs for their development at the national level consistent with the scope of the FDES 2013.

https://unstats.un.org/unsd/environment/FDES/essat.htm

A brochure with further detail on the FDES is available here: https://unstats.un.org/unsd/environment/fdes.htm

Environmental indicators in the former Yugoslav Republic of Macedonia and **progress in the implementation of SEIS** at the national level

The Environmental Information Center, as a Department of the Ministry of Environment and Physical Planning of the former Yugoslav Republic of Macedonia, is responsible for monitoring and reporting on the state-of-the-environment.

Pursuant to the provisions of the Law on Environment, the Ministry, has adopted 40 environmental indicators for 12 chapters in 2008, thus identifying the indicators that are relevant at the national level. The development of various indicators and the preparation of the national Indicator Report on the Environment, is a dynamic process that is subject to continuous updating and improvement, as well as compliance with provisions of national environmental legislation. It is outlined that the basic set of indicators should be updated and supplemented every two years.

Between January and October 2016, the Ministry has updated and supplemented the indicators from year 2014. The following aspects were taken into account during the preparation:

- National priorities,
- Recommended core set of indicators and the EEA core set of environmental indicators,
- Harmonization with UNECE and Eurostat indicators.

^{*} Russian translation provided by the Eurasian Economic Commission.

A total of 77 indicators were prepared out of which 40 indicators have been updated and supplemented with new available data. 22 new indicators have been added to the list and 15 indicators have not been updated given the lack of data and information. The indicators are divided into 13 specific areas, including air, nature, climate, soil, waste, water, agriculture, energy, fisheries, transport, health, tourism and costs for environmental protection. A chapter on the costs of environmental protection has been introduced for the first time in this reporting cycle.

It is particularly important that the national environmental indicators are continuously updated, amended, and are made publicly available on the website of the Ministry: http://www.moepp.gov.mk/?page_id=746 (Macedonian) http://www.moepp.gov.mk/?page_id=746&lang=en (English)

The former Yugoslav Republic of Macedonia is an active participant in the Working Group on Environmental Monitoring and Assessment, and is part of the process of developing a mechanism for a Shared Environmental Information System (SEIS). In the first phase of implementation in the year 2015, from 67 specific data sets (part of eight thematic areas), we have managed to provide 73% of the requested data.

By updating the national indicators in 2016, the former Yugoslav Republic of Macedonia made a significant progress in the implementation of a SEIS. 11 new data sets have been prepared, out of which 9 have been provided from the national emission inventory for polluting substances. This means that progress was achieved with 16% increase compared to 2015, resulting in a delivery of 89% of the requested data.

Achievements within the **third twining project** for air quality in the former Yugoslav Republic of Macedonia

Air pollution continues to be a severe risk to the human health in the country. The limit and target values set in the legislation for pollutant concentrations, i.e. for particulate matter are significantly exceeded throughout the country. The European Union has supported the improvement of the national capacities in air quality management with the main aim for gradual improvement of air quality over last ten years. To continue this support, the European Union, through the Instrument for Pre-Accession Assistance, funded the Twinning Project 'Further strengthening the capacities for effective implementation of the acquis in the field of air quality'. The project duration was 21 months (May 2015 to January 2017) with a budget of 1.1 million Euros.

The main beneficiary institution of the project was the Ministry of Environment and Physical Planning. The Institute of Public Health, City of Skopje and other municipalities also participated in the project activities. The main EU member state partners were the Finnish Meteorological Institute and Environment Agency of Austria.

The main purpose of the project was to strengthen the administrative capacities in the area of air quality management and health impact assessment of air pollution by implementing the appropriate EU acquis. The activities of the project supported the beneficiaries in making the necessary reforms and improvements for the implementation of air quality legislation.

During the project the capacities of the beneficiaries were strengthened in relation to air quality monitoring, data management and reporting. Emission inventories for different sectors and air quality assessment methodologies were improved to gain more scientifically sound information as regards to the causes of air pollution. Significant efforts were put into definitions of local level measures to improve air quality with the preparation of the air quality improvement plans for Skopje region and municipality of Tetovo. Furthermore, the project activities included development of methodologies for health impact assessment of air pollution. This included a pilot study for assessment of air quality health impacts in Skopje.

As part of the Twinning project activities, efforts were made to improve the awareness of air quality issues. For this a campaign to increase understanding of the possibilities to improve air quality in everyday life was designed.

The social media pages of this campaign can be found here: https://www.facebook.com/dishemezaedno



Upcoming Events

High-level Seminar on the Processoriented Approach to Statistical Production

19 - 21 April 2017, Seoul https://www.unece.org/stats/documents/2017.04.prod.html#/

Regional Forum on Sustainable Development for the UNECE Region 25 April 2017, Geneva

http://www.unece.org/index.php?

Nineteenth Session of the Working Group on Environmental Monitoring and Assessment 27 - 28 June 2017, Geneva

27 - 28 June 2017, Geneva http://www.unece.org/index.php? id=44829#/

Thirteenth session of the Joint Task Force on Environment Statistics and Indicators

29 - 30 June 2017, Geneva http://www.unece.org/index.php? id=43950#/

Task Force meeting on the Water-Food-Energy-Ecosystem Nexus 19 October 2017, Geneva

http://www.unece.org/index.php?id=43626#/

Global Workshop on Climate Change Adaptation

11 - 12 December 2017, Geneva http://www.unece.org/index.php? id=43633#/

The Working Group on Environmental Monitoring and

Assessment was established in 2000 by the Committee on Environmental Policy to serve as an instrument for UNECE Member States, to provide recommendations, propose action plans, and improve coordination of international initiatives concerned with environmental monitoring, assessment and reporting.

For more information on the Working Group please visit:

http://www.unece.org/environmental-policy/environmental-monitoring-and-assessment

Disclaimer: This is not a UN official publication. This newsletter is only distributed electronically to WGEMA members and interested individuals and organizations wishing to receive information about the Working Group. The views expressed do not necessarily reflect the official position of the United Nations.