

# Summary reports in accordance with article 7 of the Protocol on Water and Health

The joint secretariat UNECE - WHO/Europe Protocol on Water and Health

**Online Reporting System** 

Party: Estonia





# Summary reports in accordance with article 7 of the Protocol on Water and Health

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### Introduction

### Guidelines for summary reports in accordance with article 7 of the Protocol on Water and Health

#### Background and objectives

1. In accordance with article 6 of the Protocol on Water and Health, Parties are required to set targets and target dates within two years after ratification. The Meeting of the Parties evaluates progress in implementing the Protocol on the basis of summary reports in accordance with article 7, paragraph 6. The objectives of these triennial summary reports are:

(a) To assess progress by means of self-assessment by the Party and assessment by the Meeting of the Parties;

(b) To exchange experience and share lessons learned;

(c) To illustrate successes resulting from the implementation of the Protocol;

(d) To identify challenges in implementing the Protocol, with a view to informing activities under the Protocol's programme of work.

2. The summary reports do not aim to compare the situations in different Parties.

3. In accordance with article 7, paragraph 1 (b), the summary reports contain information on common indicators intended to show how far progress has contributed towards preventing, controlling and reducing water-related disease and to improving the water, sanitation and health situation in the region.

4. The aims of these guidelines are as follows:

(a) To assist Parties in meeting their commitments under article 7 of the Protocol;

(b) To promote the provision of consistent, transparent, accurate and complete information in order to enable a thorough review and assessment of the implementation of the Protocol by the Parties;

(c) To assist the Meeting of the Parties in carrying out its responsibilities to review the progress in implementation of the Protocol pursuant to article 7, paragraph 6.

5. These guidelines are complementary to and should be read together with the *Guidelines on the Setting of Targets, Evaluation of Progress and Reporting* [1], in particular regarding the setting of targets and the identification of indicators to measure progress.

#### Structure

6. Parties should structure their summary reports according to the template adopted by the Meeting of the Parties. To ensure completeness, no mandatory element should be excluded. If mandatory elements cannot be reported for any reason, Parties should explain the omission or the reason for partial reporting in the section relating to that element.

7. The summary reports should be useful for the self-assessment of Parties (e.g., they should encourage Parties to think about the process, the circumstances and "what is behind the figures"). Thus, in addition to figures, reports should include explanatory narratives that could be of use for other Parties, for instance addressing information on legal, regulatory, financial, informational, educational and management measures.

8. Parties are requested to concentrate on, where possible, the following types of information:

(a) The rationale and justification for establishing specific targets;

(b) The outcomes and impacts of actions or measures taken to implement the targets set and other provisions of the Protocol;

(c) Short descriptions of success stories and case studies that could serve as examples of good practice for other Parties;

(d) Major obstacles encountered in implementation;

(e) Actions needed to enhance implementation.

9. The summary reports will be composed of an executive summary providing an overall evaluation of the progress achieved in implementing the Protocol and the following seven parts:

(a) A general part on the process of setting targets and reporting and national circumstances;

(b) Information on targets and target dates set and assessment of progress achieved towards the targets;

(c) Information on common indicators;

(d) Information on water-related disease surveillance and response systems in accordance with article 8 of the Protocol;

(e) An overall evaluation of progress achieved in implementing articles 9-14 of the Protocol;

(f) A thematic part linked to priority areas of work under the Protocol;

(g) Information on the person submitting the report.

10. The summary reports should not exceed 50 pages.

### **Preparation process**

11. Parties are encouraged to consider the participation of all concerned governmental sectors and departments, as well as other relevant stakeholders, in the preparation and use of the summary reports, including non-governmental organizations, civil society, local communities, the private sector and the media.

12. The person or authority responsible for preparing the summary report is encouraged to work closely with the national counterparts responsible for implementation of related international conventions and the *acquis communautaire* of the European Union. Coordinating report preparation will ensure the sharing of data and analysis as well as consistency between reports, thus reducing the overall reporting burden for the country while maintaining consistency with the reporting format. Such coordination could furthermore enhance opportunities for synergies in the national implementation of related international conventions and European Union directives.

### Outreach and communication

13. The preparation of summary reports is an opportunity for communicating the work achieved in meeting the Protocol's objectives to the general public and other stakeholders, including the private sector, and involving them in national implementation. To this end, in addition to involving stakeholders in the preparation of summary reports, it is particularly important for Parties, after submitting their summary reports, to communicate to the general public the positive outcomes identified in the reports and the obstacles and challenges that remain.

14. Various means of communication can be used, including (a) publicly launching the summary reports on World Water Day, World Health Day or World Toilet Day, for example; (b) making the reports accessible to a wider audience through national clearing-house mechanisms, other media or on dedicated Internet sites; and/or (c) developing and disseminating extracts of the national reports.

#### Language

15. The summary report should be submitted in one of the official languages of the Protocol. To facilitate exchange of experience, Parties are also encouraged to submit, where relevant, a translation of their summary report in English.

#### Submission

16. Parties are required to submit their summary reports to the joint secretariat, using the adopted template for reporting, 210 days before the next session of the Meeting of the Parties. Submission of the reports ahead of this deadline is encouraged, as this will facilitate the preparation of analyses and syntheses of the reports for the consideration of the Meeting of the Parties. Parties.

17. Parties are requested to submit, to the two addresses below, an original signed copy by post and an electronic copy by e-mail. Electronic copies should also be available in word-processing software.

#### Joint Secretariat to the Protocol on Water and Health

United Nations Economic Commission for Europe Palais des Nations 1211 Geneva 10 Switzerland (E-mail: <u>protocol.water\_health@unece.org</u>)

World Health Organization Regional Office for Europe WHO European Centre for Environment and Health Platz der Vereinten Nationen 1 53113 Bonn Germany (E-mail: <u>euwatsan@who.int</u>)

[1] United Nations publication, Sales No. E.10.II.E.12. Available from <u>http://www.unece.org/index.php?id=11644</u> (accessed on 14 April 2016).

### **Executive summary**

# Please provide an overall evaluation of the progress achieved in implementing the Protocol in your country during the reporting period.

*Please provide a short description of the main steps taken and highlight important achievements, key challenges, success factors and concrete good practice examples.* 

Suggested length: maximum 2 pages

#### Background

Estonia ratified the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes on 9th September 2003. Starting that date Estonia has been guided by the Protocol. Estonia is a member of the European Union and must implement the EU policy. The aim and idea of the Protocol coincide a lot with the policy in the EU. Therefore most of our targets are based on EU relevant targets.

#### Drinking water

Estonia transposed Commission Directive (EU) 2015/1787 of 6 October 2015 amending Annexes II and III to Council Directive 98/83/EC on the quality of water intended for human consumption which regulates the risk based approach concerning drinking water quality. It gave an option for Estonian water works to choose between regular monitoring of substances in DW or develop monitoring plan based on risk assessment. It gave our water suppliers a chance to optimize the sampling frequency and sampled parameters based on risk assessment and therefore focus resources on most critical points of the DW chain. In that process Estonia gathered all the data of the ground water bodies and developed a estimation about substances occurance in DW. Nevertheless, monitoring is expensive especially for small water suppliers and risk assessment approach at the moment was not widely used by water suppliers.

Since 16.12.2020 the DIRECTIVE (EU) 2020/2184 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the quality of water intended for human consumption (recast) entered in to force.

Estonia transposed the recast directive into nationl legislation (amendments were made mainly in the Water Act and different regulations adopted or amended under the same law) in early 2023 and is is actively working on implementing the directive, more specifically the risk based approach to water safety, materials that come into contact with drinking water, access to drinking water etc. That process successfully brought together health and environment sectors where a lot of cooperation was needed to integrate the different fields. One of the biggest challenges is implementing the risk base approach to water safety which is now obligatory. In 2023, Estonia started developing a risk-based water safety IT-tool for the water suppliers, surveillance authorities and other relevant counterparts to facilitate the risk-based approach implementation in Estonia.

In addition to that, there was no prior specific regulation for drinking water contact materials hygiene in Estonia, hence great efforts are made to transpose and implement the article 11 of the Directive and also the delegation- ja implementing acts of the DWD and create a system

of contact materials safety in Estonia. Concerning the new parameters that need to be moniorted in drinking water according to the DWD, Estonia has increased the laboratory and surveillance capacity. Implementing the access to water requirements were mainly delegated to the local municipalities, who organise access to clean drinking water in their territories. Among other things, local authorities must map the situation and take appropriate and proportional measures to improve the access to drinking water, with special focus on vulnerable and marginalised groups. Local authorities must also organise the setting up of publicly usable indoor and outdoor drinking water abstraction points in public spaces where this is required by the justified needs of the community and where it is technically feasible.

In the end of 2024, a new Public Healthcare Act was adopted. The purpose of the act is to ensure the protection of human health, create conditions for extending the life expectancy of residents and the number of years left to live in good health, prevent and reduce undesirable health effects, and increase health equality among residents, thereby improving the health of the population. The act also regulates and updates the safety requirements for of indoor swimming and bathing services. More specific water safety requirements for pools, spas and water parks will be adopted by a regulation under the aforementioned act in 2025.

Since 2021 the new National Public Health Plan 2020-2030 developed by the Ministry of Social Affairs was adopted. which is a national strategy for public health inter alia environmental health adopted by the Government. In the beginning of that process public consultations were held in the ministry. In addition, local municipalities were visited by the Ministry and the plan was introduced and discussed in the local communities. There are different targets in the plan, from which the 7th is called "health supporting environment" and there is a solution 7.2.1 set for called "Reducing the health risks related to water". The are several priorities set under that solution, e.g: 1) Modernization of water status monitoring and making comprehensible information available to the consumer based on the results, 2) Increasing access to safe drinking water and updating risk assessment principles, and others.

Estonia, since making an overview (in 2020) of water quality of individual water works (private wells), that are not under state surveillance, is taking measures and allocating resources to connect them to the public water supply or implement other measures for safe drinking water. Estonia continuously also creates and updates guidelines for private well owners.

One of our target is increasing of the total number of persons who are supplied with safe drinking water (coming from the public water supply system) with target indicator percentage (%) of population supplied with drinking water conforming to requirements. In order to increase the total percentage of population who has access to safe and monitored drinking water, a lot of remedies have been implemented and investments have been made, including money from the state budget, EU funds, as well as drinking water producers themselves. The results are obvious – percentage of population supplied with drinking water by public drinking water supply conforming to requirements in 2023 was 98,77% and in 2024 98,21%.

In the second half of 2023, the Ministry of Climate, in cooperation with the water sector, local governments and the Competition Authority, began developing a water service strategy roadmap, which must agree on a water pricing methodology that supports the sector and promotes efficiency, indicators for effective water entrepreneurship and find a functioning model of a sustainable water company in Estonia. For the same purpose, a broad-based water service reform steering group began work in June 2023, whose task is to support the implementation of the roadmap. The steering group includes representatives of the Ministry of Climate, the Competition Authority, the Ministry of Social Affairs, the Ministry of Finance, the Environmental Investment Centre, the Health Board, the Estonian Water Companies

Association, the Association of Estonian Cities and Municipalities, the Estonian Society of Water Supply and Sewerage Engineers and the Estonian Central Union of Owners, as well as experts in the field.

With the reform, the government aims to ensure the availability and high quality of public water supply and sewerage services for all Estonians. To ensure the sustainability of the water sector, the water reform needs to reduce the fragmentation of the sector and ensure that water companies can cope even after the end of EU subsidies, control the increase in water prices and prevent a decline in the quality of service.

A meeting on risk-based drinking-water surveillance in Nordic-Baltic countries was convened on 24-26 April 2024. This meeting, hosted by Estonia and organized under the UNECE-WHO/Europe Protocol on Water and Health, was convened in collaboration with the Nordic-Baltic Network on Water and Health. The meeting was funded by the Nordic Council of Ministers. Over 30 participants were in attendance from countries including Estonia, Finland, Iceland, Lithuania, Latvia and Norway, which included representatives from national health authorities and surveillance agencies, as well as water supply utilities. The main objective of the meeting was to promote subregional networking, exchange of experiences and best practices in the implementation of risk-based surveillance approaches among the Nordic-Baltic countries. Throughout the course of the meeting, broad agreement was reached on the importance of strengthening risk-based approaches in participating countries. The significance of this was recognized not only for ensuring safe drinking-water management, and effective surveillance and monitoring, but also as a key requirement for compliance with the Drinking Water Directive.

#### Sanitation

One of our target is ensuring appropriate sewage collection and treatment for all the residents with target indicator percentage (%) of population connected with public sewerage system or have appropriate own system. Percentage of people connected with public sewerage system rised to 83% in 2023 and 98% of the population is connected to the public sewerage system in agglomeration areas more than 2000 pe. 98% of WWTPs (*waste water treatment plant*) are in conformity with the UWWTD (*Urban Waste Water Treatment Directive*) requirements in the agglomeration areas more than 2000 pe. And even more, WWTPs fulfil the HELCOM convention requirements, which has much higher treatment standards than is set in UWWTD. New wastewater treatment plants have been built and existing ones have been reconstructed. Huge investments have been done to sanitation systems and therefore, all Estonian cities are covered with public sewerage systems and urban wastewater treatment plants. In future, more attention should be paid to sanitation systems in rural areas.

Since 2018 Ministry of the Environment launched a new measure to financing households for connecting to public water and sewerage system in agglomerations over 2000 pe, which turned out to be very popular.

#### **Bathing water**

Most bathing waters have been classified as excellent or good. More information under point XV.

#### COVID-19

COVID-19 wastewater monitoring continues as it is part of an early warning system and can provide useful and preventive information

### Part one – General aspects

# 1. Were targets and target dates established in your country in accordance with article 6 of the Protocol?

Please provide detailed information on the target areas in part two.

*If targets have been revised, please indicate the date of adoption and list the revised target areas. Please provide detailed information in part two.* 

Please select only one option

- YES
- O NO
- IN PROGRESS

### 2. Were targets and target dates published and, if so, how?

*Please explain whether the targets and target dates were published, made available to the public (e.g., online, official publication, media) and communicated to the secretariat.* 

Targets were developed and published together with the following strategic documents:

<u>The National Health Plan 2020 – 2030</u> adopted by The Government of Estonia in 2021. This document is available to the public through following webpage of Ministry of Social Affairs.

Besides other topics the topic 7.1.2 "REDUCTION OF RISKS RELATED TO WATER" is covered in the document. It has following overall targets: Modernization of the water monitoring and from the recieved results making the information clear and easily available for the consumers. Development of methodology for assessing the health risks of radionuclides in drinking water and improvement and implementation of the necessary evaluation skills. Increasing access to safe drinking water and updating the principles of risk assessment.

Estonian Environmental Strategy 2030

In implementation: River Basin Water Management Plans for 2022-2027

# 3. Has your country established national or local arrangements for coordination between competent authorities for setting targets?

If so please describe, including information on which public authority(ies) took the leadership and coordinating role, which public authorities were involved and how coordination was ensured. Estonia has established arrangements for coordination for setting targets. In Estonia the responsibility for implementing Protocol on Water and Health is divided between the Ministry of Climate and the Ministry of Social Affairs. (In Estonia, the Ministry of Climate was formally established on 1 July 2023. Before that, the Ministry was called the Ministry of the Environment).

Under the authority of the Ministry of Climate falls the responsibility for assuring and preserving the quality of the water as a resource (both groundwater and surface water), which is to be used as a source of drinking water. The Ministry of the Climate is responsible for the following government functions: protection of the national environment and of nature; maintenance of the land and spatial databases; natural resources including estimation of the their quantities and regulation of their use, recycling, and protection; radiation safety; surveillance over the environment; organisation of meteorological, geological, cartographic, geodesic surveys and ecological/marine research; maintenance of the land and water cadastres; and drafting of legislation regarding these areas. In other words, the responsibility of the Ministry of Climate is to organise and coordinate environmental policy.

Under the authority of the Ministry of Social Affairs falls the responsibility for protecting the health of the population and coordinating activities in this area. The Ministry drafts legislation aimed at assuring a healthful human environment, as well as strategies and policies to advance the same. The Health Board is a subsidiary agency of the Ministry of Social Affairs which is responsible for surveillance of drinking water and bathing water quality.

Despite the fact that there is no official coordination body for Protocol implementation, including target setting, co-operation between involved ministries and other competent authorities and stakeholders work well.

# 4. Was a programme of measures or action plan developed to support implementation of the targets?

If so, please briefly describe that programme or plan, including how financial implications were taken into account.

Targets have been included in several national strategies and programmes: National Health Plan 2020 – 2030, Estonian Enviromental Strategy 2030, River Basin Water Management Plans 2022 – 2027, Oil shale Development plan 2016 – 2030, Radiation Protection National Strategy 2018 – 2027.

Securing the population with safe and healthy drinking water is one of the priorities in the field of environmental health. For the implementation of The National Health Plan 2020-2030 there have been developed different programs. Among other programs is the "Environmental Health Program". The objective of that program is following:

The living environment of all Estonian residents has become more supportive of health, and information on possible health risks arising from the environment and ways to reduce them is readily available in a timely manner.

The program focuses on promoting environmental health and the program is funded from the state budget. The programme includes several water related targets, that are constantly

#### being monitored:

The percentage of the population provided with water from central water supply network that is conforming to all requirements: 98,21% (2024) Bathing water quality (percentage of bathing water that is classified as "excellent" or "good" according to the Bathing water Directive requirements): 87,4% (2024) The share of pools with quality water is increasing: 83% (2024)

River Basin Management Plans was developed to provide a thorough overview of the status of Estonian waterbodies and to plan activities to improve the status of rivers, lakes and coastal waters and the sea. The plan is drawn up for each river basin district for six years and then updated. Previous River Basin Management Plans has been implemented for the period 2015-2021. After that new River Basin Management Plans for 2022–2027 have been prepared and taken in use. Concrete actions were set in Programmes of Measures under the River Basin Management Plans. The guidelines and restrictions in the River Basin Management Plans and the Programme of Measures must be taken into account in the elaboration of planning and development plans and in the granting of environmental permits. Actions were financed from the state budget, the local governments, the European Union and the private sector. Elaborating River Basin Management Plans is a public process, Environmental Board coordinates involvement of public and other stakeholders.

There is a specific state foundation, the Environmental Investments Centre under the Ministry of Climate in Estonia. It is a financial institution, mediating state budget funds (revenues from environmental charges), EU funds, funds from foreign aid programmes and the Green Investment Scheme, and granting loans for the implementation of environmental projects. For example, water companies and local governments can apply for support form there for projects to meet the drinking water and wastewater related requirements.

5. What has been done in your country to ensure public participation in the process of target setting in accordance with article 6, paragraph 2, and how was the outcome of public participation taken into account in the final targets set?

Processes of developing and implementing Estonian Environmental Strategy, River Basin Management Plans and National Health Plan (and process of their development) have been public and therefore public participation was made available. Several targets are set as legal requirements in legal acts. Preparing legal act is a public process where stakeholders are involved.

Ministry of the Environment (now Ministry of Climate) developed the River Basin Management Plans with the involvement of various stakeholders, including the public. The public consultation on the drafts lasted from 31.12.2021 to 30.06.2022.

The public consultation meetings was held from 14.03.2022 to 21.03.2022 on a thematic basis and online via MS Teams, together with public consultations on the <u>Flood Risk Management</u> <u>Plans</u>, the <u>Marine Strategy</u> and the Land Reclamation Management Plans. Recorded meetings and presentations are available on <u>the website of the Ministry of Climate</u>.

During the public consultation, everyone had the opportunity to submit their suggestions on the draft water management plans and draft programme of measures. The Ministry of the Environment responded to the suggestions and objections submitted after the end of the public consultation. Based on the substantiated proposals and objections and the results of the public consultation, the documents were improved.

Ministry of Social Affairs has adopted in 2021 the new National Health Plan 2020 – 2030. In the beginning of that process public consultations were held in the ministry. All the relevant stakeholders, also NGOs and other bodies who represent the people were invited and participated in the discussion. Also local municipalities were visited by the Ministry and the plan was introduced and discussed in the local communities.

6. Please provide information on the process by which this report has been prepared, including information on which public authorities had the main responsibilities and what other stakeholders were involved.

According to the responsibilities mentioned above under point 3, overview of drinking and bathing water quality, water related diseases and outbreaks was prepared by the Ministry of Social Affairs and Health Board. Remaining parts were prepared by the Ministry of the Climate. The Estonian Waterworks Association was also involved.

### 7. Please report any particular circumstances that are relevant for understanding the report, including whether there is a federal and/or decentralized decision-making structure.

There are not any federal decentralized structures in Estonia.

# Part two – Targets and target dates set and assessment of progress

For countries that have set or revised targets and target dates, please provide information specifically related to the progress towards achieving them. If you have not set targets in a certain area, please explain why.

*For countries in the process of setting targets, please provide information on baseline conditions and/or targets considered under the relevant target areas.* 

Suggested length: 330 words per target area.

### I. Quality of the drinking water supplied (art. 6, para. 2 (a))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Target: The percentage of the population provided with water from central water supply network that is conforming to all requirements

At the end of year 2024, 85,5% of the total national population was connected to the water supplies, of whom 98,21% used water for which no microbiological, chemical and indicator values were not exceeded (except radiological indicators).

In the last 6 years this numbers have remained more or less stable between 98 – 99 %.

### Percentage of population supplied with drinking water conforming to requirements

| Baseline |  |
|----------|--|
| 2006     |  |
| 2022     |  |
| 2023     |  |
| 2024     |  |
| 73%      |  |
| 98,3%    |  |
| 98,77%   |  |
| 98,21%   |  |
|          |  |

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Drinking water related legislation in Estonia is intended to support the development and implementation of risk management strategies that will ensure the safety of drinking water supplies through the control of hazardous constituents of water.

Since Estonia is a member of the EU, the water quality must be in compliance with the Directive 2020/2184/EU. The Directive lays down requirements for risk based water safety and the essential quality standards at EU level.

Requirements of the recast drinking water directive concerning quality of water intended for human consumption have been transposed into the following Estonian legislation:

-Water Act (23 January 2023) adopted by the Estonian Parliament

-Regulation 61 (3 March 2023) of the Minister of Social Affairs: "Drinking water quality and control requirements and analysis methods and requirements for providing information to

#### consumers"

-Regulation 6 (16 January 2020) of the Minister of the Environment: "<u>Specified data</u> <u>composition of the water use report and procedure for submission of the report</u>"

-Regulation 23 (14 April 2023) of the Minister of the Environment: "Requirements for risk assessment and management of drinking water catchment areas and supply areas1"

Since 16.12.2020 the <u>DIRECTIVE (EU) 2020/2184</u> OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the quality of water intended for human consumption (recast) entered in to force. Estonia has activly worked on transposition this directive into our legislation.

In order to increase the total percentage of population who has access to safe and monitored drinking water, a lot of remedies have been implemented and investments have been made, including money from the state budget, EU funds, as well as drinking water producers themselves.

Access to water requirements in the Water Act are delegated to the local municipalities, who organise access to clean drinking water in their territories. Among other things, local authorities must map the situation and take appropriate and proportional measures to improve the access to drinking water, with special focus on vulnerable and marginalised groups. The Ministry of Social affaris together with Ministry of Climate and the Health Board aid local municipalities in this matter in different ways (administrative, financial and knowhow based measures). Coupled together with implementing the risk based approach to water safety, the contact materials regulation and other requirements from the drinking water directive, the legislative base in the Water Act ensures the prerequisites for safe drinking water and meeting the set target.

Estonia has made significant investments to comply with drinking water and wastewater directives since 2004. Approximately 1,7 billion euros have been invested using EU funds, Estonian Environmental Investment Centre aid and water companies and municipalities own contribution. What's important to highlight is that close to 50% of the environmental funds money that have been available in Estonia, have been used to build and upgrade our water infrastructure. This has been possible as we have taken the achievement of compliance with drinking water and wastewater directives very seriously and this has been the priority of our government in the environmental sector since the accession to EU.

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The results are obvious – pollution load have been decreased significantly, at the same time the amount of wastewater is relatively constant during this period.

However, achieving these goals has been very challenging as Estonia is very sparsely populated country. This results in very high investment and maintenance cost per capita.

Estonia has several future challenges related to sustainability and affordability issues in this sector. Water utilities efficiency must be raised through consolidation of smaller water companies to regional ones.

In 2004 Ministry of the Environment of Estonia took the initiative and restructured smaller water companies to regional companies, which serve several municipalities together,

alltogether 40% of the municipalities are operated by regional water companies. Regional water companies ensure better service quality and lower price of water, ensure efficient management and higher competence of water service. But not all water companies have yet joined into regional companies. Today we are convinced that regional water companies are the right solution for us to ensure sustainable water service in long term. Since the beginning of 2022 the Ministry of the Environment has changed the application rules for water companies for investments. The investment funds are applicable only for regional water companies.

To help the municipalities to tackle the environmental goals in water management, Ministry of the Environment has prepared guidelines for the municipalities how to regulate the supervision of the individual sewerage systems. Since 2018 Ministry of the Environment launched a measure to financing households for connecting to public water and sewerage system in agglomerations over 2000 pe, which turned out to be very popular.

The Estonian Water Works Association (EVEL) was founded in 1995 by 11 water companies. EVEL is a nationwide voluntary association of water companies providing the service of public water supply and sewerage and other business operators related to this area of activity. EVEL comprises 42 water companies and 29 companies related to the field of water management. For it's members EVEL is organizing information sharing, training programs and workshops related to the watersector's legislation and technical development.

Since 2017, EVEL in cooperation with the Järvamaa Vocational Education Center (JKHK) organizing workplace-based study program "Water Management Operator, Level 5". The curriculum concerns the training of both drinking water and sewage treatment plant operators. After 2 years of study, the professional examination will take place and after successful completion of the exam the student will be awarded with the certificate of professional qualification "Water Management Operator, Level 5".

The digitalisation of existing assets is a key aspect of enhancing efficiency in the water sector. As part of the EVEL GIS project, we have updated the document "Requirements for As-Built Surveys of Water and Sewerage Infrastructure," incorporating a new section in 2023 titled "Requirements for Ditch As-Built Drawings." The continuous revision and modernisation of this document ensure that water utilities have access to accurate data, supporting a forwardlooking approach to water sector development..

In addition to several completed Baltic Sea Interreg projects, whose summaries, guidelines, and other materials can be found on the website: .

In the second half of 2023, the Ministry of Climate, in cooperation with the water sector, local authorities and the Competition Authority, started to develop a roadmap for a water services strategy, which should agree on a water pricing methodology that supports the sector and promotes efficiency, indicators for efficient water business and a model for a sustainable water business in Estonia.

Therefore, a broad-based Water Services Reform Steering Group was launched in June 2023 to support the implementation of the roadmap. The steering group is composed of representatives of the Ministry of Climate, the Competition Board, the Ministry of Social Affairs, the Ministry of Finance, the Environmental Investment Centre, the Health Board, the Estonian Water Companies Association (EVEL), the Estonian Association of Towns and Municipalities, the Estonian Water Supply and Sewerage Engineers Association and the Estonian Owners' Association, as well as experts in the field Vahur Värk, project manager of Entec Eesti OÜ, and Tauno Võhmar, mayor of Alutaguse municipality.

The strategic roadmap will be prepared with the help of a water reform consultant found through an international tender process, a consortium consisting of Civitta Eesti AS,

Keskkonnalahendused OÜ, Powerhouse OÜ, TRINITI law firm and international experts. The work is funded by the European Union's Technical Support Instrument (TSI).

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Access to safe drinking water and sanitation is essential to health and environment, a basic human right and a component of effective policy for health protection. In 2006, 73% of the population in Estonia was supplied with drinking water that conformed with requirements. Today, we have reached approximately the level of 99%.

Still has remained one problem which is the plentiness of small water suppliers and the issues concerning their sustainability and water quality.

The fulfillment of the targets is influenced in some cases by the availability of funds (eg., the percentage of the population provided with water from central water supply network).

The results of the investments to the water infrastructure sector are obvious – pollution load have been decreased significantly, higher connection rates to drinking water and sewerage systems, comformity with environmental and health norms.

Estonia has a high proportion of people connected to public water supply and sewerage: in 2023, the proportion of people connected to public sewerage was 83% and the proportion of people connected to public water supply was 84%.

The rate of compliance with the combined sewerage and treatment requirements of aglomerations of at least 2,000 personal equivalents (p.e.) discharges resulting from the Urban Wastewater Treatment Directive 91/271/EEC, which is still applicable, is also high -- in 2023, 98% of the wastewater discharges with a load of at least 2,000 p.e. were compliant with the collection and treatment requirements (i.e. 55/56 of the wastewater discharges were compliant). And even more, WWTPs fulfill the HELCOM convention requirements, which has much higher treatment standards than is set in UWWTD.

The Urban Wastewater Treatment Directive 91/271/EEC provides for the possibility of using individual systems in exceptional cases for collecting systems with a load of at least 2,000 p.e., where the construction of collective sewerage systems is unjustified (too costly or no environmental benefit). The development of public water supply and sewerage in a municipal authority is generally based on a Public Water Supply and Sewerage Development Plan, which is drawn up by the municipal authority in cooperation with the water company, reviewed at least every four years and updated if necessary (this obligation is laid down in the Collective Water Supply and Sewerage Act). It is neither necessary nor reasonable to provide public water supply and sewerage in all areas.

The plan will be drawn up on the basis of an assessment of the most appropriate technical solution for the area concerned (including the choice between public water supply and sewerage or individual solutions), taking into account economic, social and environmental considerations. The planning of the shared water supply and sanitation system must be based on the assumption that the provision of the public water supply and sanitation service in the area is necessary for the protection of health and the environment, that the cost of the public water supply and sanitation service remains reasonable for the inhabitants of the area, and that the risks arising from the area to the provision of the public water supply and sanitation service are prevented, mitigated or reduced.

If, as a result of the analyses, it is not feasible to provide a public water supply and sewerage service in the area at a reasonable cost, there is no obligation to develop a public water supply and sewerage system. The average price of a public water supply and sanitation service in Estonia is €4.25/m3 (including VAT), which represents about 1.03% of the average net household income, below the upper limit of the OECD's estimate of a reasonable price for a public water supply and sanitation service (up to 3-5%) and also below the 2% price ceiling for water services mentioned above. Achieving the good status of water bodies, ensuring the continuity of the public water supply and sanitation service, keeping the price of the service at a reasonable level and providing people with good quality drinking water will also contribute to the achievement of the objectives of the Climate Minister's Decree of 02.07.2024. 2024 Decree No. 46 "Requirements, training programme and procedures for persons competent for the operation of drinking water and wastewater treatment facilities" and Decree No. 15 of the Minister of Climate of 06.03.2024 "Procedure for determining the volume and cost of illegally used public water supply and sewerage services".

In addition, Regulation No 61 of the Minister of the Environment of 08.11.2019 "Requirements for the treatment of wastewater and the discharge of wastewater, stormwater, mine water, quarry water and cooling water, measures for assessing compliance and limit values for pollutant content" was also renewed in 2024. The amendments to Regulation No 61 were mainly related to the updating of the list of hazardous substances and the limit values. The new limit values for hazardous substances in discharges of used water take into account the need to ensure that surface water bodies do not pose a problem of exceeding the limit values for hazardous substances.

### 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

The global indicator selected by UN Member States for monitoring SDG target 6.1 is '**proportion of population using safely managed drinking water services**'.

One of the main aims for DW in the adopted National Health Plan till 2030 is to increase the percentage of population connected to the public water supply of which water is safe to drink. This target is inline with SDG 6.1 and 6.3.

At the end of year 2024, 85,5% of the total national population was connected to the water supplies. These are supplies that are under the Health Board supervision. Remained population uses unpiped source drinking water (boreholes, wells). In 2019 large scale survey of individual drinking water wells (over 1000 wells over the country) was conducted. Upon recieved data <u>a set of guidelines</u> for individual drinking water wells users were developed in 2020.

The overall aim is to connect them to the public water supply if possible or implement other remedies for water safety. These activites are in line with SDG 6.1.

### 5. If you have not set a target in this area, please explain why.

not applicable

# II. Reduction of the scale of outbreaks and incidents of water-related disease (art. 6, para. 2 (b))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Target: There are no outbreaks of diseases due to drinking water. Target date: **2025** 

Base value (2010): 0

Current value (2024): 0

Target is set on national level in National Health Plan 2020 – 2030 implementation program on Environmental Health in accordance with recast Directive which determines that: quality of water intended for human consumption, Member States shall take the measures necessary to ensure that water intended for human consumption is wholesome and clean. For the purposes of the minimum requirements of this Directive, water intended for human consumption shall be wholesome and clean if it:

(a) is free from any micro-organisms and parasites and from any substances which, in numbers or concentrations, constitute a potential danger to human health, and

(b) meets the minimum requirements set out in directive Annex I, Parts A and B;

In period 2022-2024 there were 2 water-related outbreaks – one outbreak due to drinking water (141 cases, 2023 y) and one outbreak due to bathing water (10 cases 2024 y)

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Estonia has adopted the recast drinking water directive and with surveillance monitoring performed by the Health Board and additional monitoring done by the water producers to have good overview of water quality in public water supplies. Operators of water supplies that do not meet the requirements for water quality are obliged to improve the water quality. There are no drinking water supply systems in Estonia that constantly fail to meet the requirements of microbiological parameters. Temporary deviations from required microbiological parameters have been noted in less than 0,34% of water works under suirveillance.

Since 16.12.2020 the DIRECTIVE (EU) 2020/2184 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the quality of water intended for human consumption (recast) entered in to force. Estonia has transposed this directive into its national legislation. The new directive has

requirements for risk assessment and risk management of the catchment areas for abstraction points of water intended for human consumption, for risk assessment and management of the supply system, risk assessment of domestic distribution systems etc.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

In period of 2022 – 2024 there were some water-related outbreaks. In 2023, a central water supply system in Kuressaare suffered damage and was contaminated, causing around 141 people to fall ill and seek medical attention. The illnesses were caused by various pathogens that entered the drinking water during the water emergency. However, it is not possible to determine the exact number of people who fell ill, as the epidemiological study revealed that not all those who fell ill sought medical attention due to the milder course of the disease.

In 2024 there was also a bathing water related outbreak at Russalka beach (10 cases).

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

These targets are in line with SDG 6.1, 6.2 and 6.3. Requirements also help to achieve SDG 3.2.

### 5. If you have not set a target in this area, please explain why.

not applicable

### III. Access to drinking water (art. 6, para. 2 (c))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Target: Percentage of national population who are supplied with safe drinking water through public water supply

Base value (2006): 73% Current value (2024): 85,5% Target value (2025): 90%

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Estonia has implemented the recast drinking water directive which sets limit values for different parameters. In order to increase the total percentage of population who has access to safe and monitored drinking water, a lot of remedies have been implemented and investments have been made, including resources from the state budget, EU funds, as well as drinking water producers and local governments.

Implementing the access to water requirements are delegated to the local municipalities, who organise access to clean drinking water in their territories. Among other things, local authorities must map the situation and take appropriate and proportional measures to improve the access to drinking water, with special focus on vulnerable and marginalised groups. Local authorities must also organise the setting up of publicly usable indoor and outdoor drinking water abstraction points in public spaces where this is required by the justified needs of the community and where it is technically feasible. Ministry of Social affaris together with Ministry of Climate and the Health Board aids local municipalities in this matter in different ways (administrative, financial and know-how based measures that support the process of facilitating access to water). They also must develop an overview of the measures, assess the effectiveness of those measures and report about them to the Commission by 2029.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

According to the WHO, access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. In 2006, 73% of the population in Estonia was connected to the water supplies. Today, we have reached the level of 85,5%.

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

It is in line with SDG 1.4, 3.2, 3.8, 4.a and 6.1, 9.1 and 11.1.

### 5. If you have not set a target in this area, please explain why.

not applicable

### IV. Access to sanitation (art. 6, para. 2 (d))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Target: Ensuring appropriate sewage collection and treatment for all the residents.

Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. The maintenance of hygienic conditions, through services such as wastewater disposal helps to protect public health and prevent diseases. According to WHO, management and investments in improvements on sanitation systems should be made based on adequate understanding of the actual health risks posed by the systems and how these risks might best be controlled. As waste water is the main source of point pollution to water bodies being therefore also environmental concern, it is essential to implement appropriate waste water collection and treatment requirements all over Estonia.

### 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Estonia must ensure waste water treatment according to Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment and HELCOM recommendations.

The Ministry of the Environment is responsible for implementation of the directive and HELCOM recommendations for waste water treatment.

Requirements of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment and HELCOM recommendations are transposed into Estonian legislation. Requirements are set in Water Act and also in Government and ministerial regulations issued under the Water Act. Sanitation issues are regulated by:

-Water Act

-Public Water Supply and Sewerage Act

-Regulation No. 61 (8.11.2019) of the of the Minister of the Environment of Estonia "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values".

-Regulation No 29 (31.07.2019) of the Minister of the Environment "Limit values and requirements for the use of sewage sludge for landscaping, reclamation and agriculture".

-Regulation No 24 (19.07.2017) of the Minister of the Environment "Requirements for the manufacture of sewage sludge products".

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

A lot of investments have made into sanitation systems and therefore, all Estonian cities are covered with public sewerage systems and urban wastewater treatment plants. In future, more attention should be paid to sanitation systems in rural areas.

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Inadequate sanitation is a major cause for water bodies pollution being therefore high environmental concern. Inadequate sanitation is also major cause of diseases world-wide and improving sanitation is known to have a significant beneficial impact both on environment and on health. The maintenance of hygienic conditions, through services such as wastewater disposal helps to protect environment and public health. Therefore it is fulfilling SDG 6.2 and 6.3 and also 3.2, 3.3, 3.8 and 3.9. Also SDG 1.4, ensure access to basic sanitation, is fulfilled. Activities concerning access to sanitation also helps to achieve SDG 4.a, 5.1, 9.1 and 11.1.

### 5. If you have not set a target in this area, please explain why.

not applicable

# V. Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

# 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

In Estonian legal system, collective systems are considered as water supply zones and therefore have to meet all the drinking water requirements on same basis as 6.2.(a).

# VI. Levels of performance of collective systems and other systems for sanitation (art. 6, para. 2 (e))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

Sewage collecting systems requirements and targets are covered with 6.2.(d). All Estonian sanitation systems must have also sewage collecting systems due to requirement that all generated waste water must be treated before discharging.

# VII. Application of recognized good practices to the management of water supply (art. 6, para. 2 (f))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

Estonian Environmental Research Centre has conducted a <u>research</u> "<u>Study on drinking water</u> <u>quality and systems in sparsely populated areas</u>". Additionally Health Board has prepared recommendations for action when <u>coliform bacteria</u> and <u>legionella bacteria</u> has been detected in drinking water.

According to the regulation No. 61 (24 September 2019) of the Minister of Social Affairs: "Quality and control requirements for drinking water and methods for testing" paragraph 1 section 3 Health Board local regional services must advise private well owners concerning water quality.

# VIII. Application of recognized good practice to the management of sanitation (art. 6, para. 2 (f))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

### 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

Sanitation management is covered with 6.2.(d). All Estonian sanitation systems must have sewage collecting systems and all generated waste water must be treated before discharging according to the set quality standards.

### IX. Occurrence of discharges of untreated wastewater (art. 6, para. 2 (g) (i))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

According to Water Act, discharging of untreated wastewater is prohibited. Detailed requirements for wastewater treatment are set in the regulation No. 61 (8.11.2019) of the Minister of the Environment "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values".

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Detailed requirement for wastewater treatment are set in regulation No. 61 (8.11.2019) of the Minister of the Environment "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values". Wastewater shall be treated before discharging into a recipient up to the limits or treatment levels established by the regulation, on the spot, or transported or discharged into a wastewater treatment plant. According to Water Act a permit for the special use of water is necessary if effluent or other pollutants are discharged into a recipient. Permit for the special use of water is issued and inspected by the Environmental Board.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

While discharging treated effluent and pollutants into a water body where the status class of its body of surface body is moderate, poor or bad, or where there is a risk of deterioration of the status class of the body of surface water, the issuer of the permit may reduce the emissions allowed for treated effluent and pollutants in the water permit or integrated permit, or establish more stringent limit values for pollutant concentrations than the limit values.

If the emissions of treated effluent and pollutants planned or determined by the water permit or integrated permit exceed the allowed annual combined emissions of pollutants established by the programme of measures of a river basin management plan for a water body or body of water, the issuer of the permit may reduce the emissions allowed for treated effluent and pollutants in all the water permits or integrated permits granted for the discharge of treated effluent or pollutants into that water body pro rata to the amount exceeding such emissions.

Permit for the special use of water for wastewater discharge is issued by the Environmental Board. Certain conditions for wastewater treatment and discharge are set in this permit for the special use of water. Inspection over the fulfilment of conditions set in permit are made by the the Environmental Board.

### 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements for wastewater treatment are in line with SDG indicator 6.3 and 6.6 by helping to improve water quality by reducing pollution and minimizing release of hazardous chemicals and materials and halving the proportion of untreated wastewater and to protect and restore water-related ecosystems. Also requirements for wastewater treatment help to achieve SDG 3.3, 3.9, 11.b, 12.4.

### 5. If you have not set a target in this area, please explain why.

not applicable

# X. Occurrence of discharges of untreated storm water overflows from wastewater collection systems (art. 6, para. 2 (g) (ii))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

According to regulation No 61 (8.11.2019) of the Minister of the Environment "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values" from common sewerage system storm water overflows can be used only if the dilution rate of wastewater and stormwater is 1:4.

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

The overflow of the combined sewer must be designed to work only if the effluent discharged contains one part of the wastewater and at least four parts of the rainwater. The ratio of wastewater and storm water flow rates is determined by the design project. Wastewater treatment limit values shall not apply to rainwater and sewage mixtures discharged through the overflow.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Permit for the special use of water for wastewater discharge is issued by the Environmental Board. Certain conditions for wastewater treatment and discharge are set in this permit for the special use of water. Inspection over the fulfilment of conditions set in permit are made by the Environmental Board.

### 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements are in line with SDG indicator 6.3 and 6.6 by helping to improve water quality by reducing pollution and minimizing release of hazardous chemicals and materials and halving the proportion of untreated wastewater and to protect and restore water-related ecosystems. Also requirements help to achieve SDG 3.3, 3.9, 11.b, 12.4.

### 5. If you have not set a target in this area, please explain why.

not applicable

# XI. Quality of discharges of wastewater from wastewater treatment installations (art. 6, para. 2 (h))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

According to regulation No. 61 (8.11.2019) of the Minister of the Environment "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values" all discharged wastewater must meet the quality standards set in the regulation.

### 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Detailed requirement for wastewater treatment are set in regulation No. 61 (8.11.2019) of the Minister of the Environment "Requirements for Waste Water Treatment and Discharge of Sewage, Precipitation, Mining, Quarrying and Cooling Water, Conformity Assessment Measures and Pollutant Limit Values". Wastewater shall be treated before discharging into a recipient up to the limits or treatment levels established by the regulation, on the spot, or transported or discharged into a wastewater treatment plant. According to the Water Act a permit for the special use of water is necessary if effluent or other pollutants are discharged into a recipient. Permit for the special use of water is issued by the Environmental Board and fulfilling the permit requirements is inspected by the department of environmental inspections of the Environmental Board. When discharging effluent into a recipient whose status class is poor or bad, the issuing authority of permits for the special use of water may impose requirements that are up to 30 percent more stringent than those established by the regulation on effluent discharged to the recipient. When discharging effluent into a recipient whose quality indicators deteriorate due to discharging effluent to the recipient and there is a threat that the status class of the water body will deteriorate, the issuing authority of permits

for the special use of water may impose requirements that are up to 15 percent more stringent than those established by the regulation.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Permit for the special use of water for wastewater discharge is issued by the Environmental Board. Certain conditions for wastewater treatment and discharge are set in this permit for the special use of water. Inspection over the fulfilment of conditions set in permit are made by the Environmental Board.

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements for wastewater treatment are in line with SDG indicator 6.3 and 6.6 by helping to improve water quality by reducing pollution and minimizing release of hazardous chemicals and materials and halving the proportion of untreated wastewater and to protect and restore water-related ecosystems. Wastewater treatment requirements also help to achieve SDG 3.3, 3.9, 12.4.

### 5. If you have not set a target in this area, please explain why.

not applicable

# XII. Disposal or reuse of sewage sludge from collective systems of sanitation or other sanitation installations (art. 6, para. 2 (i))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Sewage sludge reuse and disposal are regulated by the Waste Act and regulation No 29 (31.07.2019) of the Minister of the Environment "Limit values and requirements for the use of

sewage sludge for landscaping, reclamation and agriculture".

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Detailed requirements for sewage sluge reuse and disposal are set in regulation No 29 (31.07.2019) of the Minister of the Environment "Limit values and requirements for the use of sewage sludge for landscaping, reclamation and agriculture". The regulation regulates the use of sewage sludge in agriculture, landscaping and recultivation to avoid its adverse effects on surface and groundwater, soil, plants, animal and human health. Regulation set limitations on using sewage sludge in agriculture, landscaping and recultivation in the sense of heavy metals and hazardous substances concentrations in sewage sludge. Also there are restrictions to use sewage sludge in the areas where in the soil heavy metals are over set concentrations or where the pH is low or when there is a risk for flooding or erosion.

Taking into account accumulative properties of heavy metals there are also set limits for amounts of heavy metals that are carried to soil in 10 years perspective. Only stabilized or stabilized and hygienic sediments may be used for landscaping, re-cultivation and farming of short rotation coppice. The stabilized sediment deposited on the ground must be brought into the soil or covered with soil within two days after the start of application. It is forbidden to use sediment on land where vegetable or berry crops and herbs are grown.

The land on which the sewage sludge is laid shall not be used for the production of vegetable crops or herbs for food or feed within one year of application and grazing animals or stocking animals within two months of laying. Regulation foresees also several requirements for the user of sewage sludge.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Requirements are set since 2003, last update in 2023. The compliance is inspected by the Environmental Board.

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements are in line with SDG indicator 6.3 and 6.6 by helping to improve water quality by reducing pollution and minimizing release of hazardous chemicals and materials and halving the proportion of untreated wastewater and to protect and restore water-related ecosystems. Requirements also help to achieve SDG 3.3, 3.9, 12.4 and 15.1.

### 5. If you have not set a target in this area, please explain why.

not applicable

### XIII. Quality of wastewater used for irrigation purposes (art. 6, para. 2 (i))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

# 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

# 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

Wastewater was not allowed to use for irrigation purposes in Estonia until 2023. Treated urban waste water was allowed be discharged into a body of water or into soil, but discharges into the soil were not considered to be irrigation activities. Then and now, any discharge can take place on the basis of an environmental permit. In 2023-2024 the Ministry of Climate legalised the water reuse for irrigation. Therefore, the Water Act was changed in 2024 and also the ITC development was made to improve the environmental permitting infosystem with the functionality of water reuse permits. Water reuse is allowed if it is economically sound and safe for the environment and human health, not only in agriculture but also in other areas.

# XIV. Quality of waters which are used as sources for drinking water (art. 6, para. 2 (j))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

In Estonia, approximatly 60% of public water supply consumers use groundwater and 40% use surface water.

In the start of 2023, Estonia transposed the recast drinking water directive into national legislation together with the requirements of risk based approach to water safety, The risk based approach also includes risk assessment and risk management of the catchment areas for abstraction points of water intended for human. The risk assessment and risk management of the catchment areas for abstraction points of water intended for human. The risk assessment and risk management of the catchment areas for abstraction points of water intended for human consumption shall be carried out for the first time by 12 July 2026.

The parameters to be monitored in drinking water shall be based on the result of the risk assessment, informed by the results of monitoring of sources of water intended for human consumption and confirming that human health is protected from the adverse effects of any contamination of water intended for human consumption. Therefore, the risk assessment gives input for some of the parameters to be monitored in drinking water, besides the compulsory parameters.

In addition there are some requirements for monitoring raw water quality and volume set in the permits for water suppliers. Environmental permits are issued by Environmental Board.

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

#### (See also article 6, paragraph 5, of the Protocol)

Please see explanations under point 1. In the start of 2023, Estonia transposed the recast drinking water directive into national legislation together with the requirements of risk based approach to water safety (see under point 1) with the amendments of the Water Act.

In addition, more specific requirements were set in the Regulation 23 (14 April 2023) of the Minister of the Environment: "Requirements for risk assessment and management of drinking water catchment areas and supply areas1"

In 2023, Estonia started developing a risk-based water safety IT-tool for the water suppliers, surveillance authorities and other relevant counterparts to facilitate the risk-based approach implementation in Estonia (including catchment). The IT-tool will encourage the water suppliers to do the work efficiently and will help to ensure that all the risk-assessments are done with common structure, quality and timeframe.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Since 16.12.2020 is valid DIRECTIVE (EU) 2020/2184, where in article nr 8 are set requirements for the risk assessment and risk management of the catchment areas for abstraction points of water intended for human consumption. Member States shall ensure that the risk assessment includes all the necessary elements that are given in the directive.

Currently Estonia is in implementation phase of DIRECTIVE (EU) 2020/2184 (see under point 1).

### 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements for quality of waters which are used as for a source for drinking water are in line with SDG indicator 3.9 and 6.3. 16.12.2020 Directive (EU) 2020/2184 article nr 8 The risk assessment and risk management of the catchment areas for abstraction points of water intended for human consumption shall be carried out for the first time by 12 July 2026.

### 5. If you have not set a target in this area, please explain why.

not applicable

### XV. Quality of waters used for bathing (art. 6, para. 2 (j))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

Requirements for bathing water are set in the regulation of the Ministry of the Social Affairs No 63 "Requirements for bathing water and bathing places" (03.10.2019). The requirements of Directive 2006/7/EC are transposed in Estonian legislation by the Public Health Act, the Water Act, and regulations implementing them in 2008.

According to the Public Health Act the bathing water must be safe for the health. According to regulation No 63, bathing water shall be deemed to conform to the relevant parameters if the bathing water is classified as "sufficient", "good" or "excellent". Also Estonia has set national limits for Escherichia coli and intestinal enterococci in regulation No 63 for assessing every individual bathing water sample. The mentioned reference values for Escherichia coli is 1000 cfu/100 ml and for intestinal enterococci is 100 cfu/100ml.

# 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

The requirements of Directive 2006/7/EC are promulgated in Estonian legislation by the Public Health Act, the Water Act, and regulations implementing them in 2008.

Quality and control requirements for bathing water are laid down in the regulation of the Ministry of the Social Affairs No 63 from 3rd October 2019 "Requirements for bathing waters and bathing sites".

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Quality of bathing water has been complied with the requirements in most of the places over the years. From year 2012 (the first year in which bathing water quality could be assessed in accordance with the requirements of the new BW Directive) most of the bathing waters are classified as "excellent" (62-67%) and "good" (16-22%), some are "sufficient" (5-13%) and some years there were 1-3 bathing places which are classified as "poor" (0-7%).

Short-term pollution event occurs usually once or twice during the bathing season in some bathing places.

Bathing water profiles are established and renewed if it is necessary. The water quality management measures are also part of River Basin Management Plans and local development plans. Places where short-term events take place and bathing water quality is "poor" then bathing place owner is trying to identify the causes of the pollutions and reasons

of poor water quality. Where possible there have been pollution sources removed or their effects reduced (eg construction and renewal of sewerage routes, stormwater discharges management etc). Bathing place owners collaboration with scientists have also done some studies to identify the causes of the pollutions and reasons of poor water quality.

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Bathing water requirements are in line with SDG. Requirements help to achieve SDG 11.7 to provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities and 3.9 to substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination. Requirements also help to achieve SDG indicator.

### 5. If you have not set a target in this area, please explain why.

not applicable

## XVI. Quality of waters used for aquaculture or for the production or harvesting of shellfish (art. 6, para. 2 (j))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

According to the Water Act permit for special use of water is necessary when cultivating fish with an annual increment of more than one tonne, or if from there wastewater is discharged. But no quality criteria for waters used for aquaculture or for the production or harvesting of shellfish.

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

Permit for the special use of water is issued by the Environmental Board. Concrete conditions concerning cultivating aquaculture and discharge are set in this permit for the special use of water. Inspections over the fulfilment of conditions set in permit are made by the Environmental Board.

## 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Regulation is in place since 1 January 2011. Inspections over the fulfilment of conditions set in permit are made by the Environmental Board.

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Requirements for waters used used for aquaculture are in line with SDG indicator 6.3 and 6.6 by helping to improve water quality by reducing pollution and minimizing release of hazardous chemicals and materials and halving the proportion of untreated wastewater and to protect and restore water-related ecosystems. Requirements also help to achive SDG 3.3 and 3.9.

### 5. If you have not set a target in this area, please explain why.

not applicable

## XVII. Application of recognized good practice in the management of enclosed waters generally available for bathing (art. 6, para. 2 (k))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

In Estonia there are no enclosed waters (artificially created water bodies separated from surface freshwater or coastal water, whether within or outside a building) generally available for bathing.

The water source for all swimming pools is groundwater or water from drinking water supply. There is 223 swimming pools in Estonia. In Estonia we have a national regulation for swimming pools: Government regulation no 80 from 15 March 2007 "<u>Health protection</u> <u>requirements for swimming-pools, pools and water-centres</u>". The regulation establishes requirements for the pool water quality, purification and disinfection of pool water and cleaning the pool house.

Bathing place is water body or part of it used for bathing and land along it. Requirements for bathing water are set in the regulation of the Ministry of the Social Affairs No 63 "<u>Requirements for bathing water and bathing places</u>" (03.10.2019). The requirements of Directive 2006/7/EC are transposed in Estonian legislation by the Public Health Act, the Water Act, and regulations implementing them in 2008.

## XVIII. Identification and remediation of particularly contaminated sites (art. 6, para. 2 (l))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

In order to ensure good groundwater and surface water quality, contaminated sites must be remediated. In Estonia there are more than 340 sites where polluting activities have taken place. In the Environmental Register there is information of 82 particularly contaminated sites with national importance, inventoried sites beyond them are of local importance. There are shown locations on the map and described hazardousness of the contaminated sites to environment and human in the Environmental Portal.

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

In order to ensure good groundwater and surface water quality there was an investment plan for the years 2009 – 2015 which was approved by the Government of Estonia to remediate contaminated sites. During that period 16 most important contaminated sites were remediated. All these sites are on the list of 82 particularly contaminated sites.

The Ministry of the Environment has been used the finances of the European Cohesion Fund (period 2014–2020) for cleaning up former industrial areas. The Ministry implemented several projects to remediate the most contaminated watercourses and former industrial sites which have inventoried to be a risk for the waterbodies. One project stated in 2016 and was finished in 2023. The aim of the project was to clean up more than 30 ha contaminated sites. The investment cost of the project was more than 43 mln euros. The project was strongly linked with an integrated water project LIFE IP CleanEST. The budget of the LIFE IP CleanEST project is 16.7 mln euros and 10 mln euros of it is covered by European Commisson through the LIFE Programme. LIFE IP CleanEST is bringing together the activities of river basin management plans and nature management plans in the Viru sub-basin of the East-Estonia river basin district, an area of nearly a quarter million hectares. The project period of LIFE IP CleanEST is 2019–2028 and it is covering the Ministry of Climate.

In the framework of LIFE IP CleanEST the residual pollution of the former tire factory territory in Kohtla-Nõmme was eliminated in 2020. In total, approximately 14,000 cubic meters of heavily contaminated soil and 100 cubic meters of oil residues were removed. Contaminated soil was excavated to a depth of two meters down to the limestone layer. The most polluted area was completely remediated — there were no longer semi-liquid oil residues left on the ground. The completed work ensured future improvement in groundwater conditions and contributed to the improvement of the state of the Kohtla and Purtse rivers.

From the bed and banks of the Erra River, tar deposited at the bottom of the Uhaku karst area was removed along a 1.5 km section. The thickness of the tar patches in the Erra River ranged between 10 and 30 cm, reaching up to half a meter in some places. The estimated total volume of tar was 14,700 m<sup>3</sup>. It was found on the banks of the river as a pure layer as well as mixed with soil. The tar was removed by excavator scraping and transported to the handling site. After the removal of pollution, cleanup work was carried out, cleared areas were leveled, and riverine habitats were restored.

The soil of the Pahnimäe asphalt concrete factory was polluted in four areas. Studies showed that the polluted soil layer lay up to 7 meters deep from the ground surface. Due to the water-conducting soil and relatively deep groundwater, dangerous substances had spread to deeper

layers along with rainwater. According to a study from 2005, the total volume of polluted soil was estimated to be 21,300 m<sup>3</sup>. Since the area was in active use, soil removal was not possible. Therefore, experimental work was carried out to determine the best soil cleaning technology that did not require soil excavation. During the operation, a suitable in-situ technology for cleaning the entire site was identified in small scale laboratory tests, and 340 m<sup>3</sup> of land was cleaned in-situ using this technology.

Besides EU finances, there is also possible to apply finances from Estonian Environment Investment Centre (EIC) to remediate contaminated sites. By the end of 2023 in total of 73 contaminated sites from the 82 particularly contaminated sites had had investments for remediation activities by EIC and EU funds and for that time 68 sites of them where cleaned up to be in totally safe or acceptably safe status.

According to the Water Act, the status of polluted, or poor or bad, water shall be remediated by the polluter or, if it is not possible to determine the polluter, by the owner of the water body or, in the case of an aquifer, by the state.

Requirements for remediation of polluted areas and monitoring requirements of these areas are stated in the Environment Liability Act.

The management of contaminated sites is a part of River Basin Managent Plans (RBMP) according to the Water Frameword Directive. Estonia has updated the RBMPs and their Programmes of Measures for 2022-2027.

## 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

The Cohesion Fund implementation plan for 2014–2020 was approved by the European Commission. There was an extra focus set on water protection issues in the plan. Contaminated sites were a big issue for protecting waterbodies of Estonia. Therefore the implementation plan foreseed more than 36 mln euros for cleaning up contaminated sites. According to the plan 5 most important contaminated sites had to be cleaned up during 2014 – 2020. Besides this investment plan, there is also possible to apply finances from EIC to remediate contaminated sites. According to the plan our target was to clean up or make safer at least 58 sites from particularly contaminated sites by the end of the 2022. In real life some of these projects were prolonged to 2023. The Ministry of the Environment aschieved the goal (for the end 2021 in total 62 particularly contaminated sites were sanitised), but besides these particularly sites smaller sites with residual pollution also had to be remediated.

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Globally the remediation activities of residually polluted sites support most of the SDG-s. In Estonian context there are strong links between the remediation works and SDG-s as follows:

Goal 3. Good health and well-being – Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination – direct link through the reduction of polluted sites;

Goal 6. Clean water and sanitation – Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate – strong links are being set by the ongoing work in the framework of the integrated water project LIFE IP CleanEST; Also 6.3 and 6.6 will be achieved.

Goal 11. Sustainable cties and communities – Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities... and Target 11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces... – former polluted and abandoned sites will be cleaned up and taken into use, often as public green areas, parks or as transport land;

Goal 12.4 - Achieve environmentally sound management of chemicals and wastes, and reduce their release to water and soil in order to minimize their adverse impacts on human health and the environment - will be achieved

Goal 14. Life below water – Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution – several remediation activities have planned to implement on residually polluted rivers (Purtse, Kohtla and Erra rivers). Cleaning up the pollution from these rivers avoids the transfer of oil products into the sea;

Goal 15. Life on land – Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services... – residually polluted sites, which are considered to be environmental pressure for any water body are foreseen to be remediated in water management plans and appropriate action plans. The link with ecosystem services approach was further strengthened by the implementation of the integrated water project LIFE IP CleanEST. Ecosystem services were assessed for 20 bodies of water as a baseline of the project. After the intervention (remediation of residual pollution included) the change in ecosüstem services will be evaluated;

Goal 17. Partnerships for the goals – Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships – direct links with own financings of remediation projects, rules for permiting, stakeholder engagement activities and dissemination of the results of such projects.

### 5. If you have not set a target in this area, please explain why.

not applicable

## XIX. Effectiveness of systems for the management, development, protection and use of water resources (art. 6, para. 2 (m))

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

General framework for the water managemet is set in the Water Act and detailed requirements are set in regulations under the Water Act. The purpose of the Water Act is to guarantee the purity of inland and transboundary water bodies and groundwater, and ecological balance in water bodies. The Water Act regulates the use and protection of water, relations between landowners and water users and the use of public water bodies and water bodies designated for public use. The discharge of pollutants into surface waters shall be controlled in accordance with the combined approach pursuant to which the discharge of pollutants into surface waters is avoided or restricted at source through the implementation of environmental requirements, including best environmental practices, best available techniques and best available methods, setting and application of emission limit values and environmental quality standards.

If it is not possible to achieve the environmental objectives provided in this Act despite the environmental requirements, emission limit values and environmental quality standards, additional measures provided by law, including, where appropriate, more stringent environmental requirements, emission limit values and environmental quality standards, must be applied. The use and protection of surface water and groundwater shall be planned and organised on the basis of catchment areas in terms of river basins, taking into account the hydrological boundaries of catchment areas of water bodies.

Water use and protection shall be based on the principle of recovery of the costs of water services, environmental and resource costs and the polluter pays principle. For implementing polluter pays principle natural resource charges and pollution charges are determined in the Environmental Charges Act. According to the Water Act special use of water needs a permit that is issued by the Environmental Board and controlled by the Environmental Board. The public uses of a water body are water abstraction until certain amount, bathing, water sports, moving on water or ice and fishing to the extent provided for by law and these activites do not require permit. The provisions of law regulating the stay on the land of another shall not be violated by the public use of a water body. The status of surface water and groundwater shall not be deteriorated. Good status of surface water and groundwater, including good chemical status and good ecological potential of artificial bodies of water is good if both the ecological status and the chemical status of the body of surface water are at least good. The

status of groundwater is good if both the chemical status and the quantitative status of the body of groundwater are at least good. To achieve these objectives, measures shall be applied that that are foreseen in river basin water management plans. Water Act also regulates hydroenergy and damming issues, lowering of water level and liquidation of damming, water traffic, use of water for firefighting purposes, protection of water against wastewater and effluent pollution etc. It defines rights of water users and protection of rights and obligations of water users.

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

The modern Water Act is in place since 2019, last update in 2024. Regulations are mainly based on the EU requirements and the HELCOM requirements. Water related obligations are set in permit of special use of water which are managed and controlled by the Environmental Board.

Public Water Supply and Sewerage Act is in place since 1999, last reduction in force from 2024. Regulations are mainly based on the EU and the HELCOM requirements.

### 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

Success can be assessed through several indicators that are described in part III of this report.

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Water related requirements are in line with SDG-s. Requirements help to achieve SDG 6.1 to achieve universal and equitable access to safe and affordable drinking water for all and 6.2 to achieve access to adequate and equitable sanitation and hygiene for all. Requirements in the Water Act help to achieve SDG 6.3 to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and also SDG 6.4 to substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater. Water Act is in line with SDG 6.5 to implement integrated water resources management at all levels, including through transboundary cooperation as appropriate. Water realated activities help to achieve SDG 6.6 to protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes. Requirements also help to achieve SDG 3.3, 3.9, 6.6 a, 11.5, 15.1, 17.9.

### 5. If you have not set a target in this area, please explain why.

not applicable

### XX. Additional national or local specific targets

For each target set in this area:

### 1. Please describe the current target and target date.

Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.

none

## 2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target.

(See also article 6, paragraph 5, of the Protocol)

none

## 3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

none

## 4. Please describe how the target set under this area contribute to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

none

### 5. If you have not set a target in this area, please explain why.

No additional targets.

### Part three – Common indicators

In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible 2005 — the year of entry into force of the Protocol — as the baseline year.

### I. Quality of the drinking water supplied

### 1. Context of the data

1. What is the population coverage (in millions or per cent of total national population) of the water supplies reported under sections 2 and 3 below?

*The rationale of this question is to understand the population coverage of the water quality data reported under sections 2 and 3 below.* 

*Please describe the type of water supplies for which data is included in the following tables, and the population share covered by these supplies.* 

*Please also clarify the source of the water quality data provided (e.g., data from regulatory authorities).* 

At the end of year 2024, 85,5% of the total national population was connected to the water supplies, of whom 98,21% used water for which no microbiological, chemical and indicator values were not exceeded (except radiological indicators).

2. Please specify from where the water quality samples reported in sections 2 and 3 below are primarily taken (e.g., treatment plant outlet, distribution system or point of consumption).

*The rationale of this question is to understand where the samples were primarily taken from for the water quality data reported in sections 2 and 3 below.* 

Depending on the sample taken (it can be treatment plant, distribution system or point of consumption), but most often it is the point of consumption.

### 3. In sections 2 and 3 below, the standards for compliance assessment signify the national standards.

If national standards for reported parameters deviate from the World Health Organization (WHO) guideline values, please provide information on the standard values.

*The rationale of this question is to understand any possible differences between the national standards for microbiological and chemical water quality parameters and the respective WHO guideline values.[1]* 

[1] The latest edition of the WHO *Guidelines for Drinking-water Quality* is available at: <u>http://www.who.int/water\_sanitation\_health/publications/dwq-guidelines-4/en/</u>.

National standards have been drafted and adopted regarding EU directives (EU) 2020/2184 (on the quality of water intended for human consumption) and 2013/51/EURATOM (laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption).

### 2. Bacteriological quality

4.i) Please indicate the percentage of samples that fail to meet the national standard for *Escherichia coli* (*E. coli*). Parties may also report on up to three other priority microbial indicators and/or pathogens that are subject to routine water quality monitoring.

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by "non-centralized versus centralized" water supplies or by population number-based categories. If you do so, please indicate the reported categories by adding the alternative area/category name in the second column in the table below accordingly.

*If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.* 

|                 | Alternative<br>area/category<br>name, if<br>applicable | Baseline value | Value reported<br>in the previous<br>reporting cycle | Current value |
|-----------------|--|----------------|--|---------------|
| Specify year    | none   | 2009           | 2021   | 2024          |
| E. coli (Total) | none   | 1,5%           | 0,32%  | 0,06%         |
| E. coli (Urban) | none   | none           | none   | none          |

| E. coli (Rural)                      | none        | none | none  | none  |
|--------------------------------------|-------------|------|-------|-------|
| Additional<br>parameter 1<br>(Total) | Enterococci | 3,2% | 0,72% | 0,63% |
| Additional<br>parameter 1<br>(Urban) | none        | none | none  | none  |
| Additional<br>parameter<br>(Rural)   | none        | none | none  | none  |
| Additional<br>parameter 2<br>(Total) | none        | none | none  | none  |
| Additional<br>parameter 2<br>(Urban) | none        | none | none  | none  |
| Additional<br>parameter 2<br>(Rural) | none        | none | none  | none  |
| Additional<br>parameter 3<br>(Total) | none        | none | none  | none  |
| Additional<br>parameter 3<br>(Urban) | none        | none | none  | none  |
| Additional<br>parameter 3<br>(Rural) | none        | none | none  | none  |

## 4.ii) Please comment on the trends or provide any other important information supporting interpretation of the data.

In Estonia, drinking water quality and consumer number information is collected on a public drinking water supply system basis. However, no distinction is made between urban and rural

areas when it comes to these systems, as many public drinking water supply systems are located across administrative boundaries in both urban and rural areas.

### 3. Chemical quality

5. i) Please report on the percentage of samples that fail to meet the national standard for chemical water quality with regard to the following parameters:

| (a) Arsenic  | 0%    |
|--------------|-------|
| (b) Fluoride | 3,3%  |
| (c) Lead     | 0%    |
| (d) Nitrate  | 0,85% |

### 5. ii) Please provide any other important information supporting the interpretation of the data.

The natural occurrence of **fluorides** in Estonian drinking water from ground water is fairly high. Estinia has some problems with fluoride levels exceeding the limit value 1,5 mg/l (transposed to national legislation from the drinking water directive 2020/2184/EU) in drinking water in western part of the country. In these cases, necessary measures are applied (recommendations for public etc) and levels of flourides in drinking water are decreased (water purification with mainly reverse osmosis).

Natural occurrence of **arsenic** in Estonia drinking water usually does not exceed WHO guidline and drinking water directive limit values (10µg/l), but during monitoring was once found local geological presence.

Natural occurrence of **lead** in Estonian ground water is also not exceeding WHO values. There are still some problems with old lead pipes, that take time to replace.

### 6.i) Please also identify up to three additional chemical parameters that are of priority in the national or local context.

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by "non-centralized versus centralized" sanitation systems or by population numberbased categories. If you do so, please indicate the reported categories by adding the alternative area/category name in the second column in the table below accordingly.

*If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.* 

|                                      | Alternative<br>area/category<br>name, if<br>applicable | Baseline value | Value reported<br>in the previous<br>reporting cycle | Current value |
|--------------------------------------|--|----------------|--|---------------|
| Specify year                         | none   | 2009           | 2021   | 2024          |
| Arsenic (Total)                      | none   | 0%             | 0%   | 0%            |
| Arsenic (Urban)                      | none   | none           | none   | none          |
| Arsenic (Rural)                      | none   | none           | none   | none          |
| Fluoride (Total)                     | none   | 22,9%          | 5,1%   | 3,3%          |
| Fluoride (Urban)                     | none   | none           | none   | none          |
| Fluoride (Rural)                     | none   | none           | none   | none          |
| Lead (Total)                         | none   | 0%             | 0%   | 0%            |
| Lead (Urban)                         | none   | none           | none   | none          |
| Lead (Rural)                         | none   | none           | none   | none          |
| Nitrate (Total)                      | none   | 0%             | 0,3%   | 0,85%         |
| Nitrate (Urban)                      | none   | none           | none   | none          |
| Nitrate (Rural)                      | none   | none           | none   | none          |
| Additional<br>parameter 1<br>(Total) | Iron   | 37,96%         | 2,12%  | 2,72%         |
| Additional<br>parameter 1<br>(Urban) | none   | none           | none   | none          |
| Additional<br>parameter 1<br>(Rural) | none   | none           | none   | none          |
| Additional<br>parameter 2            | none   | none           | none   | none          |

| (Total)                              |      |      |      |      |
|--------------------------------------|------|------|------|------|
| Additional<br>parameter 2<br>(Urban) | none | none | none | none |
| Additional<br>parameter 2<br>(Rural) | none | none | none | none |
| Additional<br>parameter 3<br>(Total) | none | none | none | none |
| Additional<br>parameter 3<br>(Urban) | none | none | none | none |
| Additional<br>parameter 3<br>(Rural) | none | none | none | none |
| Additional<br>parameter 4<br>(Total) | none | none | none | none |
| Additional<br>parameter 4<br>(Urban) | none | none | none | none |
| Additional<br>parameter 4<br>(Rural) | none | none | none | none |
| Additional<br>parameter 5<br>(Total) | none | none | none | none |
| Additional<br>parameter 5<br>(Urban) | none | none | none | none |
| Additional<br>parameter 5<br>(Rural) | none | none | none | none |

### 6.ii) Please comment on the trends or provide any other important information supporting interpretation of the data.

In Estonia, drinking water quality and consumer number information is collected on a public drinking water supply system basis. However, no distinction is made between urban and rural areas when it comes to these systems, as many public drinking water supply systems are located across administrative boundaries in both urban and rural areas.

### II. Outbreaks and incidence of infectious diseases related to water

### i) Outbreaks and incidence of infectious diseases related to water

In filling out the below table, please consider the following points:

(a) For reporting outbreaks, please report confirmed water-related outbreaks only (i.e., for which there is epidemiological or microbiological evidence for water to have facilitated infection);

*(b) For reporting incidents, please report the numbers related to all exposure routes. In your response:* 

(i) Please report cases per 100,000 population;

(ii) Please differentiate between zero incidents (0) and no data available (-).

*Please extend the list of water-related diseases, to the extent possible, to cover other relevant pathogens (e.g., enteric viruses, Giardia intestinalis, Vibrio cholerae).* 

*Please indicate how the information is collected (e.g., event-based or incidence-based surveillance).* 

| Other<br>relevan<br>t<br>pathog<br>ens, if<br>applica<br>ble | Baselin<br>e for<br>inciden<br>ce rate<br>per<br>100,00<br>0<br>popula<br>tion (all<br>exposu<br>re<br>routes) | Value<br>reporte<br>d in the<br>previou<br>s<br>reporti<br>ng<br>cycle<br>for<br>inciden<br>ce rate<br>per<br>100,00<br>0<br>popula | Curren<br>t value<br>for<br>inciden<br>ce rate<br>per<br>100,00<br>0<br>popula<br>tion (all<br>exposu<br>re<br>routes) | Baselin<br>e for<br>Numbe<br>r of<br>outbrea<br>ks<br>(confir<br>med<br>water-<br>borne<br>outbrea<br>ks) | Value<br>reporte<br>d in the<br>previou<br>s<br>reporti<br>ng cycle<br>for<br>Numbe<br>r of<br>outbrea<br>ks<br>(confir<br>med<br>water- | Current<br>value<br>for<br>Numbe<br>r of<br>outbrea<br>ks<br>(confir<br>med<br>water-<br>borne<br>outbrea<br>ks) | Informa<br>tion is<br>collecte<br>d<br>through<br>: |
|--|--|---|--|---|--|--|---|
|--|--|---|--|---|--|--|---|

|   |               |      | tion (all<br>exposu<br>re<br>routes) |      |      | borne<br>outbrea<br>ks) |      |       |
|---|---------------|------|--------------------------------------|------|------|-------------------------|------|-------|
| Specify<br>year   | none          | 2009 | 2021                                 | 2024 | 2009 | 2021                    | 2024 | none  |
| Shigello<br>sis   | none          | 3,9  | 0,2                                  | 0,9  | 0    | 0                       | 0    | NAKIS |
| Entero-<br>haemor<br>rhagic<br>E. coli<br>infectio<br>n | none          | 1,2  | 0,5                                  | 0,7  | 0    | 0                       | 0    | NAKIS |
| Typhoid<br>fever  | none          | 0,1  | 0,1                                  | 0,1  | 0    | 0                       | 0    | NAKIS |
| Viral<br>hepatiti<br>s A                                | none          | 1,4  | 0,5                                  | 0,7  | 0    | 0                       | 0    | NAKIS |
| Legione<br>Ilosis                                       | none          | 0,4  | 0,8                                  | 1,6  | 0    | 0                       | 0    | NAKIS |
| Cryptos<br>poriosis                                     | none          | 0    | 0,5                                  | 0,7  | 0    | 0                       | 0    | NAKIS |
| Additio<br>nal<br>disease<br>1                          | Cholera       | 0    | 0                                    | 0    | 0    | 0                       | 0    | NAKIS |
| Additio<br>nal<br>disease<br>2                          | Giardia<br>s  | none | 3,3                                  | 1,0  | none | 0                       | 0    | NAKIS |
| Additio<br>nal<br>disease<br>3                          | Rota+n<br>oro | none | none                                 | none | none | none                    | 1    | NAKIS |

| Additio<br>nal<br>disease<br>4 | none |
|--------------------------------|------|------|------|------|------|------|------|------|
| Additio<br>nal<br>disease<br>5 | none |

## ii) Please comment on the trends or provide any other important information supporting interpretation of the data.

Since 2009, the diagnosis of legionellosis and the advanced system of legionellosis have improved significantly. As a result, the number of cases has been diagnosed with a (continuous) growth trend. According to the Communicable Diseases Prevention and Control Act the information is collected for 56 communicable diseases. There is a registery for communicable diseases (NAKIS).

The incidence of other diseases is stable or on a decreasing trend.

### III. Access to drinking water

### i) Access to drinking water

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by "non-centralized versus centralized" water supply systems or by population numberbased categories. If you do so, please indicate the reported categories by adding the alternative area/category name in the second column in the table below accordingly.

*If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.* 

|                               | Alternative<br>area/category<br>name, if<br>applicable | Baseline value                  | Value reported<br>in the previous<br>reporting cycle | Current value          |
|-------------------------------|--|---------------------------------|--|------------------------|
| Specify year                  | none   | 2009                            | 2021   | 2024                   |
| Percentage of population with | none   | 100% (JMP) Or<br>87% (Connected | 100% (JMP) Or<br>86,7%                               | 100% (JMP) Or<br>85,5% |

| access to<br>drinking water<br>(Total)                                     |      | with public<br>water supplies). | (Connected with<br>public water<br>supplies). | (Connected with<br>public water<br>supplies) |
|--|------|---------------------------------|---|--|
| Percentage of<br>population with<br>access to<br>drinking water<br>(Urban) | none | none                            | none  | none   |
| Percentage of<br>population with<br>access to<br>drinking water<br>(Rural) | none | none                            | none  | none   |

## ii) Please comment on the trends or provide any other important information supporting interpretation of the data with regard to access to drinking water.

In Estonia, drinking water quality and consumer number information is collected on a public drinking water supply system basis. However, no distinction is made between urban and rural areas when it comes to these systems, as many public drinking water supply systems are located across administrative boundaries in both urban and rural areas.

The percentages of connected residents seems to be on a slight downward trend, but this may also be due to the fact that public water utilities are required to assess the number of consumers connected to their system at minimum once every five years. Many larger public water utilities dont assess these numbers very frequently, which is why larger jumps in the percentage growth for a particular year may appear when the data arrives.

### iii) Access to drinking water

### Tick all that apply

Estimates provided by the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring
Programme (JMP) for Water Supply and Sanitation. JMP definitions are available at http://www.wssinfo.org/definitions-methods/watsan-categories.

National estimates. Please specify how "access" is defined and what types of drinking-water supplies are considered in the estimates in your country.

## iv) In particular, please specify if the above percentage on "access to drinking water" refers to access to (tick all applicable):

### Tick all that apply

Improved drinking water sources (as per JMP definition)

- Supplies located on premises
- Supplies available when needed
- Supplies that provide drinking water free from faecal contamination

### IV. Access to sanitation

### i) Access to sanitation

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by "non-centralized versus centralized" sanitation systems or by population numberbased categories. If you do so, please indicate the reported categories by adding the alternative area/category name in the second column in the table below accordingly.

*If data can be reported neither for urban and rural areas nor for alternative categories, please report total (national) values only.* 

|  | Alternative<br>area/category<br>name, if<br>applicable | Baseline value  | Value reported<br>in the previous<br>reporting cycle                   | Current value   |
|--|--|---|--|---|
| Specify year   | none   | 2009  | 2020   | 2023  |
| Percentage of<br>population with<br>access to<br>sanitation<br>(Total) | none   | 100% (JMP) Or<br>81 %<br>(Connected with<br>public sewerage<br>system). | 100% (JMP) Or<br>83% (Connected<br>with public<br>sewerage<br>system). | 100% (JMP) Or<br>83% (Connected<br>with public<br>sewerage<br>system) |
| Percentage of<br>population with<br>access to<br>sanitation<br>(Urban) | none   | none  | none   | none  |
| Percentage of<br>population with<br>access to<br>sanitation<br>(Rural) | none   | none  | none   | none  |

## ii) Please comment on the trends or provide any other important information supporting interpretation of the data with regard to access to sanitation.

### none

### iii) Access to sanitation

#### Tick all that apply

 Estimates provided by JMP. JMP definitions are available at http://www.wssinfo.org/definitions-methods/watsan-categories.

 National estimates. Please specify how "access" is defined
and what types of sanitation facilities are considered in the estimates in your country.

## iv) In particular, please specify if the above percentage on "access to sanitation" refers to access to (tick all applicable):

Tick all that apply

- Improved sanitation facilities (as per JMP definition)
- Facilities not shared with other households
- Facilities from which excreta is safely disposed in situ or treated off site

### V. Effectiveness of management, protection and use of freshwater resources

### 1. Water quality

## 1. On the basis of national systems of water classification, please indicate the percentage of water bodies or the percentage of the volume (preferably) of water1 falling under each defined class

(e.g., for European Union countries and other countries following the European Union Water Framework Directive2 classification, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status; for other countries, in classes I, II, III, etc.).

### [1] Please specify.

[2] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

none

## (a) For European Union countries and other countries following the European Union Water Framework Directive classification

### (i) Ecological status of surface water bodies

|   | Baseline value<br>for the<br>percentage of<br>surface water<br>classified as | Value reported<br>in the previous<br>reporting cycle<br>for the<br>percentage of<br>surface water<br>classified as | Current value for<br>the percentage<br>of surface water<br>classified as |
|---|--|--|--|
| Specify year  | 2009   | 2020   | 2023   |
| High status   | 8  | 1  | 1  |
| Good status   | 521  | 407  | 428  |
| Moderate status   | 191  | 258  | 248  |
| Poor status   | 28   | 73   | 59   |
| Bad status  | 0  | 5  | 8  |
| Total<br>number/volume<br>of water bodies<br>classified     | 748  | 744  | 744  |
| Total<br>number/volume<br>of water bodies<br>in the country | 750  | 744  | 744  |

### (ii) Chemical status of surface water bodies

|  | Baseline value<br>for the   | Value reported in the previous | Current value for the percentage |  |
|--|-----------------------------|--------------------------------|----------------------------------|--|
|  | percentage of surface water | reporting cycle<br>for the     | of surface water                 |  |

|   | bodies classified<br>as | percentage of<br>surface water<br>bodies classified<br>as | bodies classified<br>as |
|---|-------------------------|---|-------------------------|
| Specify year  | 2009                    | 2020  | 2023                    |
| Good status   | 99%                     | 89,8%   | 84,1%                   |
| Poor status   | 1%                      | 10,2%   | 15,9%                   |
| Total<br>number/volume<br>of water bodies<br>classified     | 750                     | 144   | 197                     |
| Total<br>number/volume<br>of water bodies<br>in the country | 750                     | 744   | 744                     |

### (iii) Status of groundwaters

|                                | Baseline value<br>for the<br>percentage of<br>groundwaters<br>classified as | Value reported<br>in the previous<br>reporting cycle<br>for the<br>percentage of<br>groundwaters<br>classified as | Current value for<br>the percentage<br>of groundwaters<br>classified as |
|--------------------------------|---|---|---|
| Specify year                   | 2009  | 2020  | 2023  |
| Good<br>quantitative<br>status | 96%   | 97%   | 94%   |
| Good chemical<br>status        | 96%   | 79%   | 74%   |
| Poor quantitative<br>status    | 4%  | 3%  | 6%  |
| Poor chemical<br>status        | 4%  | 21%   | 26%   |

| Total<br>number/volume<br>of groundwater<br>bodies classified        | 25 | 39 | 31 |
|--|----|----|----|
| Total<br>number/volume<br>of groundwater<br>bodies in the<br>country | 25 | 39 | 31 |

### (b) For other countries

### (i) Status of surface waters

|   | Name of<br>relevant class of<br>national<br>classification<br>system | Baseline value<br>for the<br>percentage of<br>surface water<br>falling under<br>class | Value reported<br>in the previous<br>reporting cycle<br>for the<br>percentage of<br>surface water<br>falling under<br>class | Current value<br>for the<br>percentage of<br>surface water<br>falling under<br>class |
|---|--|---|---|--|
| Specify year  | not applicable   | not applicable  | not applicable  | not applicable   |
| I   | not applicable   | not applicable  | not applicable  | not applicable   |
| II  | not applicable   | not applicable  | not applicable  | not applicable   |
| 111   | not applicable   | not applicable  | not applicable  | not applicable   |
| IV  | not applicable   | not applicable  | not applicable  | not applicable   |
| V   | not applicable   | not applicable  | not applicable  | not applicable   |
| Total<br>number/volume<br>of water bodies<br>classified | not applicable   | not applicable  | not applicable  | not applicable   |
| Total<br>number/volume                                  | not applicable   | not applicable  | not applicable  | not applicable   |

| of water bodies |  |  |
|-----------------|--|--|
| in the country  |  |  |

### (ii) Status of groundwaters

|   | Name of<br>relevant class of<br>national<br>classification<br>system | Baseline value<br>for the<br>percentage of<br>groundwaters<br>falling under<br>class | Value reported<br>in the previous<br>reporting cycle<br>for the<br>percentage of<br>groundwaters<br>falling under<br>class | Current value<br>for the<br>percentage of<br>groundwaters<br>falling under<br>class |
|---|--|--|--|---|
| Specify year  | not applicable   | not applicable   | not applicable   | not applicable  |
| 1   | not applicable   | not applicable   | not applicable   | not applicable  |
| П   | not applicable   | not applicable   | not applicable   | not applicable  |
| Ш   | not applicable   | not applicable   | not applicable   | not applicable  |
| IV  | not applicable   | not applicable   | not applicable   | not applicable  |
| V   | not applicable   | not applicable   | not applicable   | not applicable  |
| Total<br>number/volume<br>of water bodies<br>classified     | not applicable   | not applicable   | not applicable   | not applicable  |
| Total<br>number/volume<br>of water bodies<br>in the country | not applicable   | not applicable   | not applicable   | not applicable  |

2. Please provide any other information that will help put into context and aid understanding of the information provided above (e.g., coverage of information provided if not related to all water resources, how the quality of waters affects human health).

A total of 31 groundwater bodies have been formed in Estonia, the status of which is assessed separately on the basis of data collected for each body.

The poor chemical status of groundwater is caused by very different indicators, for example: The growth trends of chloride (Cl-), ammonium (NH4+) and sulphate ion (SO42-) concentrations are a problem in North-East-Estonia. Higher chemical oxygen demand (COD) readings have been measured from the monitoring wells of the Ida-Viru oil shale basin, and the concentrations of 1-basic phenols exceeded the threshold value established for them in several places. The growing trend of barium (Ba2+) in groundwater also needs further investigation. In the Matsalu region of West-Estonia, the problem is the increased COD readings, which indicates a higher than permitted content of organic matter in groundwater. The poor chemical status of groundwater in the Pandivere region of Central Estonia is mainly due to elevated levels of nitrates (NO3-), pesticides and petroleum products.

The reasons for the growth trends of different pollutants can be very different. On the one hand, it may be a naturally occurring phenomenon, for example the deep aquifers of Cambrian-Vendian Voronka may mix with saltier aquifers, resulting in an increase in the concentration of chloride ions in the groundwater. At the same time, the intensive pumping of groundwater in coastal areas causes a large-scale lowering of the groundwater level, which in turn promotes any intrusion of saline water into groundwater (including seawater). Various organic compounds may be of natural origin, such as higher levels of NH4+ and SO42- and COD in groundwater may be due to the anaerobic environment of the groundwater or the preferences in the area. Therefore, it is often difficult to determine the extent of the absorption of these compounds on groundwater quality indicators. On the other hand, the increase in indicators for organic and inorganic compounds (NO3-, phenols, pesticides and their degradation products) may indicate intensive activities of agriculture in, for example, the Central Devon region of Central, South-East and South-Estonia, where groundwater is either karstic or too close to the surface – vulnerable to the spread of pollutants. The problem of 1basic phenols in groundwater seems to be solved with the remediation of contaminated sites and the introduction of more accurate determination methods (which distinguish anthropogenic phenols from natural humic substances or other similar substances).

The next assessment of groundwater status will be carried out on 2025-2026.

### 2. Water use

### 3. Please provide information on the water exploitation index at the national and river basin levels for each sector (agriculture, industry, domestic)

i.e., the mean annual abstraction of freshwater by sector divided by the mean annual total renewable freshwater resource at the country level, expressed in percentage terms.

*For 'Industry'*: Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.

*For 'Domestic use': Please specify whether the figure only refers to public water supply systems or also to individual supply systems (e.g., wells).* 

|   | Alternative<br>water<br>exploitation<br>index name, if<br>applicable | Baseline value<br>for the water<br>exploitation<br>index   | Value reported<br>in the previous<br>reporting cycle<br>for the water<br>exploitation<br>index   | Current value<br>for the water<br>exploitation<br>index  |
|---|--|--|--|--|
| Specify year                                | none   | 2009   | 2020   | 2023   |
| Agriculture                                 | none   | 0,206%   | 0,0437%  | 0,827%   |
| Industry                                    | none   | 0,177% The<br>figure do not<br>include water<br>abstraction for<br>energy cooling.   | 0,485% The<br>figure do not<br>include water<br>abstraction for<br>energy cooling.   | 8,085% The<br>figure do not<br>include water<br>abstraction for<br>energy cooling.   |
| Domestic use                                | none   | 0,259% The<br>figure<br>represents also<br>abstraction in<br>private water<br>supply were the<br>abstraction rate<br>is more than 10<br>m3 per day or<br>more than 30<br>m3 per month. | 0,328% The<br>figure<br>represents also<br>abstraction in<br>private water<br>supply were the<br>abstraction rate<br>is more than 10<br>m3 per day or<br>more than 30<br>m3 per month. | 6,845% The<br>figure<br>represents also<br>abstraction in<br>private water<br>supply were the<br>abstraction rate<br>is more than 10<br>m3 per day or<br>more than 30<br>m3 per month. |
| Additional water<br>exploitation<br>index 1 | none   | none   | none   | none   |
| Additional water<br>exploitation<br>index 2 | none   | none   | none   | none   |
| Additional water<br>exploitation<br>index 3 | none   | none   | none   | none   |

## Part four – Water-related disease surveillance and response systems

### 1. In accordance with the provisions of article 8 of the Protocol:

## 1.1 Has your country established comprehensive water-related disease surveillance and early warning systems according to paragraph 1 (a)?

Please select only one option

- YES
- NO
- IN PROGRESS

# 1.2 Has your country prepared comprehensive national or local contingency plans for responses to outbreaks and incidents of water-related disease according to paragraph 1 (b)?

Please select only one option

- YES
- O NO
- IN PROGRESS

1.3 Do relevant public authorities have the necessary capacity to respond to such outbreaks, incidents or risks in accordance with the relevant contingency plan according to paragraph 1 (c)?

Please select only one option

YES

- NO
- IN PROGRESS

# 2. If yes or in progress, please provide summary information about key elements of the water-related disease surveillance and outbreak response systems.

(e.g., identification of water-related disease outbreaks and incidents, notification, communication to the public, data management and reporting).

Please also provide reference to existing national legislation and/or regulations addressing water-related disease surveillance and outbreak response.

Health Board is a Competent Authority in the field of communicable disease control, surveillance, prevention and in epidemiologycal risk analysis in Estonia.

### Duties of Health Board:

1) conduct epidemiological investigations with the aim of ascertaining the circumstances under which persons suffering from a disease became infected and of determining the circumstances of the spread of the communicable disease, contact the persons suffering from a communicable disease and persons who have been in close contact therewith, and, in the event of clusters of disease, shall provide instructions for the application of disease control measures;

2) inform the population through the media of the occurrence of a communicable disease and the measures taken to control the outbreak of the disease;

3) collect, analyse and publish data concerning immunisations;

4) organise the surveillance of communicable diseases, including the sentinel surveillance, according to the relevant legislation of the European Union and recommendations of the World Health Organisation.

Health Board is also competent authority in the area of epidemiological risk analysis and risk assessment of communicable diseases and shall determine and assess:

- 1) tendencies of spread of communicable diseases;
- 2) immunisation coverage.

Health Board handles the early warning and response system of the European Centre for Disease Prevention and Control in Estonia and is the liaison body authorised by the World Health Organisation and European Commission concerning biological agents in connection with the application of international health regulations.

The Health Board participates as the competent authority in the disease-specific epidemiological activities of the World Health Organisation and the European Centre for Disease Prevention and Control, including in the international disease control programmes by performing the role of the national reference laboratory in the relevant testing areas of communicable diseases.

In performing the functions prescribed, the Health Board co-operates with local authorities for the prevention, surveillance of communicable diseases and to prevent and control the spread of communicable diseases.

When participating in the international control of communicable diseases, the Health Board informs other states of the occurrence of a communicable disease and the measures taken to control the outbreak of the disease.

According to the Communicable Diseases Prevention and Control Act, cases of communicable diseases shall be registered in the Estonian Communicable Diseases Register (hereinafter the register), which is maintained in order to register the cases of communicable diseases, to determine the tendencies of their spread, prevent communicable diseases, organise the control and health services, develop the health policy, analyse the communicable diseases morbidity, spread and mortality, to evaluate the diagnostics and treatment, organise statistics and scientific research, including epidemiological research.

According to this act there are 56 diseases for registering. Information on all diseases must be reported into national electronical register NAKIS. National reports are available on Health Board webpage (<u>https://www.terviseamet.ee/nakkushaigused/statistika</u>).

In addition to Communicable Diseases Derpartment, Health Board has four regional departments. The regional departments conduct surveillance and provide enforcement in the following areas: preservation of the cold chain for vaccination coverage in the population, outbreak investigation, drinking water and natural mineral water, swimming pools and natural bathing waters, schools, pre-school establishments, and childrens camps.

3. Please describe what actions have been taken in your country in the past three years to improve and/or sustain water-related disease surveillance, early warning systems and contingency plans, as well as to strengthen the capacity of public authorities to respond to water-related disease outbreaks and incidents, in accordance with the provisions of article 8 of the Protocol.

Vibrio surveillance in bathing water and Vibrio surveillance based on the clinical laboratory data; wastewater-based surveillance of poliovirus and SARS-CoV-2.

## Part five – Progress achieved in implementing other articles of the Protocol

## Please provide a short description of the status of implementation of articles 9 to 14 of the Protocol, as relevant.

Suggested length: up to two pages

Estonia ratified the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes on 9th September 2003. Starting that date Estonia has been guided by the Protocol. According to Article 6 Estonia has set national targets in order to ensure implementation of the Protocol. Estonia as a member of the European Union must implement the EU water policy. The aim and idea of the Protocol coincide a lot with the water policy in the EU. For several issues targets are set as legal requirements in legal acts. One of the main target is ensuring appropriate sewage collection and treatment for all the residents. During the reporting period a lot of success has been achieved to reach the target. Percentage of people connected with public sewerage system rised to 83% in 2017 and stayed at that level til 2020. 100% of WWTPs are in conformity with the UWWTD requirements in the agglomeration areas more than 2000 pe. And even more, WWTPs fulfill the HELCOM convention requirements, which has much higher treatment standards than is set in UWWTD.

We have made significant investments to comply with drinking water and wastewater directives since 2004. Approximately 1,7 billion euros have been invested using EU funds, Estonian Environmental Investment Centre aid and water companies and municipalities own contribution. What's important to highlight is that close to 50% of the environmental funds money that have been available in Estonia, have been used to build and upgrade our water infrastructure. This has been possible as we have taken the achievement of compliance with drinking water and wastewater directives very seriously and this has been the priority of our government in the environmental sector since the accession. By the end of year 2024 there was 85,5% of population connected to the public water supplies.

The results are obvious – pollution load have been decreased significantly, at the same time the amount of wastewater is relatively constant during this period.

The Ministry of Climate has started the water services reform to renew the business principles of water utilities and to encourage smaller water companies to consolidate into regional companies and upgrade their operational capacities. Regional water companies ensure better service quality and lower price of water, ensure efficient management and higher competence of water service. But not all water companies have yet joined into regional companies. The main goal of the reform is to maintain the economical long-term sustainability of water services. While in 2023, the average expenditure on water services in Estonia was about 1.1% of household income, in 2024 it was 1.03% (1.31% of the income of the lowest income county). The current water price is favourable precisely because all the infrastructure expansion and reconstruction has been done largely with euro subsidies, not at the expense of the price of water services. The price of water already varies greatly from one region to another, depending to a large extent on the number of customers of the water companies, the length of the pipelines built and managed by the water companies (in rural areas the distances are greater but the number of customers is smaller), the resulting wear and tear, the need for investment, etc. Water prices must remain reasonable. The question of what is 'reasonable' will be answered in the course of the roadmap for reform.

To help the municipalities to tackle the environmental goals in water management, Ministry of the Environment has prepared guidelines for the municipalities how to regulate the supervision of the individual sewerage systems.

Since 2018 Ministry of the Environment launched a measure to financing households for connecting to public water and sewerage system in agglomerations over 2000 pe, which turned out to be very popular.

In 2012 the Water Health Safety Information System (https://vti.sm.ee/) was launched. The system was developed and taken into use out by the Ministry of Social Affairs and the Health Board. The system allows water and mineral water producers, pool and bathing water owners to send data about their water quality via internet to the Health Board inspectors. Health Board uses this system to create reports about waterworks. The public and consumers have access to data on their water quality via Health Board's homepage linked to the Water Health Information System (vtiav.sm.ee). Health Board is using this information system for risk based approach and by the Ministry of Environment for planning financial support for drinking water producers.

However, since the Water Health Information System platform is already outdated and this application would need to be significantly improved, it was decided to start developing a new system (Environmental Health Information System), which would then completely replace the previous one. Environmental Health Information System, should also include modules for risk assessment of drinking water supply systems and simplify data exchange between the state and facilities under supervision.

## Part six – Thematic part linked to priority areas of work under the Protocol

### 1. Water, sanitation and hygiene in institutional settings

1. In the table below, please provide information on the proportion of schools (primary and secondary) and health-care facilities that provide basic water, sanitation and hygiene (WASH) services.

Basic services refer to the following:

(a) Basic sanitation service: Improved facilities (according to JMP definition), which are sexseparated and usable at the school or health-care facility;

*(b) Basic drinking water service: Water from an improved source (according to JMP definition) is available at the school or health-care facility;* 

*(c) Basic hygiene service: Handwashing facility with water and soap available to students (schools) or patients and health-care providers (health-care facilities).* 

*If the above definitions/categories do not apply in your country, please report for alternative categories for which data are available. In this case, please indicate the reported categories by adding alternative category name in the second column in the table below accordingly.* 

Please indicate the source of data. If data is not available, please put (-).

|   | Alternative<br>category name, if<br>applicable | Current value | Specify year | Source of data |
|---|--|---------------|--------------|----------------|
| Basic sanitation service (Schools)            | none   | 100%          | 2024         | none           |
| Basic drinking-<br>water service<br>(Schools) | none   | 100%          | 2024         | none           |
| Basic hygiene<br>service (Schools)            | none   | 100%          | 2024         | none           |

| Basic sanitation<br>service (Health-<br>care facilities)        | none | 100% | 2024 | none |
|---|------|------|------|------|
| Basic drinking-<br>water service<br>(Health-care<br>facilities) | none | 100% | 2024 | none |
| Basic hygiene<br>service (Health-<br>care facilities)           | none | 100% | 2024 | none |

### 2. Has the situation of WASH in schools been assessed in your country?

Please select only one option

- YES
- NO
- IN PROGRESS

### 3. Has the situation of WASH in health-care facilities been assessed in your country?

Please select only one option

- YES
- NO
- IN PROGRESS

### 4. Do approved policies or programmes include actions:

### (please tick all that apply)

### Tick all that apply

- To improve WASH in schools
- **V** To improve WASH in health-care facilities

## 5. If yes, please provide reference to main relevant national policy(ies) or programme(s)

Regulation under which the surveillance is conducted in schools - <u>https://www.riigiteataja.ee/akt/128082013010</u>

In 2016 the Health Board carried out a study "Conditions for Personal Care in Schools". The summary of the study is available only in Estonian on Health Board website: <u>https://www.terviseamet.ee/sites/default/files/documents/2024-</u>03/isiklikuhuegieenitagamisetingimused.pdf

As our tragets are achieved, there was no special activity in this area in period of 2021-2024.

### 2. Safe management of drinking-water supply

## 6. Is there a national policy or regulation in your country, which requires implementation of risk-based management, such as WHO water safety plans (WSPs), in drinking water supply?

Please select only one option

- YES
- NO
- IN PROGRESS

## 7. If yes, please provide reference to relevant national policy(ies) or regulatory documentation.

Regulation 61 (24 September 2019) of the Minister of Social Affairs: "*Drinking water quality and control requirements and analysis methods and requirements for providing information to consumers1*"

### Water Act

National Public Health Plan 2020 – 2030

Estonia has transposed Commission Directive (EU) 2020/2184 (on the quality of water intended for human consumption). Articles 8 and 10 to Council Directive 2020/2184 on the quality of water intended for human consuption that regulates the risk based approach on the catchment area and domestic distribution systems. Risk based approach on the supply system has been implemented since 2017 and at the moment approximately 5 waterworks have applied risk-based approach. The largest waterwork is AS Tallinna Vesi, that supplies drinking water to about 480 000 consumers (which is 36% of the population).

With the Regulation 23 (14 April 2023) of the Minister of the Environment: "Requirements for risk assessment and management of drinking water catchment areas and supply areas1" drinking water companies now will have the framework to prepare risk assessments of catchment areas and distribution systems that are in accordance with the Drinking Water Directive.

## 8. i) In the table below, please provide information on the percentage of the population serviced with drinking-water under a WSP.

Please indicate the source of data. If data is not available, please put (-).

|                   | Current value for<br>the percentage<br>of population | Specify year | Source of data  |
|-------------------|--|--------------|---|
| Total             | 36%  | 2024         | VTI (water health<br>safety<br>information<br>system) |
| Additional data 1 | none   | none         | none  |
| Additional data 2 | none   | none         | none  |
| Additional data 3 | none   | none         | none  |

## 8. ii) Please provide any other important information supporting the interpretation of the data.

According to the amended drinking water directive it is possible to implement risk-based approach.

### 3. Equitable access to water and sanitation

### 9. Has the equity of access to safe drinking-water and sanitation been assessed?

Please select only one option

- YES
- NO
- IN PROGRESS

## 10. Do national policies or programmes include actions to improve equitable access to water and sanitation:

### (please tick all that apply)

Tick all that apply

To reduce geographical disparities

- To ensure access for vulnerable and marginalized groups
- To keep water and sanitation affordable for all

## 11. If yes, please provide reference to main relevant national policy(ies) and programme(s).

In Estonia there are no disparities between different population groups and the access to drinking water and sanitation is both 100% in Estonia.

According to the Local Government Organisation Act (02.06.1993) the functions of a local authority include the organisation, in the rural municipality or city, the supply of water and sewerage unless such functions are assigned by law to other persons.

According to the Public Water Supply and Sewerage Act (10.02.1999) the prices for water services shall not be discriminatory with regard to different clients or groups of clients.

The Estonian Competition Authority implements price regulation (including approving the prices) and market supevision in the fields of public water supply and sewage. The Competition Authority is in the area of government of the Ministry of Justice. The Competition Authority worked out the recommended principles for calculation of prices for water services and these are prepared and published on its website.

For population of Estonia, in 2023, the average expenditure on water services was about 1.1% of household income, in 2024 it was 1.03% (1.31% of the income of the lowest income county).

In Water Act § 88 "Right of local authority to limit use for purposes other than domestic needs of water which is used for production of drinking water" is given the following point:

If there is insufficient supply of drinking water to satisfy the needs of drinking and preparing food, a local authority has the right to limit the use for any other purpose of water that is used for production of drinking water until the water resources have recovered to the required level.

According to the Building Code and its regulation nr 85 (02.07.2015) of Minister for Economic Affairs and Infrastructure:

- A dwelling shall be equipped with a toilet or, in the absence thereof, the possibility of using the toilet in the same building or in an area designated for servicing the building shall be ensured.

- At least the possibility of obtaining cold water must be ensured in the dwelling or, in the absence thereof, the possibility of obtaining cold water must be ensured in the same building or in the area designated for servicing the building.

### Building Code

### Water Act

Minister of Social Affairs reguation nr 61 (24.09.2019) "<u>Quality and control requirements for</u> <u>drinking water and methods for testing</u>"

National Public Health Plan 2020 – 2030

### Part seven – Information on the person submitting the report

# The following report is submitted on behalf (please enter the name of your Party, Signatory or other State below) in accordance with article 7 of the Protocol on Water and Health

The following report is submitted on behalf of Deputy Director General of the Health Board **Mari-Anne Härma** in accordance with article 7 of the Protocol on Water and Health.

### Name of officer responsible for submitting the national report

Leena Albreht

### E-mail

leena.albreht@terviseamet.ee

### Telephone number

+372 794 3525

### Name and address of national authority

Health Board, Paldiski road 81, Tallinn 10617

### Date

04.04.2025

### Signature

In this section, please provide a scanned page of the report with the signature of the authorized representative. Follow the instructions below:

- 1. Export Report (Navigate to the 'Dashboard', select the 'Actions' menu, choose 'Export,' and then 'Export report (PDF)')
- 2. Print out the exported PDF report
- 3. Obtain the signature of the authorized representative on the printed report
- 4. Scan only the page with a signature
- 5. Return to this section
- 6. Upload the scanned signature page to this section as an attachment
- 7. Proceed by clicking on "Next" to continue.

### 122/Signature 2025-04-04.pdf

Signature of the Head of the Environmental Health Department of the Health Board on behalf of Mari-Anne Härma, Deputy Director General of the Health Board

### Submission

- Parties are required to submit their summary reports to the joint secretariat, 210 days before the next session of the Meeting of the Parties, using the present Online Reporting System created based on the template and in accordance with the guidelines on reporting, which were adopted at the fourth session of the Meeting of the Parties (Geneva, 14-16 November 2016), as annexes to <u>decision IV/1 on reporting</u>. Submission of the reports ahead of this deadline is encouraged, as this will facilitate the preparation of analyses and syntheses to be made available to the Meeting of the Parties.
- 2. Parties are requested to submit, to the two addresses below, an original signed copy by post.

### Joint Secretariat to the Protocol on Water and Health

United Nations Economic Commission for Europe Palais des Nations 1211 Geneva 10 Switzerland (E-mail: <u>protocol.water\_health@unece.org</u>) World Health Organization Regional Office for Europe WHO European Centre for Environment and Health Platz der Vereinten Nationen 1 53113 Bonn Germany (E-mail: <u>euwatsan@who.int</u>)