Consultation process country presentation - Estonia

Ramon Nahkur
Ministry of Social Affairs / adviser

06.03.2018
Water and health situation in Estonia

Total water uptake for DW purposes:

<table>
<thead>
<tr>
<th>Surface water (SW)</th>
<th>Ground water (GW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 %</td>
<td>22%</td>
</tr>
</tbody>
</table>

- **SW**:
  - Drinking water
  - Cooling water
  - Other

- **GW**:
  - Drinking water
  - Mining industry
Ecological status of surface water bodies

According to the latest data of 2016:

- 55% of the total of 750 water bodies are in good status;
- 77% of the total of 39 ground water bodies are in good status.
Water and health situation in Estonia

1316 water suppliers (2016)

• Only 2 of them use surface water for supply (Tallinn, Narva)

• The rest is using groundwater (well protected)
% of public water supply consumers by source

- Groundwater: 59.5%
- Surface water: 40.5%

1,172,664 consumers of public water supplies
Water and health situation in Estonia

- 89.3% of total population has access to a drinking water supply system

98.1% of that population consumed drinking water conforming with requirements.

- 98% of all water supplies are Small scale water systems (SSWS)

- 83% of population is connected to public sewerage systems.
Percentage of population supplied with DW conforming with requirements
Water and health situation in Estonia – water suppliers

• Water supplies with productivity less than 10 m³ per day are 48,9% (serve about 1,5% of the population).

• Water supplies with productivity 10-99 m³ per day are 41,3% (serve about 11,1% of the population)

• Water supplies with productivity 100-999 m³ per day are 8,2% (serve about 18,5% of the population)

• Water supplies with productivity more than 1000 m³ per day are 1,5% (serve about 68,9% of the population).
Water and health situation in Estonia - Sanitation

• In agglomerations more then 2000 86% (2016) are in compliance
• In agglomerations less than 2000 pe 66% of the wastewater treatment plants effluent is in conformity with the requirements
• 200 000 inhabitants (17% of total) of the population lives in rural areas and use individual sanitation and drinking water systems.
• According to the latest studies, 50% of systems do not meet the quality standards and depreciated.
Water and health situation in Estonia – **microbiological quality**

- There are no drinking water supply systems in Estonia in which constantly fail to meet the requirements of microbiological parameters.
- Temporal deviations from required microbiological parameters have been noted in 5% of water works under surveillance (<0.01% water consumers).
- Mostly these deviations from requirements come up when there are some technical problems in the water supply.
- Due to implementation of improved methods and government monitoring, there have been no outbreaks associated with drinking water during the past 20 years.
Water and health situation in Estonia – chemical quality

- Small problem (used to be bigger) is the regional excess of fluoride content (over 1.5 mg/l), which depends from the used groundwater level – 400 consumers involved.
Policy landscape – relevant institutions
Policy landscape – relevant institutions

National level:

I Ministry of Social Affairs:

- Development and implementation of public health and environmental health policy – drinking water, bathing water, mineral water, hazardous chemicals, noise, EMF etc.

- Responsible for legislation of drinking water quality.
Policy landscape – relevant institutions

National level:

Il Health Board:

• subordination of the Ministry of Social Affairs, who performs state supervision and enforces state direction on the basis of the legislative acts.
Policy landscape – relevant institutions
II Health Board:

- Surveillance monitoring (check and audit)
- Approval the programme of monitoring carrying out by water producer (points of sampling, frequency of monitoring, parameters which needs to be monitor, quality of water)
- Issue of permits for sale water which is not harmful for health but doesn't comply to indicator parameters
- Advising water producers
- Issue precept
- Inform public
- Provide training for specialist
- Most important responsibilities is prevention of water-borne outbreaks, avoidance of epidemics and protection of water supplies are
Policy landscape – relevant institutions

NATIONAL LEVEL:

Ill Ministry of Environment (incl. Subsidiary agencies):

• development and implementation of environmental policy: water resources, water management, public water and sewerage systems, past pollution, bathing waters

• responsibility for assuring and preserving the quality of the water;

• management of natural resources and regulation of their use;

• financing of water related projects (water infrastructure, water courses, past pollution, floods;

• surveillance water policy (not drinking water);
Policy landscape – relevant institutions

NATIONAL LEVEL:

IV State authorities (MoE subsidiary agency):

• **Environment Agency** - collects, processes, analyses and distributes environmental data;

• **Environmental Inspectorate** - is responsible for supervision in all areas of environmental protection;

• **Environmental Board** - provides guidance on the use of the environment, issuing permits and licenses
MUNICIPAL LEVEL:

Local municipalities:

- Management of public water supply and sewerage
- Mostly forwarded for the water utilities (municipality owned)
- Investment implementations;
- Local policy and surveillance of individual sewerage systems
Targets
Measures taken to address issues of water and health - targets

Estonia has set 3 national targets under 6.2b, 6.2c and 6.2d:

1) Increasing % of population supplied with drinking water conforming to requirements

2) There are no outbreaks of diseases due to drinking water

3) Ensuring appropriate sewage collection and treatment for all the residents
Measures in case of emergency situation
Measures in case of emergency situation

• Emergencies are regulated by the Emergency Act.

• Local Municipalities are responsible for the sustainability of drinking water supply and sewerage in emergency situations.

• Emergencies are coordinated by the Ministry of Internal Affairs.
Measures in case of emergency situation

- According to Public Water Supply and Sewerage Act \(^{1}\) A water undertaking shall be a provider of the vital services specified in clause 34 (9) 3) of the Emergency Act if:
  1) there is a public water supply system serving a high density area with a population of 40,000 \(5\) WSZ in Estonia \(6\) or more people in the licensed territory of the water undertaking
Measures in case of emergency situation

According Emergency Act all vital service providers must have:

1. Emergency risk assessment
2. Emergency response plan
Measures in case of emergency situation

- In 1080 out of 1085 WSZ there is no obligatory plan for emergency situations. But all those waterworks get water from deep and well-protected water layers.
Public participation and cooperation
Public information and participation

- Processes of developing and implementing Estonian laws, regulations and strategies is always public.

- Local municipalities usually present the voice of the people.

- Water safety information system (VTI) is 24/7 up and running for consumers about their water quality: http://vtiav.sm.ee/index.php/?active_tab_id=JV
Inter-State cooperation in connection with water and health.

- No official and/or separate body for the cooperation, but stakeholders negotiate and agree on matters via national strategies and legislation.

- Cooperation between Ministry of Environment and Ministry of Social Affairs (incl. Subsidiary agencies)

- Ministries cooperate with Estonian Waterworks Association who cooperates with Local Municipalities and water suppliers.

- Water management committee under WFD implementation

- Inter-sectoral ad hoc working groups on water related topics: public water and sewerage, groundwater, investments, drinking
Main challenges and special needs encountered in implementing the Protocol
Main challenges encountered in implementing the Protocol

• Setting targets without the necessary funds for the measurement can be deceiving;
• So far, EU legislation and targets arising from directives have been priority, but in coming years the main challenges will be solved with EU funds;
• After that more focus should be paid for smaller scale water supplies and sanitation systems, including individual systems and finding the sustainable model for the water management (water price, water utilities structural reform, merging).
• Long term sustainability in the water sector, especially for the water infrastructure management in rural areas. Latest challenges are related with individual systems. Water price affordability.
• Lack of competent water operators in smaller water utilities. Too many water utilities. Different levels of competencies between water utilities.
• technical challenges with purification of radioactive substances (NORM-waste) and hazardous substances in the sewerage and managing the
Specific needs and specific expectations of what can be gained from the Consultation Process.

- Understanding of how to set targets and indicators for measuring progress, particularly targets in the area of small scale and individual supplies (relying on best practices from other States, requesting input from WHO/Europe).
- Use the Protocol as a tool to go beyond EU directives.
- Ideas for raising funds and using the protocol as a tool for target setting, monitoring and implementation.
- Capacity building for the public and private sector. A particular need could be education and training materials for water operators (currently missing due to lack of funds even if expertise is available) and training on water quality surveillance.
Republic of Estonia
Ministry of Social Affairs

Thank You!