



MANUAL ON THE BSES: WASTEWATER STATISTICS

Session One: Environment Statistics Toolbox

**Sixth Meeting of the Expert Group on Environment Statistics, New York
21-23 May 2019**



Outline

- Status of each part of the methodology sheet
- Diagrams
- Focus on next steps required
- Comments and observations to encourage breakout group discussion



Part 1: Statistics in sub-component 3.2: Generation and Management of Wastewater

11 statistics from within this sub-component of the Basic Set of Environment Statistics:

Volume of wastewater generated (vol.)

Pollutant content of wastewater (mass)

Volume of wastewater collected (vol.)

Volume of wastewater treated (vol.)

Total urban wastewater treatment capacity (capacity in volume and # of plants)

Total industrial wastewater treatment capacity (capacity in volume and # of plants)

Total volume of wastewater discharged to the environment after treatment (vol.)

Total volume of wastewater discharged to the environment without treatment (vol.)

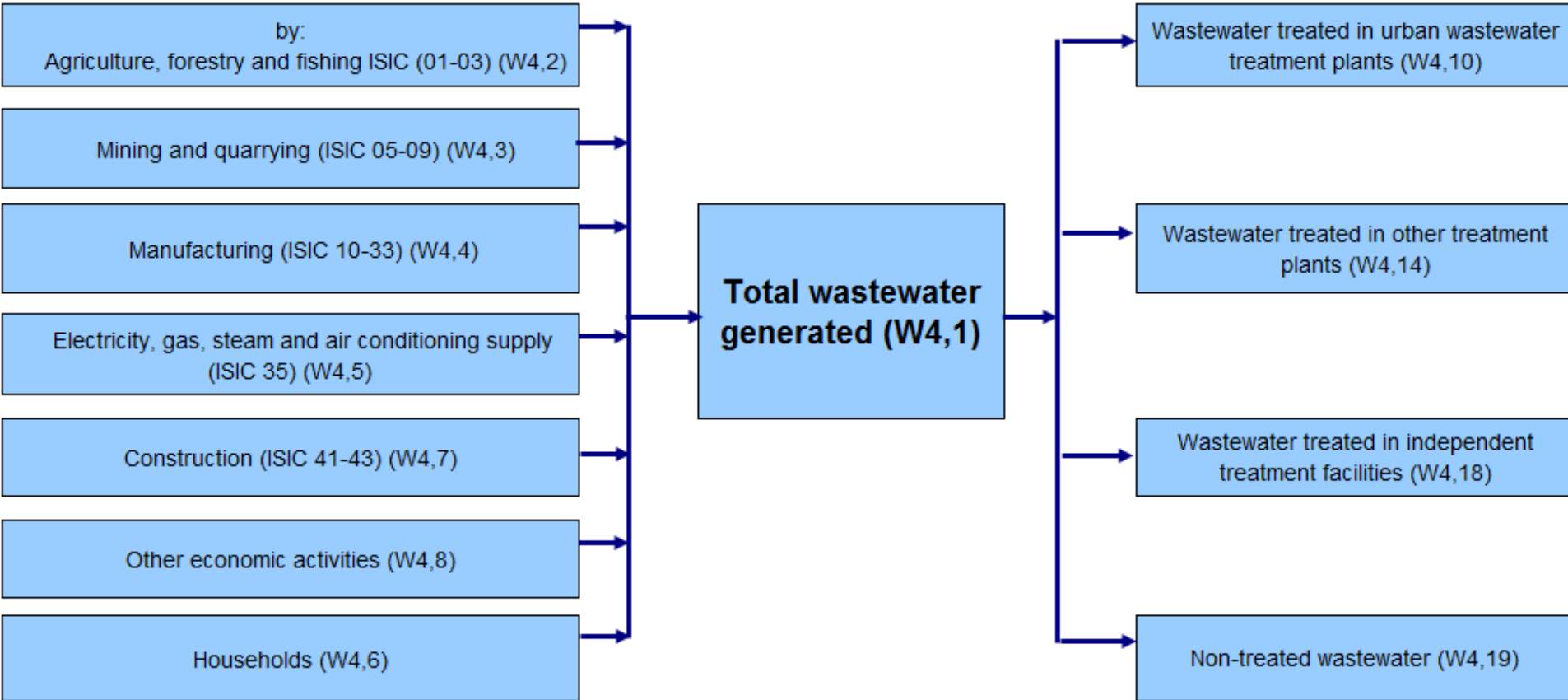
Pollutant content of discharged wastewater (mass)

Part 2: Introduction/relevance

- Work and research being currently undertaken.
- Trying to define issues concerning wastewater statistics, why this is an important issue, justification for attention to this issue
- This particular part could benefit from an expert with specific expertise to wastewater
- The section's experience in the field of wastewater statistics mostly follows work on the UNSD/UNEP Questionnaire on Environment Statistics (water section), table W4: Wastewater Generation and Treatment



Part 2: Introduction/Relevance



...and another diagram used in the Organisation for Economic Cooperation and Development (OECD)/Eurostat Questionnaire on the State of the Environment (Inland Waters) to be considered



Part 3: Definitions and description of the statistics

Considering all terms defined in

- *UNSD/UNEP Questionnaire on Environment Statistics (water section)*, especially table W4: Wastewater Generation and Treatment are available.
- *Organisation for Economic Cooperation and Development (OECD)/Eurostat Questionnaire on the State of the Environment (Inland Waters)* contains the same definitions and even more additional definitions to other relevant terms. (especially for statistics concerning pollutant content)
- *International Recommendations on Water Statistics* (United Nations, 2012) – coherent, principles, concepts and definitions for collection and compilation of water statistics
- Coherence to be ensured with *Manual of the Basic Set of Environment Statistics of the FDES*
 - *Water Resources Statistics* (sub-component 2.6: Water Resources)
 - *Human Settlements Statistics* (sub-component 5.1 :Human Settlements)



Part 4: International Sources and Recommendations

- United Nations World Water Development Report 2017: Wastewater, the untapped resource (UNESCO, 2017)
- Texts related to Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all, especially target 6.3.1: Proportion of wastewater safely treated
- International Standard Industrial Classification of All Economic Activities (ISIC rev. 4) (United Nations, 2008)
- UNSD Environmental Indicators <https://unstats.un.org/unsd/envstats/qindicators> (time series available for several wastewater generated, treated in (urban/other/independent) treatment facilities.)
- OECD database <https://stats.oecd.org> (generation and discharge of wastewater, treatment capacity, etc.)
- Eurostat <https://ec.europa.eu/eurostat/web/environment/water/main-tables> Water tables: Design capacity of plants



Part 5: Data collection and sources of data

- Scope
 - Statistical units
 - Measurements
 - Sources and institutions
 - Data collection
 - Aggregation/disaggregation
 - Quality control and validation
- All wastewater generated within a country.
- Wastewater treatment plants (often servicing one city), and aggregation of those to conceivably city, provincial or national levels.
 - National Statistical Offices, Ministry of Water, Ministry of Environment, etc.



6. Uses and dissemination

- **Presentation formats**
- **SEEA accounts/tables that use these statistics**
- **Common statistics/indicators**
- **SDGs**
 - SEEA: Wastewater received from (various ISIC industries)
 - SDG 6.3.1:
 - Proportion of wastewater safely treated (World Health Organization presenting tabulated data in Excel using a sub-indicator approach).
 - Individual statistics which contribute to the calculation of the indicator being collected and disseminated by UNSD via the UNSD/UNEP Questionnaire.



Comments and observations

- Existing draft compiled within UNSD requires much development.
- Calling for interest from those who may have expertise on wastewater statistics to collaborate with us.
- In addition to developing the wastewater related contents of the FDES, UNSD has mostly been involved with validating water and wastewater statistics through the UNSD/UNEP Questionnaire on Environment Statistics and in contributing to the metadata on SDG 6.3.1 on wastewater.

