

Update on harmonisation of international water questionnaires with the SEEA

Session 9

OECD/UNECE Seminar on Implementation of SEEA)

13-15 March 2023

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- **Section on inland waters of OECD questionnaire on the state of the environment developed late 1970s-early 1980s**
 - Joint **OECD/Eurostat** questionnaire (JQ-IW) as of 1988
 - Simplified version used by **UNSD/UNEP** since 1999
 - Regular revisions to reflect statistical developments and policy needs
- **Data used to support international work on water policies and country reviews and calculate water-related indicators (OECD, EU, SDG)**
 - SDG 6.4.1 (water use efficiency), 6.4.2 (water stress), 6.3.1 (wastewater safely treated)
- **FAO questionnaire since 2018 (SDG reporting, Aquastat database)**
- **Regular coordination meetings of international organisations**
 - UNSD, FAO, Eurostat, OECD (since June 2018), WHO and UN-Habitat (since 2020)
 - Discuss options for aligning the questionnaires (content, terms, definitions)
 - Discuss practical arrangements for collaborating on data collections
 - Jointly work with countries towards increasing data availability and quality for water-related SDG and other indicators

} Data collection with quasi-global country coverage



- **Purpose**
 - Better align the questionnaires with data needs for SDG monitoring
 - Harmonise terms and definitions, and variables covered in international questionnaires
 - Re-assess the consistency with the SEEA Central Framework, with focus on terms and definitions
 - Review the correspondence between SEEA core accounts and questionnaire tables
- **Supported by discussions among IOs on :**
 - Differences in definitions used across questionnaires
 - Differences in definitions with respect to global SDG indicators, the SEEA Central Framework and the SEEA Water
 - Differences in data submissions from countries: e.g. OECD/Eurostat vs FAO
 - Ways to mobilise better data for SDG 6.3.1



- **Consultation of member countries by OECD and Eurostat**

Glossary of terms and definitions, variables covered in questionnaire tables, flow schemes

- Additions, deletions and clarifications that are independent of SEEA. Among these, adding a variable on “environmental flow requirements” (EFR) to reflect the volume of water required to sustain freshwater and estuarine ecosystems
- Amendments to the definitions of water use, water use, water consumption, consumptive use and the associated flow scheme
- Amendments to better align with the SEEA and remaining differences (next slides)

- **Looking forward**

- Feedback so far is positive → implementation for 2023 data collection
- Alignment with UNSD/UNEP questionnaire by next data collection in 2024
- Progressive alignment with FAO questionnaire.



Alignment with the SEEA and water accounts



- **International water questionnaires were developed based on water statistics and hydrological definitions/conceptual schemes, combined with basic accounting principles**
 - OECD/Eurostat and the UNSD/UNEP questionnaires are broadly aligned with the SEEA
 - Several tables based on the principles of water accounts; use of ISIC breakdown e.g. freshwater resources and abstraction, water supply and use, wastewater generation and discharge
- **Some differences in definitions identified**
- **Recent amendments will help to further align**



- **Groundwater abstraction**

- Water accounts do not define abstraction from groundwater as the difference between water abstracted and water artificially recharged into the aquifer (as in JQ-IW). The accounts record these flows separately. They consider the artificial recharge of water into the aquifer as a flow from the economy to the environment, hence it is recorded as a return flow.
- Proposed amendment: align with accounting and treat the artificial recharge into the aquifer as a return flow.

- **Reused water**

- In JQ-IW reused water is defined as water that has undergone wastewater treatment and that is delivered as reclaimed wastewater to a user. In water accounts reused water also includes wastewater delivered without treatment to a user.
- Proposed amendment: align with accounting



Differences with accounts that will remain will be highlighted and explained

- **Abstractions for hydroelectric power generation**
 - Unlike water accounts, abstractions for hydroelectric power generation are not counted in JQ-IW; they are considered in-situ uses
 - Related data can be reported as a memorandum item in the JQ-IW
- **Other sources of water**
 - The JQ-IW focuses on freshwater resources and related abstractions to identify the level of exploitation of natural renewable freshwater resources. Other sources of water are considered in tables on water available for use and water use by supply categories
 - Water accounts cover all inland water resources (including brackish and non-fresh water)
 - Water accounts cover all sources of water, including sources (e.g. soil water) that are not distinguished in the JQ-IW (only surface water and groundwater are distinguished)
- **Wastewater definition**
 - Unlike water accounts, JQ-IW does not consider cooling water to be wastewater.



- **Water accounts are one of five priority accounts identified by UNCEEA**
- **Plan to progressively move towards water accounts (SEEA)**
 - though some inconsistencies between SEEA CF and SEEA-Water will need to be addressed
- **Use international water questionnaires as a vehicle (pragmatic approach)**
 - Data from replies to questionnaire tables can be used to populate simple SEEA core tables on water and contribute to the establishment of simple global water accounts
- **To build on**
 - Guidance from the SEEA Technical Note on Water Accounting released in 2017.
 - Earlier work on water accounts by Eurostat
 - Work with volunteering countries/experts to help develop and populate simple pilot tables in line with the SEEA using national questionnaire replies
 - Involve the SEEA Technical Committee



Correspondence with SEEA accounts

Type of physical water accounts	Corresponding questionnaire tables (OECD/Eurostat)
1. Physical flow accounts	
Record physical flows of water between the environment and the economy	<p>Table 2 Freshwater abstraction</p> <p>Table 3 Water made available for use</p> <p>Table 4 Water use by supply category and by sector</p> <p>Table 8 Generation and discharge of wastewater</p> <p>Summary Table: Water use balance</p>
Physical Supply and Use Tables (PSUT) measure, in physical terms	
1) flows of water entering the economy: abstracted or imported;	<p>Table 2 (abstraction from renewable freshwater resources)</p> <p>Table 3 (water made available from other sources or imported)</p> <p>Water use balance</p>
2) flows of water and wastewater between economic units	Table 4 (water distributed to economic units, ISIC)
3) return flows of water from the economy to the environment	<p>Table 2 (return flows before or without use)</p> <p>Table 8 (waste water discharges after or without treatment)</p>
2. Physical asset accounts	
Describe the hydrological cycle over accounting period: water stocks & their depletion; links to water abstraction& consumption by the economy.	<p>Table 1 Renewable freshwater resources (most variables, except opening and closing stocks).</p> <p>Table 2 (abstractions and return flows before or without use)</p> <p>Table 8 (return flows after use, i.e. waste water discharges)</p>



Establishing simple water accounts - Main challenges and ways forward



- **Data availability and quality are a major issue**
 - Many gaps to be filled and country coverage to be expanded
 - Time series to be improved and consolidated
- **Ways forward**
- **Review of country replies for their suitability**
 - Identification of major data gaps and quality issues
- **More detailed evaluation with countries and Eurostat**
 - Carry out a few pilot-tests with volunteering countries (delayed due to COVID)
 - Continue work with countries to improve data availability and quality
- **Consider exploiting alternative data sources to fill gaps (*e.g., earth observation*)**
 - → Provide more and better data for SDG reporting, water accounts and policy evaluation.
- **Progress report to the UNCEEA (OECD/Eurostat)**
- **Consider organising a dedicated workshop with IOs and countries to help advance measurement?**



**Thank you
for your attention!**