Convention on the Protection and Use of Transboundary Watercourses and International Lakes

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Reporting on Sustainable Development Goal indicator 6.5.2 and under the Convention

DEVELOPMENT OF AN ON-LINE REPORTING SYSTEM

Note prepared by UNECE in cooperation with UNESCO

1. Background and rationale for the development of an online system for reporting

In 2015, decision VII/2 (ECE/MP.WAT/49/Add.2) of the Meeting of the Parties established a regular reporting mechanism under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), to review and enhance implementation of the Convention and identify needs and gaps in transboundary cooperation. In 2017, the General Assembly adopted the global indicator framework for the Sustainable Development Goals (SDGs) and targets of the 2030 Agenda for Sustainable Development, including indicator 6.5.2 (proportion of transboundary basin area with an operational arrangement for water cooperation), for which UNECE and UNESCO are co-custodian agencies[1]. In 2016, the Working Group on Integrated Water Resources Management decided, for Parties to the Convention, to combine the reporting under the Convention with reporting on indicator 6.5.2 in order to increase synergies between the two processes and avoid duplication of efforts (ECE/MP.WAT/WG.1/2016/2, paras. 22, 24 and 26 (a)).

The first and the second reporting exercises on SDG indicator 6.5.2 and under the Convention for Parties, were held in 2017–2018 and 2020–2021, respectively. In these two reporting rounds, the co-custodian agencies requested countries to submit their report in PDF format for the signed version and Word format for the analysis. UNECE and UNESCO carried out the analysis by a review of the word version of the national reports and subsequently manually entered the information into an Excel database (creating delays in the processing of data and increasing the risk of human errors).

For future reporting exercises, countries requested the development of an online reporting system[2], which would greatly facilitate the improved reliability of the data reported by countries, as well as enhance the analysis of the reports and reported data by UNECE and

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[1] See A/RES/71/313, annex.
[2] See for instance Overview of comments received on the template for reporting, comment from Estonia p.3 https://unece.org/fileadmin/DAM/env/documents/2018/WAT/01Jan_16-17_Budapest/Inf4_Comments_template.pdf

UNESCO. The online system would allow information to be presented in various output formats, facilitating more effective and efficient comparison, synthesis, and analysis of the responses. For these reasons, the development of a concept for an online reporting system for future reporting exercises is part of the workplan on SDG indicator 6.5.2 under the UN-Water Integrated Monitoring Initiative for SDG6 (IMI-SDG6) for 2021 implemented by UNECE and UNESCO, as well as in the programme of work of the Water Convention for 2019-2021 and foreseen in *Decision VIII/1* (ECE/MP.WAT/54/Add.2).

2. Existing reporting systems

UNECE undertook preliminary research on existing reporting systems. As part of this research, UNECE contacted several United Nations agencies and multilateral environmental agreements (MEAs), whose reporting process is similar to the one on SDG indicator 6.5.2 and under the Water Convention, in order to learn from their experience with different online reporting systems in terms of data gathering, data entry and management, data analysis, etc. In this process, the experiences from the Ramsar Convention, the Convention on Biological Diversity, the World Meteorological Organization, the Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention, the Framework Convention on Tobacco Control of the World Health Organization or the UNECE Statistics database were consulted and reviewed to understand existing online systems and requirements, as well as to learn from their challenges, lessons learned and recommendations and establish the list of criteria listed in section 3 below.

One of the conclusions by UNECE and UNESCO of this preliminary research was the importance of establishing an online reporting system both tailored for countries to easily input their data and that allowed for straightforward data extraction for subsequent analysis (see criteria below). The technical requirements, in particular related to the management of data coming from Member States, imply a direct advantage to capitalize on existing and well-established systems and processes, which would be brought by the hired institution, as compared to creating a new system.

3. List of considerations and requirements for the online reporting system

The development of an online platform seeks to support the long-term sustainability of reporting as an important means by which to help advance transboundary water cooperation. For the system to be used efficiently and with as little hurdles as possible, future needs should be anticipated from the initial stages of the system's development whenever possible. Thus, a number of aspects should be decided in advance, such as the type of functions the system should have, the types of analysis planned, the inter-operability with other platforms, data access, as well as the modalities of data entry. The most important aspects, which should guide the development of an effective system, are set out below.

a. List of requirements for the online reporting system:

1) Technical requirements:

   - The system should allow country representatives to enter the responses directly into the online system interface; to account for different capacities, countries could still have the option to submit responses in Word/PDF formats.

   - The system should entail a delegation function, which allows different country representatives to access to the system to split the work among themselves during the filling process, to coordinate among different authorities, or to use the system for training purpose on the methodology of the indicator.

- The system should support all types of questions present in the reporting template (e.g., multiple choice, tables, yes/no questions) and allow direct connection between cells with related answers, to avoid inconsistencies (see point below).

- To facilitate the input of the information by countries and the validation, review and analysis of the reports by UNECE and UNESCO, the system should allow for automatic checks and controls. For instance, the system should include in-built prompts to provide an answer to an empty field (where appropriate), or auto-generate sums, such as in the calculation of the SDG indicator value, or criteria for operationality.

- The system should allow respondents to submit draft versions and preliminary submissions of the report to UNECE and UNESCO.

- Draft and final version should have the possibility to be downloaded in Word and Pdf formats for sharing outside the platform (especially to allow national coordination when countries work on draft versions).

- As countries can submit their national reports in English, French, Russian and Spanish, the system interface should be available these four UN languages.

- The system interface should include the possibility to make references to the guidance documents to facilitate the input of the information by countries, e.g., by providing links to reference documents or through pop-up explanatory text, such as definitions.

- It should be easy to extract data from the data collection system in frequently used formats (extensions) for further analysis by country, basin, agreement, reporting exercise or question.

- Any future changes and redevelopments of the online reporting system should come with a guarantee that new and old reporting systems will remain compatible for future analysis.

2) Organisational requirements

- The organisation/software developer contracted for the provision of an online reporting system should be, a reliable and well-established institution, with a good reputation in delivering similar on-line systems, and able to demonstrate the potential to support the reporting process in the next 10-20 years.

- The software developer should assist with the adaptation of the reporting template to the online format.

- The developer should provide ongoing assistance to countries, UNECE and UNESCO after the initial set-up of the system.

- In case some aspects of the system need to be reworked, the developer should assist in implementing these changes.

b. *Additional criteria/desirable characteristics of the reporting system:*

- The system should allow UNECE and UNESCO to provide comments and suggestions for countries and highlight areas for improvement directly in the system.

- The system should provide an overview of the status of the responses received allowing UNECE and UNESCO to monitor progress of countries in their reports.

- The system should be accessible with a limited bandwidth and be mobile friendly to enter the responses from a smartphone or tablet.

- The system should allow countries to choose basins and agreements from an indicative lists compiled by UNECE and UNESCO, to facilitate the entry of the information by countries and to facilitate the analysis of responses and support validation of the reports by UNECE and UNESCO, ensuring that countries respond on all relevant basins.

- The developer should provide data analysis and visualisation tools, e.g. via an API (application program interface), to allow for the presentation of the collected data and its analysis.

- The data should be compatible with UN-Water SDG 6 data portal and be able to feed information to the portal.

4. Additional considerations

The current reporting template may need to be adjusted to respond to the functionalities of the online system to allow and facilitate the filling of the information by countries' representatives. The main content of the template will not be changed. The software developer should work jointly with UNECE and UNESCO to ensure consistency with the current template, in consultation with a core group of volunteer countries. The online reporting template should also be tested by a number of volunteer countries to verify the consistency with the content of the reporting template, to identify possible challenges in completing the responses, and assess the ease of filling the information, and to evaluate the ease of analysing submitted data.

5. Proposed next steps

To ensure the successful implementation of an online reporting system, the proposed next steps are as follows:

a. Address and integrate comments and suggestions received into the requirements.

b. 2nd quarter of 2021: UNECE and UNESCO to consult with UN-Water.

c. Present a full concept note for an online reporting system at the ninth session of the Meeting of the Parties (29 September – 1 October 2021) for information.

d. 2nd half of 2021/early 2022: selection of the organisation/software developer.

e. 1st half of 2022: UNECE and UNESCO will work with the software developer to facilitate setting up of the online reporting system.

f. 2nd half of 2022: UNECE and UNESCO will organize a test-run of the system in collaboration with the software developer and a core group of volunteer countries

g. 2023: The 3rd reporting exercise will be carried out using the online reporting system

h. 2024-2025: Evaluation of the online reporting system based on the experience of the 3rd reporting exercise for possible improvements of the system based on lessons learned from the system's full application before the 4th reporting exercise in 2026.

The working Group is invited to provide comments on the proposed way forward, other possible options as well as the proposed process.