

Reference Metadata in ESMS 2.0 structure

Statistical survey on public water supply and sewerage

E_VOD.2_A_EN_2024_1

Reference Metadata in ESMS 2.0 structure

1	Contact
1.1	Contact organisation
State Statistical Office	
1.2	Contact organisation unit
Department for environmental statistics, energy and transport	
1.3	Contact name
Suzana Stojanovska	
1.4	Contact person function
Advisor	
1.5	Contact mail address
Dame Gruev 4, 1000 Skopje, Republic of North Macedonia	
1.6	Contact email address
suzana.stojanovska@stat.gov.mk	
1.7	Contact phone number
00389 2 3295 650	
1.8	Contact fax number
00389 2 3111 336	
2	Metadata update
2.1	Metadata last certified
16/06/2024	
2.2	Metadata last posted
16/06/2024	
2.3	Metadata last update
16/06/2024	

3	Statistical presentation
3.1	Data description
<p>Data on water refer to: water abstraction, water supply and water use by economy and households, wastewater treatment and discharge into water bodies.</p> <p>The quantity of water used is presented by categories of water supply and by basic economic activities - industry, for communal services, households and other users. Quantitative data are provided for public water supply about collection, treatment and water supply.</p> <p>The quantities of generated wastewater are divided by main sources of activity. The observation of wastewater flows is from water source to water receiver.</p> <p>The total quantity of wastewater discharged into water bodies is divided by place of discharge and their treatment-purification. Data for purification are presented by means of purification - mechanical, chemical, biological and combined.</p> <p>Data about the number of households connected to water services, sewage and wastewater treatment are presented.</p>	
3.2	Classification system
<p>National classification of activities NKD Rev.2 (by NACE Rev.2).</p> <p>List of river basins.</p>	
3.3	Sector coverage
<p>The coverage is full for business entities with the main activity of Section E- Water supply; sewerage, waste management and remediation activities (divisions 36,37), according to NKD Rev.2 (NACE Rev.2).</p>	
3.4	Statistical concepts and definitions
<p>Water supply from public water supply is the total volume of water abstracted from ground waters, springs, watercourses, reservoirs and lakes as well as total volume of water abstracted from other water systems.</p> <p>Abstracted volume of water is the total volume of water abstracted from water springs.</p> <p>Water springs are all sources that are used in supplying of water mains, such as ground watercourses, springs, watercourses, reservoirs and lakes.</p>	

Distributed volume of water is the volume of water sold to consumers.

Water losses are actually found losses in water supply network caused by mechanical troubles or installation defects on water supply network.

Water treatment facilities are facilities used for purification (conditioning). Tanks are divided into underground and elevated (tower-shaped) ones, used for the accumulation of water and reaching the required pressure.

Length of water mains is the length of pipes used for the supply of water and reaching of the required pressure.

The length of distribution network is the length of the water supply network from a tank to a consumer.

Waste water is water drained to the treatment facility after use, or discharged into the environment (into ground or surface waters). It does not include atmospheric or transitional waters (i.e. waters that *power* hydro-electric plants).

Treated waste water comprises all amounts of waste water that was treated during the reporting year, either primary (physical and/or chemical processes), secondary (biological and/or other treatment processes) or tertiary (physical and chemical, biological and other treatment processes) treatment of waste water.

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

Main sewer is a collecting drain, which drains water from one part or the whole city to the recipient or to the treatment facility.

3.5	Statistical unit
Enterprises.	
3.6	Statistical population
-All enterprises with the main activity of Section E- Water supply; sewerage, waste management and remediation activities (divisions 36,37), according to NKD Rev.2. -Operators of urban wastewater treatment plants; -Water users	
3.7	Reference area
Republic of North Macedonia	
3.8	Time coverage
Since 1977 onwards	
3.9	Base period

Not applicable.	
4	Unit of measure
thousand m ³	
5	Reference period
Year	
6	Institutional mandate
6.1	Legal acts and other agreements
<p>NATIONAL LEGISLATION</p> <p>Law on State Statistics ("Official Gazette of the Republic of Macedonia" No. 54/1997, 21/2007, 51/2011, 104/2013, 42/2014, 192/2015, 27/16, 83/18, 220/18, 31/20) (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/)</p> <p>Programme of Statistical Surveys 2023-2027 ("Official Gazette of Republic of North Macedonia" No. 29/23.) (https://www.stat.mk/en/about-us/legal-acts/program-for-statistical-surveys/).</p> <p>EUROPEAN LEGISLATION</p> <p>Directive 98/83/EU . https://www.google.com/search?client=firefox-b-d&q=Directive+98%2F83%2FEU</p>	
6.2	Data sharing
<p>Data for standard statistical indicators, specialized data according to specific information needs;</p> <p>Regular providing data for Eurostat via Edamis on OECD/Eurostat Joint Questionnaire "Inland water."</p> <p>Data are shared with the Ministry of Environment and Physical Planning based on the document "Memorandum of Understanding.</p> <p>Data are shared through Edamis to Eurostat according to Frame directive for water 98/83/EU of the European Parliament and the Council.</p> <p>Directive 98/83/EU . https://www.google.com/search?client=firefox-bd&q=Directive+98%2F83%2FEU</p>	
7	Confidentiality

7.1	Confidentiality - policy
<p>1. The protection of individual data is regulated by the Law on State Statistics (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/).</p> <p>2. The basic principles and activities undertaken to ensure data confidentiality are described in the Policy on Statistical Confidentiality (https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/)</p>	
7.2	Confidentiality - data treatment
<p>Pursuant to Article 38 of the Law on State Statistics (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/) and the Policy on Statistical Confidentiality (https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/), individual data are not published. However, if access is granted to microdata from the relevant survey, then the methods used to prevent data disclosure should be specified.</p>	
8	Release policy
<p>The publication of the data is in accordance with the Release Calendar which is being prepared annually before the beginning of the calendar year and is updated quarterly.</p>	
8.1	Release calendar
<p>The date of data publication is determined in the Advance Release Calendar, which is updated quarterly.</p>	
8.2	Release calendar access
<p>https://www.stat.mk/en/publishing-calendar/#/</p>	
8.3	User access
<p>All users have equal access to statistics at the same time: this means that the publication dates are announced in advance and no user has access to official statistics before they are published. Statistical data are first published in the "News Releases" edition on the website of the State Statistical Office at 12:00.</p>	
9	Frequency of dissemination
<p>Annual</p>	
10	Accessibility and clarity
10.1	News release
<p>News Releases are published and they are available on the website of the SSO in the section: "News Releases" (https://www.stat.mk/en/all-new-releases).</p> <p>News Release Public water supply and public sewage is published annually and it is available on the website of the SSO in the section: "News Releases" (https://www.stat.mk/en/stat/industry-energy-and-environment/environment/public-water-supply-and-sewage-system/)</p>	

10.2	Publications
<p>Statistical Yearbook,</p> <p>http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=34&rbrObl=37.</p>	
10.3	On-line database
10.4	Micro-data access
<p>The use of microdata by external users is possible only for research purposes and is done in accordance with the Law on State Statistics (Article 41, Article 42 and Article 43). Access to anonymised microdata is defined by an internal procedure of the State Statistical Office Access to anonymised microdata for scientific research purposes" (https://www.stat.mk/en/about-us/procedures/rules-for-access-to-anonymised-microdata-for-research-purposes/)</p>	
10.5	Other
<p>Data providing for OECD/Eurostat Joint Questionnaire "Inland water." Annual data are reported every two years.</p> <p>Data preparation based on users requests.</p>	
10.6	Documentation on methodology
<p>Methodological explanation, national are published on the web-site</p> <p>http://www.stat.gov.mk/MetodoloskiObjasSooop.aspx?id=139&rbrObl=28</p> <p>International:</p> <p>Manual for data collection of OECD/Eurostat Joint Questionnaire "Inland water" Ver. 4.0 (2018).</p>	
10.7	Quality documentation
<p>Quality report is published on the SSO website (http://www.stat.gov.mk/Meta_godini_v2.aspx). The last refers to 2023.</p> <p>Quality report is transmitted to Eurostat through Metadata Handler https://webgate.ec.europa.eu/estat/spe/metaconv/home.htm#). The last refers to the reference year 2023.</p>	
11	Quality management
11.1	Quality assurance
<p>The quality of the processes and products in the State Statistical Office is ensured by adhering to the European Statistics Code of Practice (https://www.stat.mk/en/about-us/quality/code-of-practice/) and the Quality Assurance Framework within the European Statistical System (ESS</p>	

Quality Assurance Framework –

<https://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V2.0-final.pdf>). The quality criteria are also determined in the Law on State Statistics in Article 4b and Article 4c (<https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/>).

11.2 Quality assessment

The State Statistical Office carries out statistical activities in accordance with the Statistical Business Process Model, which is based on the international model - Generic Statistical Business Process Model (GSBPM). The application of this model and international standards in statistical production ensures a high level of accuracy and comparability of data.

12 Relevance

12.1 User needs

Data on public water supply and sewage system are used by national institutions (the Ministry of Environment and Physical Planning, Regional center of environment), industrial and business associations, environmental associations, nongovernmental organizations, local government units and international and European organizations.

12.2 User satisfaction

Starting from 2009, the State Statistical Office conducts a User Satisfaction Survey every three years.

12.3 Completeness

13 Accuracy and reliability

13.1 Overall accuracy

The survey methodology and the data collection method ensure good coverage and accuracy of the data.

13.2 Sampling error

The survey is not carried out on random selected sample and therefore no sampling error is calculated.

13.3 Non-sampling error

Coverage error is not calculated - all questionnaires being sent to the reporting units are received. Measurement error: During carrying out the survey reports from the field were collected on a daily basis for the sake of coverage control and timely error detecting. Collected data were checked in the Central Office. Data processing error: Data entry was made by application prepared in advance, with manual entry mode. During data entry automatic controls were applied, entry control as well as control after the entry completion. In case of

inconsistencies in the data from the questionnaires, data providers were consulted. For settlements not covered with the system of public water supply and sewage system, the amount o is estimated.	
14	Timeliness and punctuality
14.1	Timeliness
T+180 days.	
14.2	Punctuality
The data are published on the day announced in the Advance Release Calendar.	
15	Coherence and comparability
15.1	Comparability - geographical
There is geographical comparability of the released data at national and regional level. With respect to geographical comparability with other EU countries, it is also ensured because data are collected in line with EU regulations.	
15.2	Comparability - over time
Time series from 1977 and there is no break in the time series. The number of reference periods in the time series is 41.	
15.3	Coherence - cross domain
Coherence between fields is not ensured.	
15.4	Coherence - internal
Internal coherence of data is ensured, data are controlled and analysed within the production process. .	
16	Cost and burden
Average time for filling the questionnaire is 20 minutes.	
17	Data revision
17.1	Data revision - policy
Data revision is made in accordance with the Statistical Data Revision Policy of the SSO: (https://www.stat.mk/en/about-us/policies-and-strategies/data-revision/).	
17.2	Data revision - practice
Not applicable, there is no data revision in this SS.	
18	Statistical processing
18.1	Source data

Source of data: Statistical survey on Public water supply and sewage system.

Frame on which the selection is based the random sample selection is Statistical business register.

Method used for data collection: Full coverage

18.2 Frequency of data collection

Annual

18.3 Data collection

Data are collected with the questionnaire of Public water supply and sewage system (VOD.2).

Questionnaire is sent to enterprises by post (or e-mail).

18.4 Data validation

Data validation is made according to the defined criteria for control. Data validation is performing before and after data entry. For deviations reporting units are contacted. Data check is performed on the final results before their publication.

Upon receipt of the questionnaire (by mail or Excel by email) it is archived, recorded, controlled and entered with the application (in Blaze).

The application performs the mandatory controls according to the defined validation rules. In case of errors the data providers are contacted.

The coverage is controlled which should be 100%.

Output data validation:

Output data are analyzed and verified, compared to the previous year (years).

18.5 Data compilation

After the data is downloaded electronically, the data is controlled according to predefined logical rules, imputation of missing values. The data is then imported into the appropriate input application with built-in online controls. At the end, standardized output tables are prepared with the main results being published.

18.6 Adjustment

Not applicable, no adjustment of data is made.

19 Comment

A.1 Annexes