

QUALITY REPORT FOR STATISTICAL SURVEY
Annual Survey on Public Sewage System (VOD-2K)
for 2023

Organisational unit: Environment Statistics Unit

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0. Basic information

- Purpose, goal, and subject of the survey

Survey collects data on waste waters, treatment of waste waters, discharge of waste waters, sewerage network, waste water treatment plants.

- Reference period

Calendar year

- Legal acts and other agreements

Decision on the National Classification of Activities 2007 – NKD 2007 (OG, Nos 58/07 and 72/07)

Ordinance on Register of Spatial Units (OG, No. 37/20)

Water Act (OG, No. 47/23)

Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains

- Classification system

National Classification of Activities 2007

- Concepts and definitions

Public sewerage means the activity of collection of waste waters, their transport to a waste water treatment plant, treatment and direct or indirect discharge into surface waters, treatment of sludge generated in the process of waste water treatment, if the above is conducted through public sewerage facilities, and management of these facilities; public sewerage also includes pumping and transport of waste water from sump pits.

Waste waters are all potentially polluted industrial, sanitary, rainwater and other waters.

Treated waste waters comprise all amounts of waste waters treated by using either primary (mechanical), secondary (biological) or tertiary (combined) treatment method.

The primary treatment includes the application of physical and/or chemical processes by which at least 50% of suspended solids are removed from the waste water, while the BOD5 value decreases by as much as 20%, as compared to the BOD5 value of influent waters.

The secondary treatment includes the application of biological and/or other treatment processes by which the concentration of suspended solids and BOD5 decreases by 70% to 90% and the concentration of COD by at least 75%.

The tertiary treatment includes the application of physical and chemical, biological and other treatment processes by which the concentration of nutritious matters of influent in waste waters decreases by as much as 80%, or other pollutants, which could not be removed to that extent in the secondary treatment, are now removed as well.

Discharged waste waters consist of discharges of treated and untreated waters. The waters can be discharged into ground waters, waterflows, reservoirs, lakes and the sea.

Public sewage network is a network of enclosed public drains and sewers used either for draining of both waste and atmospheric waters together (general water sewage system), or for separate draining of waste and atmospheric waters (separation water sewage system).

Total length of the public sewage network is the length of the sewerage network of enclosed public drains and pipes for wastewater and atmospheric waters from settlements, without connections and networks within buildings.

Waste water treatment plants are devices for the treatment of waste water. They are divided to devices for the primary, secondary and tertiary treatment.

- **Statistical units**

Reporting units are public suppliers of public sewage system services. According to the Water Act (NN, No. 47/23), the public supplier of sewage system services is a company in which all shares or equity shares are held by local self-government units or companies in which all shares or equity shares are held directly by local self-government units, that is, an institution founded by a local self-government unit.

- **Statistical population**

Legal entities (and parts thereof) classified in section E Water supply; sewage, waste management and remediation activities, class 37.00 Sewerage, according to the National Classification of Economic Activities 2007 – NKD 2007.

1. Relevance

1.1. Data users

Scientists

Students

1.1.1. User needs

Scientists, for research purposes

Students, for theses

1.1.2. User satisfaction

The User Satisfaction Survey was carried out. The results of the Survey are available on request.

1.2. Completeness

The data are collected for national and Eurostat purposes. Data are transmitted to Eurostat (OECD/Eurostat questionnaire on Inland Waters) in accordance with the gentlemen's agreement.

1.2.1. Data completeness rate

The indicator for this survey is not applicable.

2. Accuracy and reliability

2.1. Sampling error

Not applicable.

2.1.1. Sampling error indicators

The indicator for this survey is not applicable.

2.2. Non-sampling error

The eligibility rate is the share of eligible reporting units among all selected reporting units.

2.2.1. Coverage error

Not applicable, the coverage is full. The source for the address list of reporting units is the Statistical Business Register. The data are also compared with the last year's address list of reporting units.

2.2.2. Over-coverage rate

The indicator for this survey is not applicable.

2.2.3. Measurement errors

A treatment includes data verification, while errors that emerged are checked with reporting units before correction.

2.2.4. Non-response errors

Reporting units are contacted when necessary.

2.2.5. Unit non-response rate

The indicator for this survey is not computed.

2.2.6. Item non-response rate

The indicator for this survey is not computed.

2.2.7. Processing errors

Data that have been incorrectly entered either by the reporting unit or during the processing are verified and corrected.

2.2.8. Imputation rate

The indicator for this survey is not computed.

2.2.9. Model assumption error

Not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions (preliminary data, final data) on the website of the Croatian Bureau of Statistics.

2.3.2. Data revision – practice

Since 2018, the Croatian Bureau of Statistics has ceased to conduct a part of the survey relating to the public sewage system net due to the implementation of the new methodology. This information is published in the First Release as a notice.

2.3.3. Data revision – average size

The indicator for this survey is not applicable.

2.4. Seasonal adjustment

Not applicable.

3. Timeliness and punctuality

3.1. Timeliness

T + 6.5 months – First release (data for 2022 were released in the First Release of 13 July 2023)

T + 6.17 months – PC-Axis database

3.1.1. Timeliness – first results

Timeliness of first results is: T + 6.5.

3.1.2. Timeliness – final results

Timeliness of final results is: T + 0.

3.2. Punctuality

T + 0.

All data have been submitted on time based on planned release dates.

3.2.1. Punctuality – delivery and publication

Punctuality is: 18.

4. Accessibility and clarity

Data are disseminated in paper and in electronic format – release on the website of the Croatian Bureau of Statistics in the form of the First Releases and in the PC-Axis database.

The First Release contains short methodological explanations, such as sources and methods of data collection, coverage and comparability, definitions and etc. Metadata are also available in the database.

4.1. News release

OEN-2023-1-3 Public Sewage System, 2022

4.2. Online database

<https://dzs.gov.hr/en>

4.3. Microdata access

Conditions under which certain users can have access to microdata are regulated by the Ordinance on the Conditions and Manner of Use of Statistical Data for Scientific Purposes.

4.4. Documentation on methodology

The basic methodological explanations are published in the First Release and in the database.

5. Coherence and comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

Comparable data series refer to the periods from 2001 to 2022 (database) and from 2002 to 2022 (First Release).

5.2.1. Length of comparable time series

The indicator for this survey is not computed.

5.2.2. Reasons for break in time series

Since 2018, the Croatian Bureau of Statistics has ceased to conduct a part of the survey relating to the public sewage system net due to the implementation of the new methodology.

5.3. Coherence – short-term and structural data

The indicator for this survey is not applicable.

5.4. Coherence – national accounts

The indicator for this survey is not applicable.

5.5. Coherence – administrative sources

The indicator for this survey is not computed.

6. Cost and burden

6.1. Cost

Costs are associated with data production through material costs and employees' incomes.

6.2. Burden

The indicator for this survey is not computed.