



ISSUES CONCERNING WATER DATA COLLECTION, IN PARTICULAR ON WASTEWATER

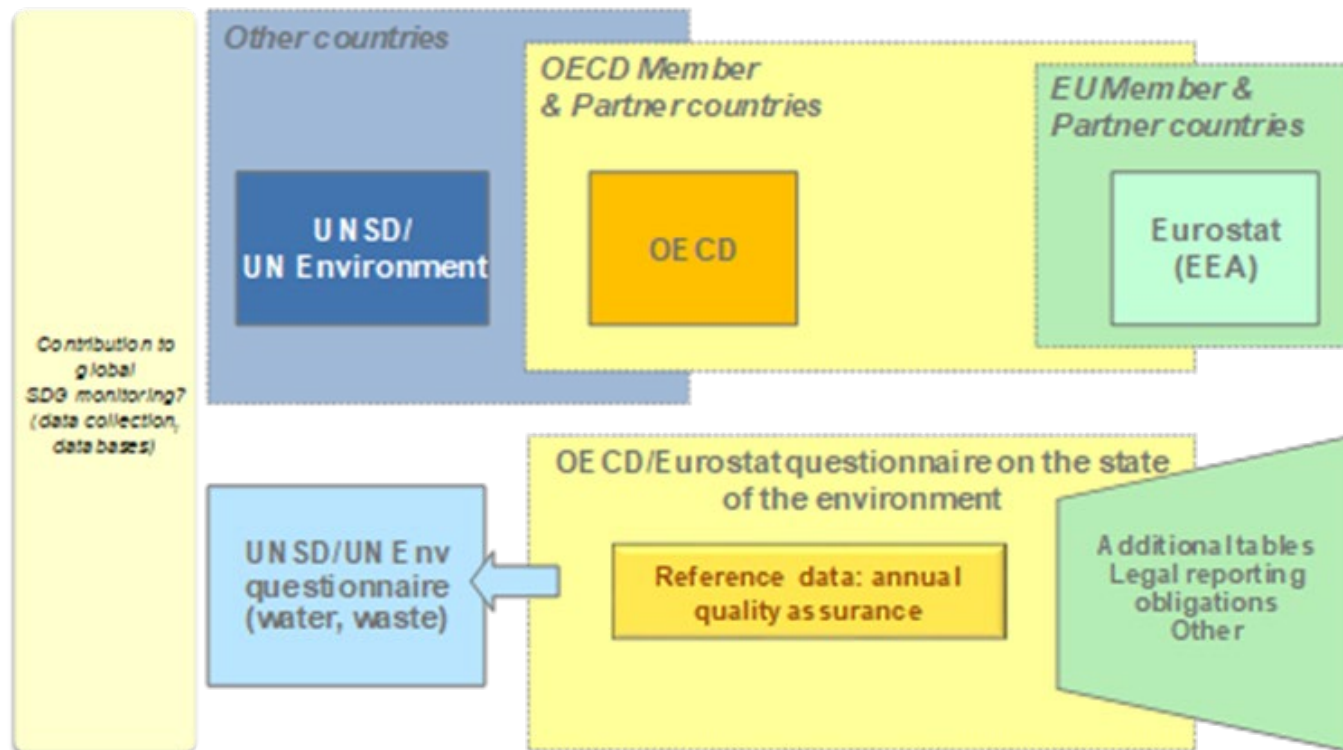
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UNSD Expert Group on Environment Statistics, 19 October 2021



International water data collection

- The OECD questionnaire (late 1970s-early 1980s) became a joint OECD/Eurostat questionnaire in 1988. A simplified version has been used by UNSD/UNEP since 1999, thus ensuring a quasi-global country coverage.
- Data collection via questionnaire: a layered approach at international level:



Eurostat focuses on EU Member States, countries of the European Free Trade Association (EFTA), and EU candidate countries. The OECD focuses on its non-EU members, on its accession countries and on selected partner countries. UNSD sends the UNSD/UN Environment Questionnaire to the rest of the world (approx. 165 countries).



International collaboration on data collection

- **Regular teleconferences since 2018** among international agencies (UNSD, FAO, OECD, ESTAT) on how to: (i) harmonise definitions and data collections; (ii) better align to SEEA; (iii) share information
 - EFR to be added to OECD/Eurostat questionnaire, and SEEA-compatible framework and definitions (to be implemented)
- More recently teleconferences have focussed on **wastewater**, with participation of WHO and UN-HABITAT, to support data collection for **SDG Indicator 6.3.1** (proportion of wastewater safely treated).
 - “Progress on Wastewater Treatment – 2021 Update” (August 2021)



OECD/Eurostat water data collection

- **OECD sends complete questionnaire every 2 years.** In the in-between years only 3 tables, selected variables (resources & abstractions; use; connection to wastewater treatment), so no data on wastewater volumes/pollution. **Eurostat collects data annually.**
- **Data quality and timeliness are still issues,** especially for OECD non-EU countries. Many data gaps and missing for many countries, especially generation and discharge of wastewater by pollutant (BOD, COD, suspended solids, nitrogen and phosphorous).
- E.g. “Progress on Wastewater Treatment – 2021 Update” says 42 countries reported standardised, validated national-level data for both generation and treatment of total wastewater flows; only 14 countries for industrial wastewater. **Little data** also on independent treatments.



OECD/Eurostat questionnaire

- UNSD collects data on the volume of wastewater treated in independent treatment facilities, in other treatment plants and in urban wastewater treatment plants, whereas OECD/Eurostat collect data on volumes of industrial and urban wastewater discharges
- Thus OECD/Eurostat disaggregate the flow of discharged wastewater by type (for example, urban and industrial discharges), whereas UNSD reports on the flow of wastewater by level of treatment (primary, secondary and tertiary).
- The **breakdown of flows by level of treatment** (UNSD), has been included in the latest 2020 version of the OECD/Eurostat Joint Questionnaire (volumes discharged with at least secondary treatment), ensuring that future rounds of data collection will have greater alignment with indicator 6.3.1 monitoring. But data is still scarce



Data challenges

- Data broken down into total, **domestic and industrial**. Industrial relies solely on official reported statistics from national authorities, and data is scarce. Domestic relies on a combination of official reported statistics and assumptions for gap filling, which poses problems in calculating the total
- Point sources are easier to monitor. **Non-point sources** (e.g. run-off) are a lot more difficult to capture.
- **Pollution loads and independent treatment** are also difficult to monitor
- Wastewater **monitoring** is relatively complex and costly, and data are not systematically aggregated to or available at the national level. Definitions (such as for treatment level) may also vary across countries
- Thus it's very difficult to have overall picture. **Evidence is patchy**



How to improve data collection?

- Use WHO/UNICEF JMP estimates to pre-fill country data?
- Establish a multi-stakeholder forum within a country that includes participation of NSOs and other relevant stakeholders at the national, provincial/state and local/municipal level of government, as relevant ? (“Progress on Wastewater Treatment – 2021 Update”).
- Other ideas?



THANK YOU

