



Ministry of Health
Republic of Latvia



Ministry of Environmental Protection and Regional Development of the Republic of Latvia

UNECE Protocol on Water and Health consultation process - situation in Latvia

**The sixteenth meeting of the Compliance Committee under the Protocol on Water and Health
6 March 2018, Geneva**



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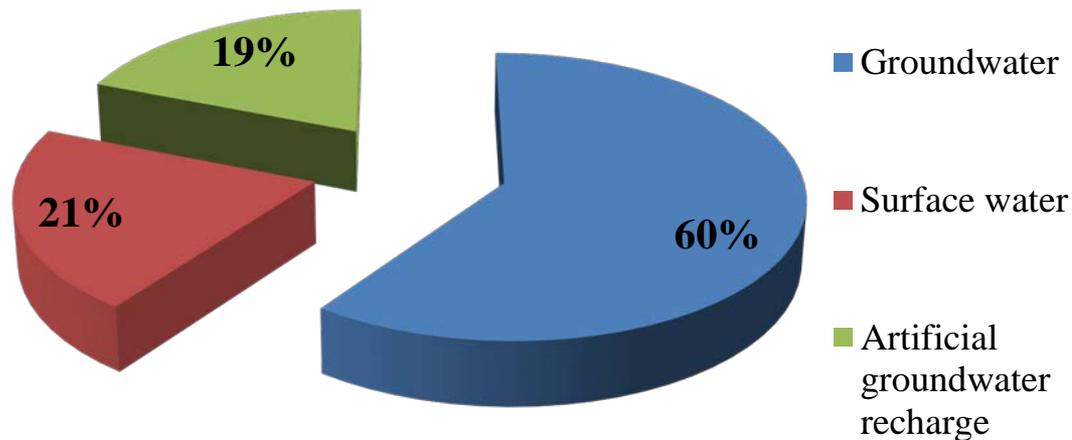
The baseline: water resources & population in Latvia



- There are more than **12,000 rivers** (only 17 are longer than 100 km) and more than **3000 lakes** (only 16 exceed 10 km²) in Latvia covering **3.9 %** (~2543 km²) of the country's territory. The length of the sea **coastline is 494 km**.
- Surface fresh water resources are estimated as 33–35 km³; total natural groundwater resources: ~13 000 m³/day.
- **56%** of the total **river discharge** originates **outside** our country. Latvian marine waters constitute only **7.7%** from the total area of the Baltic Sea.
- With roughly **1,9 million inhabitants** and a territory of 64 589 km² Latvia is one of the **least densely populated** countries (**34.3/km²**) in the EU. Urban population is ~ 68% and rural ~ 32%.
- According to European Environmental Agency, Latvia has **one of the lowest** water exploitation indexes in Europe.

The baseline: water and health situation

- 85% of the population receives high quality drinking water.
- The sources of supplied drinking water are the following:





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Baseline: water and health situation

- **Centralized water supply network is available to:**
 - 95% of households in larger agglomerations (where population equivalent (p.e.) is above 2000);
 - 90.2% of households in smaller agglomerations (p.e. < 2000).
- **Centralized sewerage network is available to:**
 - 93% of households in larger agglomerations (p.e. \geq 2000)
 - 89.6 % of households in smaller agglomerations (p.e. < 2000).

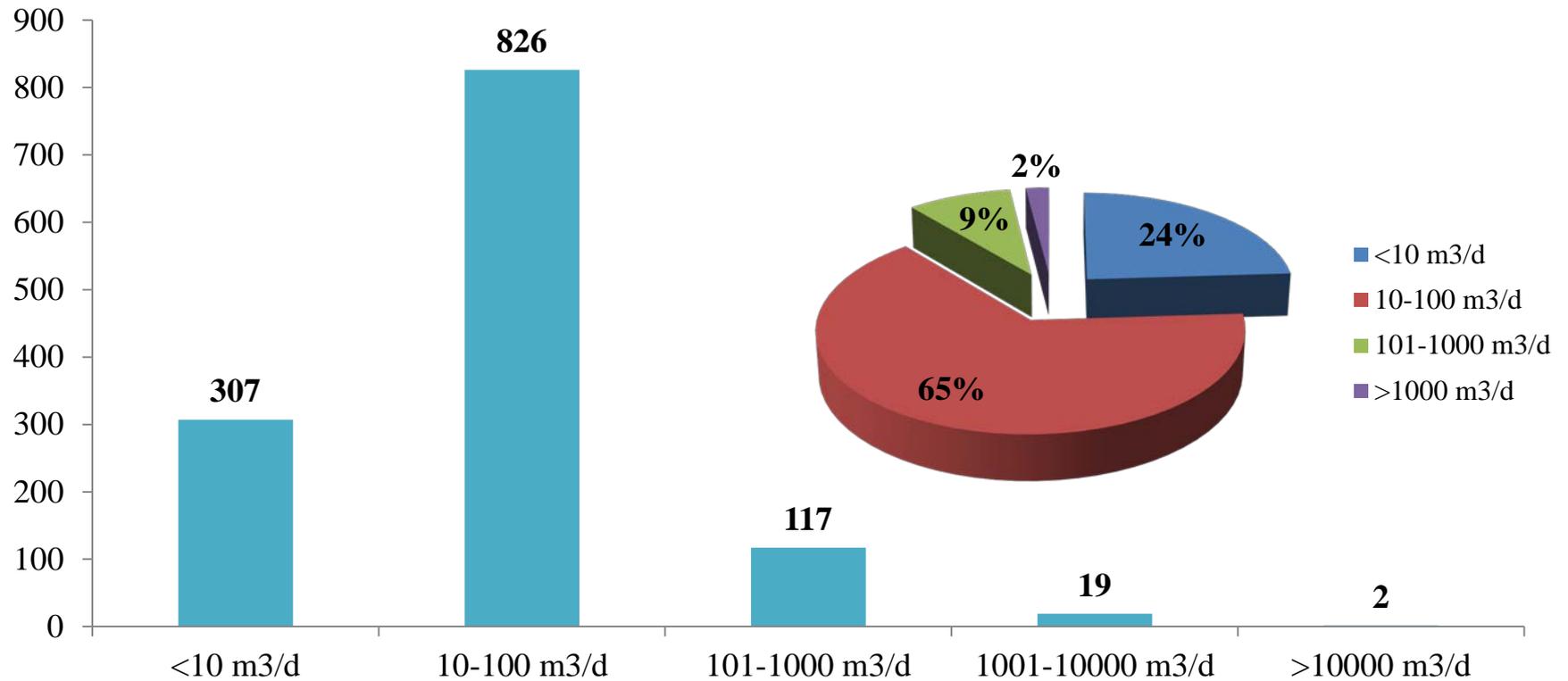
Real connection rates are lower: ~ 69% in larger agglomerations. That is why the national Environmental Policy Strategy 2014-2020 establishes targets for further increase in number of population, which uses centralized water services.

Since the end of the 1990s, more than **848 million euro** invested in the development of water supply and sewerage infrastructure in urban areas. This comprises ~ **71% of the total environmental investment** in Latvia.

Baseline: water and health situation

- Small scale (serving up to 100 m³/day) water supplies have lower compliance with chemical indicator parameters in comparison with large water supplies (serving >1000 m³/day).
- All problems related to any exceedance of chemical water quality parameters are associated with naturally occurring chemical elements (Fe, Mn, SO₄²⁻, Cl⁻), which are present in Latvian groundwater in rather high concentrations.
- According to the data of Latvian Disease Prevention and Control Centre, there are 33 confirmed cases of Legionnaires' disease per year on average.
- According to ECDC data notification rate for Legionnaires' disease in 2016 for EU region was 1.27/100 000 and for Latvia it was 0.71/100 000.
- There are no registered outbreaks and incidences of other infectious diseases, potentially related to water.

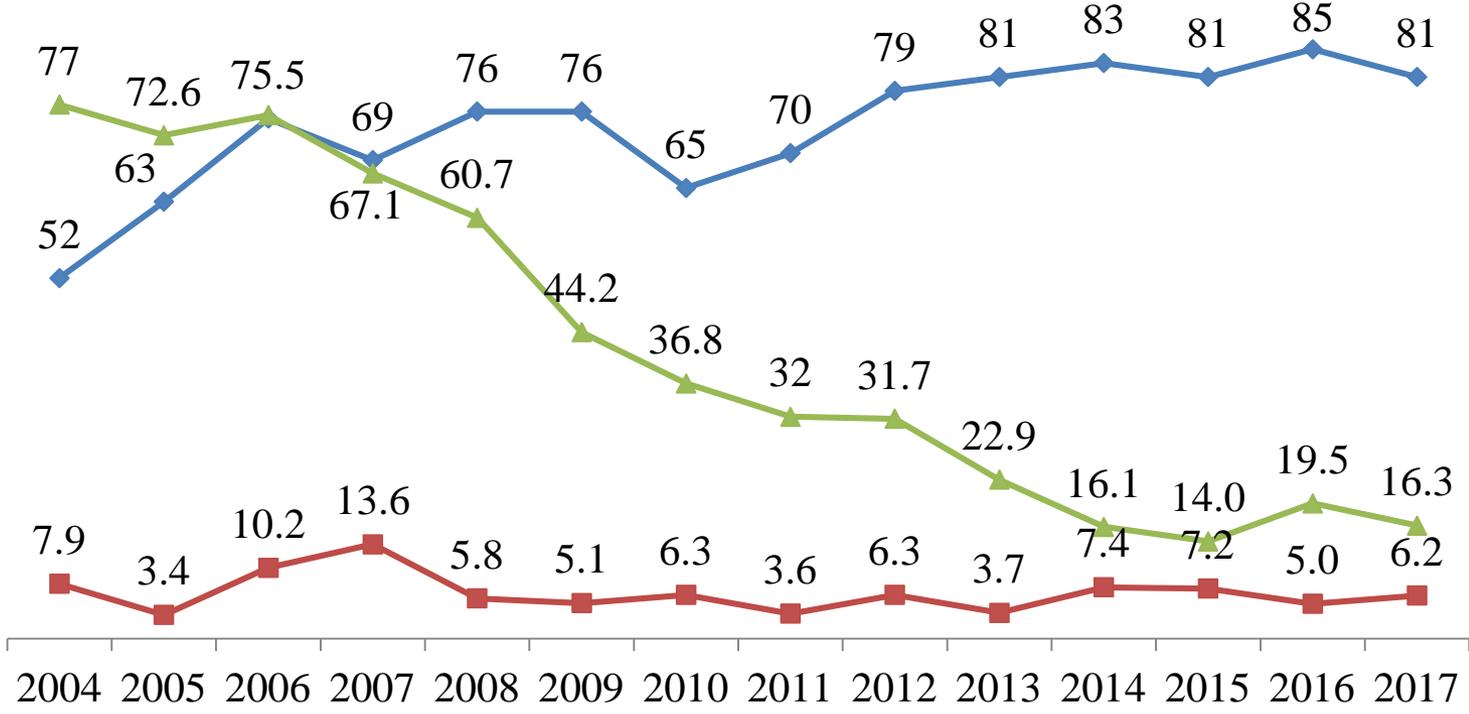
Public drinking water supply systems in Latvia (2017)



| | Small | Medium | Large |
|----------------------|------------------------|----------------------------|--|
| | <100 m ³ /d | 100-1000 m ³ /d | >1000 m ³ /d or >5000 people |
| Water supply systems | 1133 | 106 | 32 |
| Population served | 15% | 15% | 70% |

Drinking water quality (%)

70% average compliance in small WSS for all parameters
 99.8% average compliance in small WSS for E.coli and Enterococci only



64 %

25.3 %

2.8 %

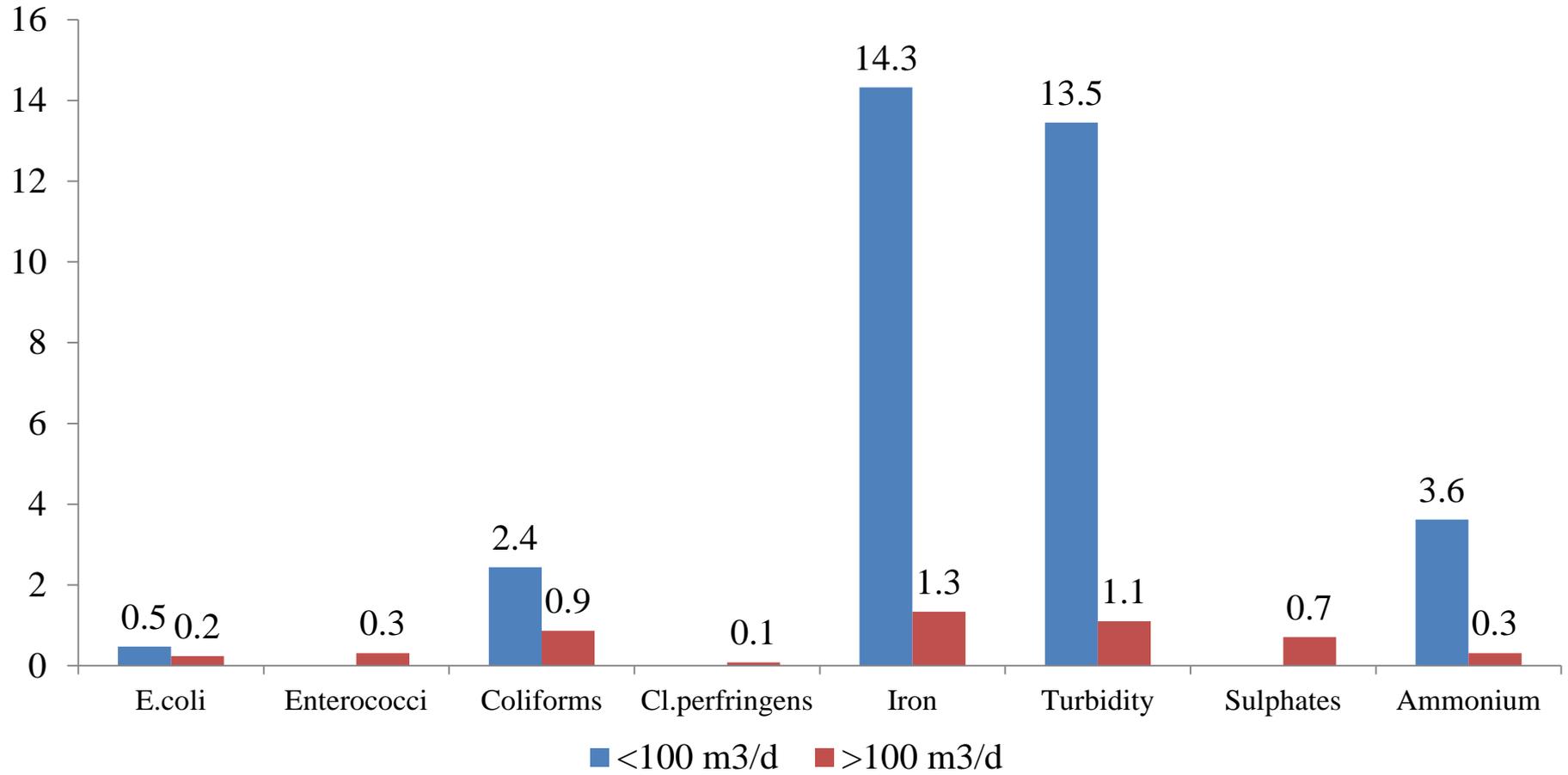
2016

Small WSS
 <100 m³/day

- ◆ Proportion of the consumers supplied drinking water in adequate quality
- Noncompliances in microbiological parameters
- ▲ Noncompliances in chemical indicator parameters

Medium + Large WSS (>100 m³/day)

WSS non-compliant with drinking water parameters (% , 2017)



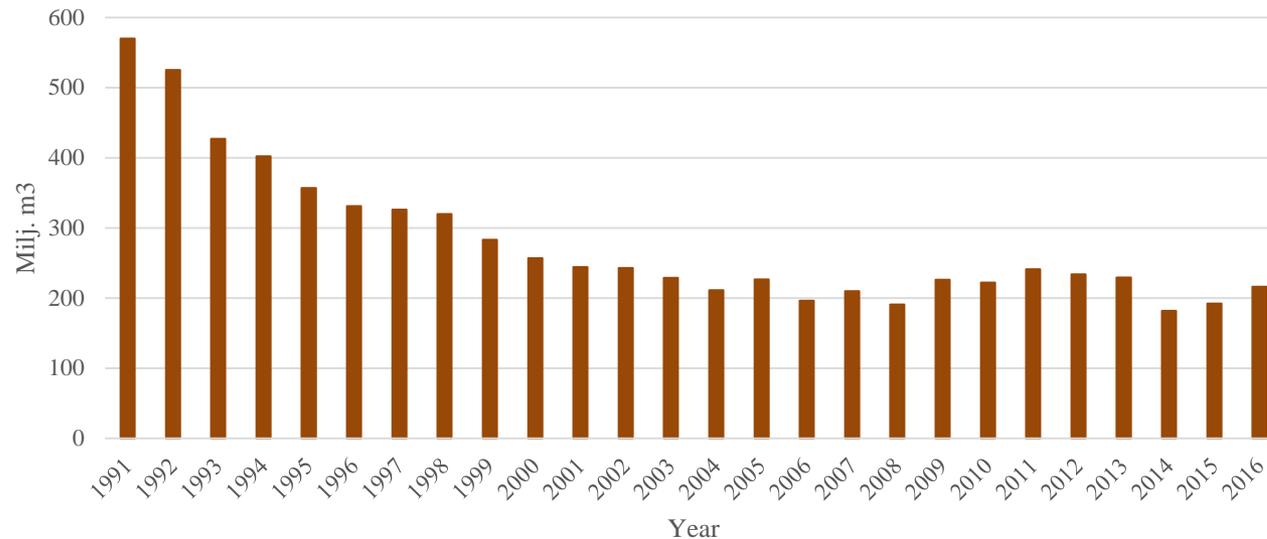


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Baseline: wastewater discharge

Since the end of the 1990s, the amount of discharged wastewater has decreased significantly.

Amount of wastewater discharged in surface water



Source: Latvian Environment, Geology and Meteorology Centre

In 2016, there were 1276 wastewater treatment plants in Latvia. In 2016, only ~ 2% of discharged wastewater did not comply with the treatment standards laid down by legislation. (In 2000 this share was ~ 18%.)



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Baseline: status of surface water and groundwater

Water status **assessment system** has **changed significantly** (improved) in Latvia since 2014, and includes biological, hydro-morphological and physico-chemical quality elements.

The status of all the largest surface water bodies and groundwater bodies is assessed every 6 years. According to the assessment carried out in 2014-2015:

~ **21%** of surface water bodies have **high** or **good ecological status**

~ **56%** surface water bodies are classified as having a **moderate** status

~12% **poor** status

~ 7% **bad** status.

Note: The ecological status may be (and in many cases is) classified as moderate/bad due to barriers to migrating fish or unfavorable conditions for other water biota and does not necessarily indicate risks for water abstraction or bathing.

Chemical status of surface water bodies assessed as **good**.

Both **chemical and quantitative status of groundwater** assessed as **good**.

Water **abstraction is not** regarded as a significant pressure on surface and groundwater bodies.



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Policy landscape – principal requirements for water protection

- Polluting activities are classified in categories A, B, and C in accordance with the risk of pollution to human health and the environment. Operators shall obtain permits to carry out Category A or B polluting activity. Permits include various requirements, incl. for water abstraction, wastewater discharge and monitoring. All wastewater **discharges** above 20 m³/day **shall obtain** either category A or B **permit**, discharges of 5 – 20 m³/day shall obtain a category C **certification**.
- A **water use permit** is to be obtained if water abstraction from surface waters or groundwater exceeds 10 m³/day, or if more than 50 persons are served. This permit is also required for other specific types of water use that do not cause pollution (like hydropower generation).
- Discharge of polluting substances into groundwater is **prohibited**.
- Discharge of non-treated industrial waste water and sewage sludge into surface waters or the environment is **prohibited**.
- **Treatment standards** for urban wastewater is laid down by law. If industrial waste water is discharged into a centralized collecting system or municipal wastewater treatment plant, the operator is obligated to **pre-treat** it.



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Policy landscape – principal requirements for water protection

- **Protection zones** shall be established around drinking water abstraction sites. Certain restrictions on land use, economic activity, construction etc. apply within these zones. To protect waters from different pressures caused by anthropogenic activity, protection zones are established also around or along surface water bodies and along the Baltic Sea coastline. There are numerous **restrictions** within these zones.
- The water use permit includes requirements for the maintenance of protection zones around the water extraction sites.
- The legislation requires **metering** of abstracted water. On the basis of the metering, a **natural resources tax** shall be paid for extraction of surface water and groundwater. The tax for extraction or use of water resources above the volume specified in the permit is calculated by applying a tenfold tax rate. The tax shall also be paid for discharges of pollutants into waters; the rates for non-dangerous and dangerous substances emissions are different.
- There are also **requirements for the construction** and maintenance of sewerage and water supply systems, as well as for management of **decentralised** wastewater collection and treatment systems.

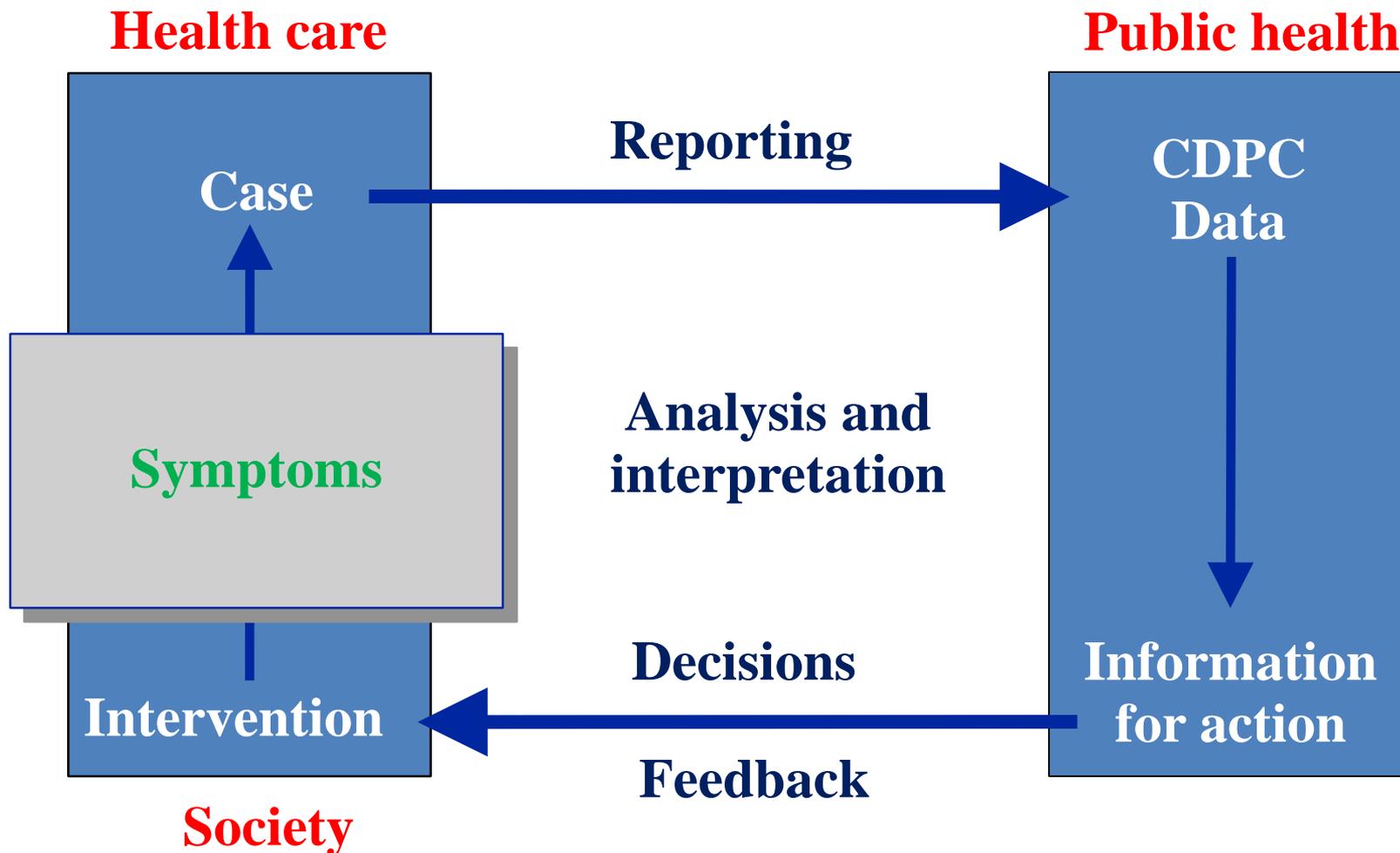
Policy landscape: relevant institutions (I)

| Institution | Principal roles (responsibility) |
|--|--|
| Ministry of Agriculture | Implementation of EU Drinking Water Directive |
| Ministry of Environmental Protection and Regional Development (MEPRD) | Develops national policy in the field of environmental protection, incl. improvement of environmental quality, sustainable use of natural resources and environmental investments. Elaborates legislation on provision of water supply and sewerage services, requirements on wastewater treatment and collection, surface water and groundwater quality. Coordinates the development of river basin management plans, in charge of investments in water services development. |
| State Environmental Service | Issues environmental permits (for polluting activities, water use, use of subterranean depths, etc.) and technical regulations. Enforcing authority, responsible for control of compliance with legal requirements. Carries out initial environmental impact assessment. |
| Latvian Environment, Geology and Meteorology Centre | Responsible for environmental information collection, evaluation and reporting. Develops environmental monitoring programs (incl. for surface water and groundwater), carries out monitoring, assessment of water status, elaborates river basin management plans. Issues documentation related to groundwater abstraction (borehole licences and passports, etc.). |
| Municipalities | Organisation of water supply and sewerage services for their population irrespective of the ownership of the residential property is one of the autonomous functions of municipalities in Latvia. Usually water services are provided by the municipal capital companies or agencies. |
| Ministry of Health | Develops policy on drinking and bathing water safety and quality monitoring and epidemiological safety. |
| Health Inspectorate | Conducts drinking water monitoring, reporting, sanitary inspections, issue of special norms. |

Policy landscape: relevant institutions (II)

- **Inter-ministerial committees, working groups**
 - 4 consultative boards of the river basin districts, which include representatives from public authorities (MEPRD, Ministry of Economics, Ministry of Health and Ministry of Agriculture), as well as representatives of municipalities and NGOs;
 - interinstitutional working group «Drinking water» under the Ministry of Agriculture. It includes representatives from MEPRD, Ministry of Foreign Affairs, Ministry of Health, control and scientific institutions, municipalities and NGOs.

Mechanism for epidemiological surveillance





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Main challenges related to water supply and sanitation

From «**Environmental Policy Strategy 2014-2020**», adopted by the Governmental Order No 130 on 26 March 2014.

1. There is a **risk of non-compliance** with the requirements on the drinking water quality and wastewater collection and treatment by the end of 2015 due to low ability-to-pay of the population.
2. **Sewage sludge is accumulated in «temporary» storage fields** or landfilled as its use in forestry, agriculture and for greening is very limited.
3. **Quality of technical designs and construction processes is not always satisfactory** as project developers are chosen on the basis of the lowest-price offer.
4. **Insufficient public funding for audit monitoring of drinking water** from small supply systems (providing less than 100 m³ per day).
5. **Development of new settlements** in the areas, **where** an appropriate **engineering infrastructure is not available**.
6. **Lack of funding** to continue development of water services in the **settlements with a p.e. of less than 2000**.

Main challenges encountered in implementing the Protocol

- Requirements in most of the target sectors are already set under the EU and national law; therefore the necessity for another mechanism for the same issues is low.
- Funding/resources issues - financial capacity of municipalities and citizens is not always sufficient to invest more in water supply and sewage collection and treatment.
- It is complicated to comply with the standards for specific parameters, naturally occurring in groundwater: iron, sulphates, ammonium.
- Remedial measures are not implemented or slowly taken.
- Ageing infrastructure.
- Insufficient data on the status of very small water supply systems.
- Insufficient capacity to detect outbreaks (statistical data collection).
- Cooperation within the sector is challenging.

Measures taken to address issues of water and health (I)

- Measures are taken in accordance with national and EU law. The four specific targets set under the Protocol are also in accordance with EU law and national policy.
 - National environmental monitoring system:
 - Monitoring of surface water and groundwater quality and quantity, including wastewater discharges.
 - Mid-term assessment of policy documents implementation (set targets) is required. It is carried out by the relevant ministry and submitted to the Cabinet of Ministers.
 - Regular reporting to the European Commission and provision of information on water status and related objectives and measures, wastewater and sewage sludge management, environmental investments to the public.
 - Drinking water and bathing water monitoring, reporting and information to the public.



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Measures taken to address issues of water and health (II)

Investments in water services development

- The period between 2007 and 2013 ensured intensive development of water supply and sewerage infrastructure.
- In total, **535** water service development projects implemented in Latvia.
- As a result, 73.1 % of the Latvian population or **1.53 million inhabitants** are provided with a **possibility to connect to centralized sewer** systems and 74.9% of the Latvian population or **1.57 million inhabitants** are provided with a **possibility to connect to centralized water supply** systems.
- In order to promote connections to the centralized networks, the Law on Water Management Services (2016) gave rights to the **municipalities to co-finance connection** of properties to the centralized sewer and water supply infrastructure. Up to date, ~ **19 %** of municipalities have such support mechanisms.

Measures taken to address issues of water and health (III)

Response measures in case of emergency:

- International health regulations have been implemented and maintained in Latvia. State Emergency Medical Service provides National Focal Point (NFP) function 24/7. The function of NFP includes the maintenance of information exchange for all kinds of threats.
- For health sector, preparedness and response State Emergency Medicine Plan (Plan) is developed and is being renewed annually.
- All responsibilities among state, municipal and private institutions are defined in the Civil Protection and Catastrophe Management Law.
- There is a Law on civil protection and management of catastrophes and a national civil protection plan.
- Local civil protection plans (include procedures, how to conduct actions in order to prevent and manage different emergencies).



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Measures taken to address issues of water and health (IV)

International cooperation related to water and health issues

- In October 2003, **Latvian and Estonian** ministers of the environment signed an agreement on cooperation within the Gauja/Koiva river basin district, which is shared by both countries. The agreement provided for the establishment of groups of experts from the competent authorities, which meet regularly to exchange information and to coordinate issues important for the development of the river basin management plans.
- The framework for **Latvian – Lithuanian** coordination within the Daugava, Lielupe and Venta river basin districts was established by a technical protocol on their joint management and signed by Latvia and Lithuania in 2003. The technical protocol envisages regular meetings of the competent authorities and experts. Meetings of the competent authorities are used to discuss problems and issues that need coordination.
- A general agreement on cooperation within the field of environmental protection exists among all 3 Baltic States: **Latvia, Estonia and Lithuania (signed on 4 June 2010)**.



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Measures taken to address issues of water and health (V)

International cooperation related to water and health issues

- Inter-governmental agreement between the **Latvian Republic and the Russian Federation** on cooperation in the field of environmental protection, signed on 20 December 2010.
- Inter-governmental agreement between **Latvia and Belarus** on cooperation in the field of environmental protection, signed on 21 February 1994.
- The public authority under the MEPRD, the Latvian Environment, Geology and Meteorology Centre, also has **agreements** with relevant institutions in neighboring countries **on the exchange of data** and other relevant cooperation activities.



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Measures taken: support of the EU funds in 2014-2020 (VI)

Operational Programme «Growth and employment», Specific objective 5.3.1 «To develop and improve the quality of services of water supply and sewerage systems and to ensure connection options»

Total available EU funding: **126 million €**

Priority measures related to the 1st investment priority «Expansion of sewerage collection networks»

1. Construction of new sewerage networks within existing agglomerations:

1st priority: agglomerations with p.e. 10 000 – 100 000

2nd priority: agglomerations with p.e. 2000 - 10 000

2. Construction of sewerage networks in extended agglomerations

1st priority: agglomerations with p.e. > 100 000

Supported activities: expansion of sewerage collection networks (construction of new networks), limited support (up to 5%) to reconstruction of the existing sewerage collection networks.



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Measures taken: support of the EU funds in 2014-2020 (VII)

Project selection: **limited selection of project proposals**

- **The 1st round of selection started in 2016** for agglomerations with a p.e. of more than 10 000 [15 agglomerations]. **In 2017 all contracts on project implementation have been concluded.**
- **The 2nd round of selection started in 2017** for agglomerations with a p.e. of more than 2 000 [38 agglomerations]. 31 projects were submitted, up to date 21 contracts are concluded.
- **The 3rd round of selection started in 2017** for development of water services in expanded agglomerations with a p.e. of more than 100 000 [2 agglomerations]. Up to date both projects are submitted and are subject to evaluation.

The projects will be implemented **until 2023**. It is planned to increase the number of the users of centralised sewerage networks by at least **43 000**.

Specific needs and specific expectations of what can be gained from the Consultation Process

- Numerous tasks stemming from the Protocol on Water and Health are also requirements laid down by the EU and Latvian national legislation. Advice, on how to combine existing situation with the implementation of the Protocol on Water and Health, without creating an excessive administrative burden.
- Evaluation of existing national provisions for the target areas and specific targets and advice for developing indicators for evaluation of progress towards the achievement of targets.
- Advice on measures to be taken for bringing political attention to the challenge, informing and education of municipalities in understanding the benefits.
- Advice on improving risk identification and management in water supply and management in buildings with an aim to reduce Legionellosis risk and to increase owners' perception change towards necessity of risk management.
- Information on legislation and other provisions such as guidelines in European countries for good practice and management of enclosed waters for bathing - swimming pools.

**Thank you for your
attention!**

