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UNECE - WHO/Europe Protocol on Water and Health Joint Secretariat protocol.water_health@un.org For information:

Ministry of Environmental Protection and Regional Development Ministry of Foreign Affairs

Reporting under the UNECE-WHO/Protocol of Water and Health

In response to your letter (Ref.: 2021/OES/251/ENV/156) on the national summary report under the **UNECE and World Health Organization Protocol on Water and Health**, please find attached the report prepared by Latvia. We express apologies for any inconvenience caused by submitting the report after the 20th April 2022.

Information was prepared jointly by the Ministry of Health and the Ministry of Environmental Protection and Regional Development of the Republic of Latvia.

Enclosure: Report prepared by Latvia on 46 pp.

Secretary of State for Health Policy

(signature*)

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

Executive summary

Targets in accordance with article 6.2 c), 6.2.d), 6.2.j) and 6.2.n) of the Protocol on Water and Health were prepared in 2017 jointly by the Ministry of Health (hereinafter - MoH) and the Ministry of Environmental Protection and Regional Development (hereinafter - MEPRD) of Latvia. These targets have been formally established within health and environment policy planning documents adopted by the Government of Latvia e.g. the Environmental Policy Strategy 2014-2020 and the Public Health Strategy 2014-2020.

The latest national policy planning documents - the new Environmental Policy Strategy 2021 – 2027, the third river basin management plans for the period of 2022 – 2027 as well as the European Union Cohesion Policy programme (2021-2027) for Latvia also includes targets and actions related to protection and sustainable use of water resources. The Water Supply Investment Plan for 2021-2027 approved in 2020 provides information on technically justified investments needed to improve and renovate the existing water supply infrastructure in the whole country as well as for each agglomeration (p.e.>2000). The Public Health Strategy 2021-2027 includes targets and actions related to achievement of safe drinking and bathing water, reduction of impact from communicable diseases by improving hygiene and sanitation and targets to raise public awareness on environmental health and safety issues. Many actions covered by other areas of article 6 of the Protocol are being carried out under relevant requirements of European Union legislation and are also specifically regulated by national legislation and policy planning documents as described in this report.

In 2012, 89,9%; in 2016, 91,4% and in 2020, 94,7% of the population was provided with an access to drinking water supply. In the end of 2020 1.3 million inhabitants in Latvia already use centralized wastewater collection services that corresponds to 88.8 % of population in agglomerations with p.e. above 2000. It is expected that after implementation of all projects started during the EU funding period 2014-2020 the access to centralized sewage networks will be provided for 95.8 % of the population in agglomerations (p.e. above 2000), although there will be differences between agglomerations regarding access to that service.

According to the national statistics, water losses in general have gradually decreased: in all sectors from 16.8% of used water in 2004 to 6.1% of used water in 2020. The reduction of water losses in the centralized supply systems is even greater - from 37,1% of supplied water in 2004 to 12.7% of supplied water in 2020.

The amount of insufficiently treated wastewater discharged to the environment gradually decreases owing to water infrastructure development projects. In 2019 93.6 % of discharged wastewater from centralized systems comply with the treatment standards laid down by legislation. (in 2000 this share was ~ 85 %.). The total amount of polluting substances discharged by wastewater treatment plants to the environment has decreased: in 2012 – 2020 period the total discharge of nitrogen with wastewater has decreased by 52 %, the total discharge of phosphorous - by 61 % and the total discharge of BOD₅ - by 39 %.

In the river basin management plans for period from 2016 to 2021 all Latvian groundwater bodies are assessed as being in a good status and the status of groundwater has not deteriorated since 2015. Only the capital Riga uses surface water for the drinking water production. Groundwater is used both for centralized and individual drinking water supply in the rest of Latvia. During the development of the third river basin management plans 2022-2027, the borders of groundwater bodies have been reviewed and updated to better assess all impacts on groundwater as well as their status.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing unnecessary consumption and pollution of waters as well as to promote a free access to drinking water in public spaces. The Strategy sets targets for improvement of drinking water quality and access to drinking water supply services also. According to the Strategy the percentage (%) of population receiving drinking water of appropriate quality should be above 87 % in 2027. The target for providing a free access to drinking water for citizens in public spaces is to ensure that at least 200 municipalities/ institutions/companies provide such service in 2027; the target regarding chemical and microbiological quality of drinking water is to reduce relevant exceedancies of standards set up for those parameters: the percentage (%) of exceedances of chemical quality standards of drinking water should be less 19.7 % in 2027 and the percentage (%) of exceedances of microbiological quality standards of drinking water should be less 4 % in 2027.

Progress has been achieved with regard to improvement of drinking water quality – the chemical quality has enhanced from 72.6 % of auditmonitoring water samples that fail to meet the standard for chemical water quality in 2005 to 12.8% in 2021.

The proportion of inhabitants receiving drinking water with excellent quality has increased from ~81-87 % in 2015-2019; 90% in 2021. It should be stressed that chemical quality concerns so called indicator parameters according to directive 98/83/EC. No clear changes in dynamic of microbiological quality parameters are noticed. The number of non-compliant samples is small and fluctuates mainly in the range of 3-7 % being much smaller with respect to E.coli and Enterococci (from 5.8% in 2018, 3.3% in 2019, 0.2% in 2020 and 0.6% in 2021).

Monitoring of bathing waters in Latvia is in line with the provisions of the the Bathing Water Directive (BWD) which is transposed into the national legislation. Over the past three years the number of official bathing sites has increased from 55 to 57. In 2021, approximately 228 bathing sites were tested for water quality in Latvia (In 2018 170 bathing sites) and around 900 samples were taken during the bathing season (in 2018 850 samples). Only a third of all bathing sites where water quality is determined are official bathing sites. The Health Inspectorate maintains a database available to the public regarding bathing sites which are not on the official bathing list, but in which water quality checks are carried out. Overall 57 bathing sites declared in the national legislation as "official" sites are those attracting many bathers due to socioeconomic reasons (located in bigger towns or resort areas), including travellers. These 57 bathing sites are facilitated areas almost fully implementing the provisions laid down by national legislation.

The most significant challenges in drinking water quality are lack of funding for new investments of drinking water supply systems and capacity building activities, lack of sufficient financing for small scale water supplies to renew pipeline networks and ensure proper water treatment.

The main challenges also remain in the area of funding and resources for water supply and sewage collection and treatment. EU funds for improvement of water supply networks will not be available in the next planning period, therefore municipalities should use their resources to continue to improve drinking water supply services.

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.

YES x NO \Box IN PROGRESS \Box

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

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 prepared in 2017 jointly by the Ministry of Health (hereinafter - MoH) and the Ministry of Environmental Protection and Regional Development (hereinafter -MEPRD) of the Republic of Latvia. These targets have been formally established within health and environment policy planning documents adopted by the Government of Latvia e.g. the Environmental Policy Strategy 2014-2020 and the Public Health Strategy 2014-2020 and published on the website of the Ministry of Health: http://www.vm.gov.lv/lv/tava_veseliba/vides_veseliba1/unece_un_pvo_udens_un_veseliba s_protokols/ (in Latvian) and the website of the United Nations Economic Commission for Europe:https://www.unece.org/fileadmin/DAM/env/water/Protocol on W H/Target set by_parties/Latvia/Latvia_targets_2017.pdf

Many actions covered by article 6 are being carried out under relevant requirements of EU legislation and are also specifically regulated by national policy planning documents such as Environmental Policy Strategy 2014 – 2020 and , River Basin Management Plans for the period of 2016 – 2021, Public Health Strategy 2014-2020, National Development Plan of Latvia, 2014-2020, Operational Programme "Growth and employment" 2014. All these policy papers are publicly available on the website of the MEPRD:

http://www.varam.gov.lv/ in the other public websites: www.likumi.lv, maintained by the official publisher of the legislation of Latvia "Latvijas Vēstnesis", and http://polsis.mk.gov.lv/documents, maintained by the Cross-sectoral Coordination Centre of the Republic of Latvia.

The latest national policy planning documents - the new Environmental Policy Strategy 2021 – 2027, the third river basin management plans for the period of 2022 – 2027 as well as the European Union Cohesion Policy programme (2021-2027) for Latvia also include targets and actions related to protection and sustainable use of water resources. At the moment of this report Environmental Policy Strategy 2021 – 2027 and European Union Cohesion Policy programme (2021-2027) for Latvia are in approval stage and will be publicly available on the website of the MEPRD: http://www.varam.gov.lv/ in the other public websites. The third river basin management plans for the period of 2022 – 2027 were approved on 19 April 2022 and are available in the website of the competent authority: https://videscentrs.lvgmc.lv/lapas/udens-apsaimniekosana-un-pludu-parvaldiba

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.

Targets were prepared jointly by the MoH and the MEPRD.

Other targets are based on already existing EU legislation to be implemented in the country so specific coordination between competent authorities for setting targets is not needed. Since the targets are set in legislation or planning documents, they shall have mandatory consultation procedures involving all relevant authorities.

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.

All abovementioned policy papers include either financing plan or information about the funding necessary for their implementation. During the development of river basin management plans, cost-effectiveness of the measures envisaged for the improvement of water status was evaluated. The development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities during the last decades when Latvia started the joining procedure to the European Union.

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?

Policy papers are subject to public consultation, which usually involves representatives from public authorities (MEPRD, Ministry of Economy, MoH, Ministry of Finances and Ministry of Agriculture as well as relevant subordinated institutions responsible for supervision and control of environmental resources and supplied drinking water), municipalities, non-Cabinet organisations. Consultation may be organized as special public events or by using written procedures. Received comments are usually evaluated and taken into account as far as possible. For legislation there is also a procedure for coordination before its adoption, which usually involves abovementioned stakeholders.

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.

MoH coordinated the preparation of this report. Involved institutions: MEPRD, Health Inspectorate, Centre of Disease Prevention and Control.

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.

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: one page (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.

No specific target under the Protocol is set. Drinking water quality standarts and requirements to drinking water quality management and surveillance are set under the national regulatory framework implementing Drinking Water Directive 98/83/EC. According to the provisions of national regulations drinking water has to comply with the mandatory harmlessness and quality requirements. The main target is to achieve the quality of drinking water for all inhabitants to be in compliance with Republic of Latvia Cabinet Regulation No. 671 "Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control Thereof" (14.11.2017.) and EU requirements.

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).

Revision of national regulations to transpose the Directive (EU) 2020/2184. Health Inspectorate performs drinking water quality audit monitoring, reports about drinking water quality under EU Drinking Water Directive and controls public drinking water supply systems from the water extract points to the consumer. Food and Veterinary Service is responsible for drinking water used in food establishments. Latvian Environment, Geology and Meteorology Centre performs the national groundwater monitoring.

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

Progress has been achieved with regard to improvement of drinking water quality – the chemical quality has enhanced from 72.6 % of auditmonitoring water samples that fail to meet the standard for chemical water quality in 2005 to 44.2 % in 2009, 31.7 % in 2012, 14.0 % in 2015, 19.5% in 2016, 16.3% in 2017, 17.7% in 2018, 19.7% in 2019, 11.9% in 2020 and 12.8% in 2021.

Regarding the general microbiological parameters, no clear changes in dynamic of water quality are noticed but the number of non-compliant samples is small and fluctuates mainly in the range of 3-7 % being much smaller with respect to E.coli and Enterococci (from 1.8 % in 2005 to 0.5-1.8 % in 2012 and 0-2.4 % in 2015, 2.0% in 2016 and in 2017, 5.8% in 2018, 3.3% in 2019, 0.2% in 2020 and 0.6% in 2021).

The proportion of inhabitants receiving drinking water with excellent quality has increased from ~63 % in 2005 to ~75 % in 2009; ~79 % in 2012; ~81-87 % in 2015-2019; 89% in 2020, 90% in 2021. It should be stressed that chemical quality outlined here concerns so called indicator parameters according to directive 98/83/EC only as no toxic chemicals are detected in drinking water.

The most significant challenges in drinking water quality are lack of funding for new investments of drinking water supply systems and capacity building activities, lack of sufficient financing for small scale water supplies to renew pipeline networks and ensure proper water treatment. Financial capacity of local authorities and citizens is not always

sufficient to invest more in centralised water supply and sewage. There are also challenges in relation to Legionella spp. risks in water supply systems of residential buildings, namely the maintenance of hot water temperature and related issues with maintenance of water pipelines (old infrastructure).

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Increase in drinking water availability and quality is fundamental to reach Sustainable Development Goal 6 which requires ensuring equal access to safe and affordable water for all.

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

Requirements for drinking water are set in specific EU and national regulations.

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.

There are no specific targets defined regarding reduction of the scale of outbreaks and incidence of infectious diseases potentially related to water in the country.

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).

Epidemiological Safety Law (https://likumi.lv/ta/en/en/id/52951-epidemiological-safetylaw) and other related legislative acts define the measures that has to be performed in order to detect, investigate and response to any outbreak of infection diseases including waterborne infections in the country.

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

Not relevant.

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

Sustainable development goal 6 requires ensuring access to water and sanitation for all. SDG Goal 3 requires ensuring healthy lives and promote well-being for all at all ages. Availability of safe drinking water ensures more healthy lives and promote well-being.

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

There were no significant outbreaks and incidence of infectious diseases related to water is low for many years. Routine infectious diseases surveillance and control functions are implemented in the country according to the Epidemiological Safety Law and other regulatory acts (Procedures of Registration of Infectious Diseases (Republic of Latvia Cabinet Regulation No.7, adopted 5 January 1999)).

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.

Latvian Environmental Policy Strategy 2014-2020 sets relevant targets, which must be achieved by 2023.

Target indicators and deadlines:

1) The percentage (%) of population in agglomerations¹ provided with access to drinking water supply that corresponds to the requirements of the legislation - 95.4% in 2023.

2) The growth of number of population served by improved drinking water supply – additional 77 600 inhabitants in 2023.

The new Latvian Environmental Policy Strategy 2021-2027 sets further national targests which must be achieved by 2027. Target indicators and deadlines:

- 1) The percentage (%) of population² receiving drinking water of appropriate quality ->87 % in 2027;
- 2) Institutions and businesses companies providing free access to drinking water for citizens in public spaces 200 companies /institutions in 2027;
- 3) The percentage of exceedances of drinking water chemical quality standards 19.7% in 2027;
- 4) The persentage of exceedances of drinking water microbiological quality standards <4% in 2027.
- 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).

According to the Latvian Law on Local Governments autonomous functions of the municipalities include, inter alia, provision of water supply and sanitation services to their inhabitants.

In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities. Since the end of the 1990s, more than 848 million euros (71 % of total environmental investment in Latvia) were invested in the development of water services in urban areas. These investments mainly supported construction and reconstruction of wastewater treatment plants and sewerage networks, drinking water preparation stations and water supply systems.

Relevant targets, priorities, activities and financing plans to ensure the EU funding were included in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014). At the moment of this report, targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan 2021-2027 and the European Union Cohesion Policy programme (2021-2027) for Latvia.

To set priorities for further improvements of drinking water preparation and supply infrastructure, Water supply investment plan for $2021 - 2027^3$ was developed and approved by the MEPRD in 2020.

In order to facilitate development and implementation of water services infrastructure projects, information on legislative requirements and best practices was aggregated in guidance documents. Also workshops and informative seminars were organized to help local authorities and companies of water services to gain investments and to find the most appropriate solution for infrastructure development.

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

In 2012, 82% of the population in Latvian agglomerations (p.e. above 2000) was provided with an access to drinking water supply that corresponds to the requirements of the legislation. In 2019, 87% of the population in agglomerations was provided with drinking water that corresponds to the requirements of the legislation. Although the EU funds for 2014-2020 period did not support investments in drinking water infrastructure,

¹ Agglomerations are the largest settlements with a population of more than 2000 inhabitants. The amount of pollution expressed in population equivalents may be calculated on the basis of the number of inhabitants and enterprises for which a connection is planned, and depending on their water consumption and values of waste water biochemical oxygen demand (BOD5). One unit of the population equivalent is the amount of pollution of organic substances which conforms to 60 g O_2 of biochemical oxygen demand per day

² This target refers to the total Latvian population.

³ https://www.varam.gov.lv/lv/udensapgades-investiciju-plans-2021-2027-gadam

municipalities allocated their own financial resources to extend or reconstruct water supply networks.

According to the assessment included in the Water supply investment plan for 2021-2027, access to centralised drinking water supply network will be provided for 95,77 % of popullation in agglomerations (p.e. above 2000) in 2023.

At the same time, those inhabitants, which do not use centralized water supply, commonly have an individual artesian well and a household connection to it or individual dug well in their own land property.

Additional work and resources will be needed in the following years to ensure full achievement of the targets. The main challenges are:

• Funding/resources - financial capacity of municipalities and citizens is not always sufficient to invest more in water supply and sewage collection and treatment;

 Natural content of groundwater - it is complicated to comply with the standards for specific parameters, naturally occurring in groundwater: iron, manganese, sulphate, ammonium;

• Remedial measures - they are necessary to decrease concentrations of the naturally occurring substances (like iron), but in some cases they are not implemented or slowly taken;

- Ageing infrastructure;
- Insufficient data on the status of very small water supply systems;

 Governance and organisation of water supply services – upgrading within the sector may be challenging due to rather large number of small providers of water supply services.

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s. Targets set in the main enviropmental policy papers are in line with the relevant Sustainable Development Goals.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of access to drinking water supply services. According to the Strategy, the percentage of the population living in urban areas (p.e. >2000) and receiving drinking water that complies with the requirements of the legislation should be 95.4 % in 2023. These targets are more focused on the largest settlements (cities and towns, taking into account a very low population density in Latvia, as well as the cost-effectiveness assessment of possible investments to develop water supply systems in small settlements.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution and unnecessary consumption of waters, as well as promoting a free access to drinking water in public spaces. The Strategy sets targets for improvement of drinking water quality and access to drinking water supply services also. According to the Strategy the percentage (%) of the total population receiving drinking water of appropriate quality will be above 87 % in 2027. The target for providing a free access to drinking water for citizens in public spaces is to ensure that at least 200 municipalities/ institutions/companies provide such service in 2027; the target regarding chemical and microbiological quality of drinking water is to reduce relevant exceedancies: the percentage (%) of exceedances of drinking water microbiological quality standards should be less 4 % in 2027.

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

Not relevant

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.

Latvian Environmental Policy Strategy 2014-2020 sets relevant targets, which must be achieved by 2023.

Target indicators and deadlines:

1) The percentage (%) of population in agglomerations provided with access to centralized wastewater collection and treatment services that correspond to the requirements of the legislation - 95,9 % in 2023.

2) The growth of number of population served by centralized wastewater collection and treatment services – additional 116 400 inhabitants in 2023.

The Latvian Environmental Policy Strategy 2021-2027 sets new relevant targets, which must be achieved by 2029.

Target indicators and deadlines:

- 1) The additional or improved capacity of waste water treatment 23 400 p.e. (in addition to the existing capacity) in 2029;
- 2) The number of inhabitants, which use centralized waste water collection and treatment (at least secondary treatment) 1 327 828 inhabitants in 2029;
- 3) The number of inhabitants provided with waste water treatment of improved quality and efficiency 713 570 inhabitants in 2029.
- 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).

According to the Latvian Law on Local Governments autonomous functions of the municipalities include, inter alia, provision of water supply and sanitation services to their inhabitants. Besides, according to the national legislation, the municipalities are responsible for installation of the centralized sewer system, which is mandatory in all the agglomerations of more than 2000 p.e. In populated areas where the p.e. is less than 2000, the relevant municipality may decide whether or not to establish a centralized collecting system. It is legislation state that water supply and sanitation solutions should be provided during building or renovation process and, if possible, centralized water supply and waste water collection must be used. If collecting systems are not in place, appropriate individual systems such as septic tanks or individual treatment plants must be used.

In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s. Since the end of the 1990s, more than 848 million euros (~71 % of total environmental investment in Latvia) were invested in the development of water services in urban areas. These investments mainly supported construction and reconstruction of wastewater treatment plants and sewerage networks, drinking water preparation stations and water supply systems.

Relevant targets, priorities, activities and financing plans to ensure the EU funding for the period 2014-2020 were included in the in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014).

At the moment of this report, targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan 2021-2027 and the European Union Cohesion Policy programme (2021-2027) for Latvia.

To set priorities for further improvements of waste water collection and treatment infrastructure, Waste water management investment plan for $2021 - 2027^4$ was developed and approved by the MEPRD in 2020.

In order to facilitate development and implementation of water services infrastructure projects information on legislative requirements and best practices was aggregated in guidance documents. Also workshops and informative seminars were organized to help local authorities and companies of water services to gain investments and to find the most appropriate solution for infrastructure development. For projects funded by the EU in 2014

⁴ https://www.varam.gov.lv/lv/notekudenu-apsaimniekosanas-investiciju-plans-2021-2027-gadam

- 2020, water-management companies qualifying for this funding developed so-called "connection plans". Those plans included the specific activities, e.g. - information to citizens about the opportunities to connect to centralized networks, explaining why this should be done, binding rules for decentralised systems owners, that could encourage the owners to rethink and to connect to the centralized system for water supply and sewage collection, possibilities to get co-financing (in ~ 1/3 all municipalities).

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

According to the national statistics Latvia's population is shrinking, therefore the number of agglomerations in Latvia with p.e. above 2000 has decreased from 89 agglomerations in 2004 to 74 agglomerations in the EU funding period 2014-2020. Still, the progress is visible. In 2012, 79% of the population in Latvian agglomerations had an access to centralized sewerage networks. In 2016 centralized sewerage network was available to 94,4 % of the population in larger agglomerations (p.e. \geq 2000) and 84,1 % of the population in smaller agglomerations (p.e. < 2000).

According to the assessment, in the end of 2020 1.3 million inhabitants in Latvia already use centralized waste water collection services that corresponds to 88.8 % of population in agglomeratons with p.e. above 2000. It is expected that after implementation of all projects started during the EU funding period 2014-2020 the access to centralized sewage networks will be provided for 95.8 % of the population in agglomerations (p.e. above 2000), although there will be differences between agglomerations regarding access to that service. Real connection rates to the centralized networks are typically lower than access to the services, that is why also the new national Environmental Policy Strategy 2021-2027 establishes targets for further increase in number of population, which uses centralized water services.

Those inhabitants who don't have access to centralized water supply and sewerage services or are provided with only one of the above-mentioned services – centralized water supply or centralized sanitation, use individual solutions. Additional work and resources will be needed in the following years to ensure full achievement of the target. The main challenges are:

- Funding/resources financial capacity of municipalities and citizens is not always sufficient to invest more in sewage collection and treatment;
- Ageing infrastructure;
- Governance and organisation of water supply services upgrading within the sector may be challenging due to rather large number of small providers of water supply services.
- Emerging pollutants;
- Further improvement of the management of individual (decentralized) waste water collection and treatment installations;
- 4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s. Targets set in the main enviropmental policy papers are in line with the relevant Sustainable Development Goals.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of sanitation services. According to the Strategy, the percentage of the population living in agglomerations with p.e. >2000 and receiving waste water management (i.e. sanitation) should be 95.9 % in 2023.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing water pollution. The Strategy sets targets for the improvement of sanitation services. According to the Strategy additional or improved capacity of waste water treatment, expressed in p.e., should be 23 400 in 2029; the number of inhabitants which use centralized waste water collection and collected waste water is treated using at least secondary treatment technology should be 1 327 828

inhabitants in 2029; the number of inhabitants provided with waste water treatment of improved quality and efficiency of should be 713 570 inhabitants in 2029.

This targets are more focused on the largest settlements(cities and towns) taking into account a very low population density in whole Latvia as well as the cost-effectiveness evaluation of possible investments to develop centralized sewerage services in small settlements.

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

Not relevant.

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.

Joining the European Union Latvia made a commitment to fulfil the requirements of the EU legislation, inter alia, the Council Directive 98/83/EC on the quality of water intended for human consumption. At that time water supply infrastructure in Latvia was outdated and could not ensure compliance with the requirements of the Directive 98/83/EC. Since enormous financial investments were needed for the reconstruction of the existing infrastructure and for the construction of a new one, during the EU accession negotiations a transitional period was agreed for implementation of the Directive 98/83/EC, namely that by 2008 the requirements of the Directive will be met for municipalities above 100,000 inhabitants; by 2011 for municipalities with a population between 10,000 and 100,000 inhabitants, and by 2015 for municipalities with population between 1,000 and 10,000 inhabitants and smaller settlements. At the moment of this report, the transitional period has ended. The Environmental Policy Strategy 2014-2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of access to drinking water supply services. According to the Strategy, the percentage of the population living in urban areas (p.e. > 2000) and receiving drinking water that complies with the requirements of the legislation should be 94 % in 2016 and 95.4 % in 2023. These targets are focused on the biggest municipalities (cities and towns) taking into account a very low population density in whole Latvia as well as the cost-effectiveness assessment of possible investments to develop water supply systems in small settlements. Levels of performance of collective systems can also be characterized by water losses in them. The development of water supply systems, including reconstruction of the old infrastructure promote water saving and sustainable use. According to the national statistics, water losses in general have gradually decreased: in all sectors from 16.8% of used water in 2004 to 6.1 % of used water in 2020. The reduction of water losses in the centralized supply systems is even greater - from 37,1 % of supplied water in 2004 to 12.7 % of supplied water in 2020.

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).

A number of legal actions have been taken. Law on Local Governments (1994) states that one of the autonomous functions of the municipalities is to ensure communal services to local residents: water supply, sanitation, heat supply, management of municipal waste and collection of wastewaters, their sewage and treatment.

Cabinet Regulations No 736 regarding a permit for use of water resources (2003) state that a permit shall be obtained if water abstraction from surface waters or groundwater exceeds 10 m^3 /day or if more than 50 persons are served. Applying for a permit, a number of documents shall be provided, including information whether the technical inventory file or the technical passport of the external water supply networks and structures or the scheme of the water supply system is at the disposal of the applicant. Construction normative LBN 222-15 "Buildings for water supply" (2015) sets the requirements for construction of new water supply systems as well as for reconstruction of the old ones. According to this normative, all water supply systems projects must be coordinated/concerted with the sewerage systems projects. Balance assessment of anticipated water usage and amount of wastewaters to be produced shall be carried out. Besides, the normative says that it is necessary to carry out washing, cleaning and disinfection of water pipes and related facilities before starting exploitation of the water supply system or after its repair works. Also regular prophylactic disinfection of water, supply system is required in order to improve the microbiological quality of drinking water.

Construction normative LBN 221-15"Internal water and sewage water network of the buildings" (2015) sets requirements for designing of new and reconstruction of old water supply networks and domestic sewer networks to ensure proper operation and good performance. Among the other things, there are requirements for the allowed pipe and junction materials to ensure quality of the supplied water.

Extension and restoration of water supply systems is largely funded by the EU funds. Relevant targets, priorities, activities and financing plans to ensure the EU funding for the water supply systems were included in the National Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund as well as in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014).

Extension and restoration of water supply systems is largely funded by the EU funds. Relevant targets, priorities, activities and financing plans to ensure the EU funding for the water supply systems were included in the National Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund as well as in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014). The Water Supply Investment Plan for 2021-2027 developed and approved in 2020 provide information on technically justified investments needed to improve and renovate the existing water supply infrastructure in a whole country as well as for each agglomeration (p.e.>2000). However, EU funds for improvement of water supply networks will not be available in the next planning period, therefore municipalities should use their resources to continue to improve drinking water supply services.

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

By the end of 2015, the practical implementation of major environmental investment programmes in Latvia within the framework of the 2007-2013 programming period of EU funds, completed. In general 535 infrastructure projects related to water services (water supply and sanitation) were successfully implemented: 117 infrastructure projects in larger agglomerations with p.e. >2000 as well as 418 infrastructure projects in smaller agglomerations with p.e.<2000 were completed. During the period 145 new drinking water preparation stations were built or reconstructed, water supply networks were extended by building new pipelines, several hundred kilometres of existing old ones were reconstructed. As a result of these activities, about 1,57 milj inhabitants were provided with an access to the centralized water supply networks. In 2016 74,9 % of population in Latvia had an access to centralized drinking water supply that corresponds to the requirements of the legislation - 95,6% of the population in larger agglomerations (where p.e. is above 2000) and 82% of the population in smaller agglomerations (p.e. is below 2000) had an access to centralized water supply network. Real connection rates were lower: ~ 68,8% of inhabitants in Latvia use drinking water supply corresponding to the quality requirements (87,7% in larger agglomerations and 75% in smaller agglomerations).

In 2019 87 % of population was provided with drinking water that corresponds to the requirements of the legislation. According to the estimate included in the Water Supply Investment Plan for 2021-2027, access to centralised drinking water supply network will be provided for 95,77 % inhabitants in agglomerations (p.e. above 2000) in 2023.

All problems related to any exceedance of chemical water quality parameters are associated with naturally occurring chemical elements (Fe, Mn, $SO_4^{2^\circ}$, Cl-), which are present in Latvian groundwater in rather high concentrations. For this reason the National Environmental Policy Strategy 2014-2020 establishes targets for further increase in number of population, which uses centralized water supply services. The target established

in the Environmental Policy Strategy 2021-2027 envisaged to decrease exceedances of standards established for chemical as well as microbiological parametres in drinking water supplied. The strategy also aims to increase the number of population using drinking water of appropriate quality. Additional work and resources will be needed in the following years to ensure full achievement of the target set up in the Environmental Policy Strategy 2014-2020 as well as in the Environmental Policy Strategy 2021-2027.

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of access to drinking water supply services. According to the Strategy, the percentage of the population living in urban areas (p.e. >2000) and receiving drinking water that complies with the requirements of the legislation should be 94% in 2016 and 95.4% in 2023. These targets are more focused on the biggest municipalities (cities and towns) taking into account a very low population density in whole Latvia as well as the cost-effectiveness assessment of possible investments to develop water supply systems in small settlements.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing unnecessary consumption and pollution of waters as well as to promote a free access to drinking water in public spaces. The Strategy sets targets for improvement of drinking water quality and access to drinking water supply services also. According to the Strategy the percentage (%) of population receiving drinking water of appropriate quality should be above 87 % in 2027. The target for providing a free access to drinking water for citizens in public spaces is to ensure that at least 200 municipalities/ institutions/companies provide such service in 2027; the target regarding chemical and microbiological quality of drinking water is to reduce relevant exceedancies of standards set up for those parameters: the percentage (%) of exceedances of chemical quality standards of drinking water should be less 19.7 % in 2027 and the percentage (%) of exceedances of microbiological quality standards of drinking water should be less 4 % in 2027.

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

Not relevant.

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.

Joining the European Union Latvia made a commitment to fulfil the requirements of the EU legislation, inter alia, the Council Directive 91/271/EEC of 21 May 1991concerning urban waste water treatment. At that time water supply and sanitation infrastructure in Latvia was outdated and was not in line with the requirements of the Directive 91/271/EEC. Since large financial investments were needed for the reconstruction of the existing infrastructure and for the construction of a new one, during the EU accession negotiations a transitional period was agreed for implementation of the Directive 91/271/EEC, namely that as from 31 December 2015 collecting systems and treatment will be provided in all agglomerations above 2000 p.e., i.e. that inhabitants of these agglomerations will be able to use centralized sanitation. At the moment of this report, the transitional period has ended.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of sanitation services. According to the Strategy, the percentage of the population living in

agglomerations with p.e.>2000 and receiving waste water management (i.e. sanitation) should be 95.9% in 2023. This target is more focused on the biggest municipalities (cities and towns) taking into account a very low population density in whole Latvia as well as the cost-effectiveness evaluation of possible investments to develop centralized sewerage services in small settlements.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing water pollution. According to the Strategy targets regarding improvement of sanitation services are the following: additional or improved capacity of waste water treatment, expressed in p.e., should be 23 400 in 2029; the number of inhabitants which use centralized waste water collection and collected waste water is treated using at least secondary treatment technology should be 1 327 828 inhabitants in 2029; the number of inhabitants provided with waste water treatment of improved quality and efficiency - 713 570 inhabitants in 2029.

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).

A number of legal actions have been taken. Law on Local Governments (1994) states that one of the autonomous functions of the municipalities is to ensure communal services to local residents: water supply, sanitation, heat supply, management of municipal waste and collection of wastewaters, their canalization and treatment.

Cabinet Regulations No 1082 "Procedure by Which Polluting Activities of Category A, B and C Shall Be Declared and Permits for the Performance of Category A and B Polluting Activities Shall Be Issued" (2010) requires a category B permit for all discharges of wastewater if daily discharge exceeds 20 m³. For discharges from 5 to 20 m³ of wastewater per day, a category C confirmation is needed. In the permit it is required to provide information about the sewer system, including its outline, the age of the pipes, date and results of the last check-up, information about the sewer maintenance. Besides, it is required to inform about the balance of water use.

Construction normative LBN 223-15 "Sewer network buildings" (2015) sets requirements for construction of new sewer systems, as well as for reconstruction of the old ones. Among the other things, this normative state that pipes, their reinforcement, accessories and equipment as well as materials used shall comply with the requirements of this normative, other applicable standards and technical provisions. There are many more requirements aimed at ensuring proper operation and performance of the sewer system.

Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) state that the most advanced and cost-efficient technical solutions shall be used for designing, constructing and maintaining of centralized collecting system, taking into account the amount and content of waste water, the necessity to eliminate leakages and the necessity to restrict surface water pollution, which is caused due to overload of the collecting system or in case of accidents during rainfall. Treatment plants shall be designed, built, rebuilt and exploited taking into account local conditions and wastewater treatment standards.

Cabinet Regulation No. 384 "Regulations Regarding the Management and Registration of Decentralized Sewerage Systems" (2017) sets requirements for wastewater management in the wastewater sewerage systems owned by an owner of an immovable property which are not connected to the centralized collecting system as well as the procedures for the registration of such systems. This Regulation shall apply to the decentralized sewerage systems situated in the territories of villages and towns. An owner of the decentralized sewerage system in his property in accordance with the requirements in the field of environmental protection. To prevent any hazard caused by the relevant decentralized sewerage system to human health and the environment, the owners of such systems shall ensure regular transfer of the collected wastewater and sediment to the waste collector. The frequency of wastewater and sediment transfer shall be selected, taking into account water consumption at the relevant immovable property, capacity of the decentralized sewerage system installation, and also the minimum disposal frequency specified in the binding regulations of the local government regarding the provision of decentralized sewerage services.

Construction normative LBN 221-15 "Internal water and sewage water network of the buildings" (2015) sets requirements for designing of new and reconstruction of old water supply networks and domestic sewer networks to ensure proper operation and good performance.

Extension and restoration of sewer systems is largely funded by the EU funds (Cohesion Fund and ERDF). Relevant targets, priorities, activities and financing plans to ensure EU funding for the sewerage systems were included in the National Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund as well as in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014). At the moment of this report, revised targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan 2021-2027 and the European Union Cohesion Policy programme (2021-2027) for Latvia.

In order to enhance quality of the applications for funding, information on the legislative requirements and best practices was aggregated in the guidance documents. Also workshops and informative seminars were organised to help local authorities and companies of water services to gain investments and to find the most appropriate solution for development of infrastructure. For the next planning period (2021 -2027) similar activities are foreseen for relevant priorities.

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

By the end of 2015, the practical implementation of major environmental investment programmes in Latvia within the framework of the 2007-2013 programming period of EU funds, was completed. In general 535 infrastructure projects related to water services (water supply and sanitation) were successfully implemented: 117 infrastructure projects in larger agglomerations with p.e. > 2000 as well as 418 infrastructure projects in smaller agglomerations with p.e. < 2000 were completed. During this period 178 new wastewater treatment plants were built or reconstructed, wastewater collection networks were extended by building new pipelines, part of existing old ones were reconstructed. As a result of these activities, about 1,53 milj inhabitants were provided with an access to the centralized sewer systems. In 2016 ~73 % of population in Latvia had an access to centralized sewerage system services that corresponds to the requirements of the legislation. Therefore the target of the previous Environmental Policy Strategy 2009-2015 - to improve the access to centralized sewerage network, was reached. According to this Strategy, the percentage of the population for which centralized wastewater management services, complying with the requirements of the legislation, is available should be 62~%in 2015.

In 2016 94.4% of the population in larger agglomerations (where p.e. is above 2000) and 75% of the population in smaller agglomerations (p.e. is below 2000) had an access to centralized wastewater network. Real connection rates are lower: ~ 84,1 % in larger agglomerations and ~ 70.0 % in smaller agglomerations. For this reason the national Environmental Policy Strategy 2014-2020 establishes targets for further increase in number of population, which uses centralized water services

According to the assessment, in the end of December 2020 1.3 million inhabitants in Latvia already use centralized waste water collection services what corresponds to 88.8 % of population in agglomeratons with p.e. above 2000. It is expected that after implementation of all projects started during the EU funding period 2014-2020 the access to centralized sewage networks will be provided for 95.8 % of the population in agglomerations with p.e. above 2000, although there will be differences between agglomerations regarding access to that service.

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

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban waste water collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of sanitation services. According to the Strategy, the percentage of the population living in

agglomerations with p.e. > 2000 and receiving waste water management (i.e. sanitation) should be 95.9 % in 2023. This target is more focused on the biggest municipalities (cities and towns) taking into account a very low population density in whole Latvia as well as the cost-effectiveness evaluation of possible investments to develop centralized sewerage services in small settlements.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources. According to the Strategy targets regarding sanitation services focuses on improvement of wastewater treatment quality and efficiency. The targets established are the following: additional or improved capacity of waste water treatment, expressed in p.e., should be 23 400 in 2029; the number of inhabitants which use centralized waste water collection and collected waste water is treated using at least secondary treatment technology should be 1 327 828 inhabitants in 2029; the number of inhabitant quality and efficiency should be 713 570 inhabitants in 2029

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

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.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The following action is envisaged in the water chapter of the Strategy: to increase the availability and quality of centralized sewer and drinking water services by expanding sewer networks and reconstructing water supply networks that do not meet the quality requirements for reducing the pollution discharged into the environments and the loss of water from supply networks.

The new Environmental Policy Strategy 2021 -2027also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. The Strategy envisages several actions for that: to continue to increase the availability and the quality of drinking water supplied by centralized network and improve the capacity and efficiency of waste water treatment by expanding and reconstructing sewer and water supply networks and improving technologies used for wastewater treatment. This actions will reduces pollution discharged into the environment and the losses of water from supply networks

The Construction normative LBN 222-15 "Buildings for water supply" (2015) sets obligations for construction of new water supply systems as well as for reconstruction of the old ones. The Construction normative is binding from the date of its entry into force. Therefore there is no need to set other objectives, because these requirements are considered as objectives for good management of water supply systems. According to this normative, all water supply systems projects must be coordinated/ concerted with the sewerage systems projects. The quality of drinking water must comply with the requirements specified in regulatory enactments in the fields of drinking water, surface and groundwater quality, and the hardness of drinking water shall not exceed 7 milligram equivalents per litre (mg-equiv/l). When preparing, transporting and storing drinking water, reagents, pipe-internal anti-corrosion coatings, as well as filter materials, for which conformity has been assessed in accordance with the procedures specified in regulatory enactments, shall be used. The quality of water intended for manufacturing purposes must meet the technological requirements and ensure adequate hygienic conditions for service personnel. Watering water shall comply with hygienic and agro-technical requirements. Besides, the normative says that it is necessary to carry out washing, cleaning and disinfection of water pipes and related facilities before starting exploitation of the water supply system or after its repair works. Also regular prophylactic disinfection of water supply system is required in order to improve the microbiological quality of drinking water.

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).

Cabinet Regulations No 736 regarding a permit for use of water resources (2003) state that a permit shall be obtained if water abstraction from surface waters or groundwater exceeds 10 m^3 / day or if more than 50 persons are served. The permit includes requirements for the maintenance of protection zones around the water extraction sites, monitoring requirements and determines permitted amount of water abstraction. The Regulations also require metering of used water. On the basis of the metering, a natural resources tax shall be paid for extraction of water resources, as required by the Natural Resources Tax Law (2005). The tax rate depends on the quality of water extracted, specific properties of groundwater (degree of mineralization etc.) and volume of extracted water. The tax for extraction or use of water resources above the volume specified in the permit is calculated applying the tenfold tax rate.

Cabinet Regulation No. 671 "Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control Thereof" determine harmlessness and quality requirements (standards) for drinking water and procedures for its monitoring and control. The Regulation No.671 state that drinking water may not contain micro-organisms, parasites and substances that cause a threat to the consumers' health. Regular laboratory examinations of supplied drinking water have to be implemented: a water supplier shall carry out a regular monitoring, but the audit monitoring shall be performed by the Health Inspectorate.

In food production enterprises both types of monitoring shall be organized by the owner or the operator of the business. Drinking water suppliers and food producers shall develop a monitoring programme each year and co-ordinate it with the Health Inspectorate. If the water supplier has conducted the risk assessment of drinking water (at present it is a voluntary measure), the quality indicators of drinking water or the frequency of sampling could be change taking into account the results of the risk assessment - the Inspectorate, on the basis of the results of risk assessment, may reduce or extend the list of indicators and the sampling frequency.

The Institute of Food Safety, Animal Health and Environment "BIOR" (hereinafter - the Institute "BIOR") is the competent institution in the risk assessment of drinking water in drinking water supply systems.

The Regulation determines places, where samples shall be taken and sampling procedures. The drinking water supplier is responsible for the provision of appropriate and precise information about supplied drinking water to the users. The Health Inspectorate also shall prepare various informative materials to the water users. The Regulation states that repairs and changes of water supply facilities may not reduce the quality of drinking water or cause a threat to the health of consumers, that water supply facilities (reservoirs, water towers, pressure boilers, settlers etc.) shall be washed, cleaned and disinfected prior to commencement of service and after repairs of accidents, as well as preventatively at least twice per year. The Regulation also determines who is responsible for carrying-out of the corrective measures in the case of non-compliance. If the monitoring determines drinking water contamination, the performer of the monitoring shall immediately notify relevant authorities, which shall act without delay.

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

Local authorities actively implement projects aimed at improvement and development of water supply infrastructure. Since the end of the 1990s, more than 848 million euros (~71 % of total environmental investment in Latvia) were invested in the development of water services (including both water supply and sanitation) in urban areas. However, additional investments are needed in the next years to ensure achievement of all targets.

A lot of households are equipped with water meters and pay water bills according to them. Water metering and water prices, which include the abovementioned tax on water extraction, as well as purification and supply costs, stimulate users to economize water resources.

Reconstruction of water supply systems decreases and prevents water leakage (losses) in the systems and improves quality of supplied water. According to the national statistics, water losses in general have gradually decreased: in all sectors from 16.8% of used water in 2004 to 6.1% of used water in 2020. The reduction of water losses in the centralized supply system is even greater - from 37,1% of used supplied water in 2004 to 12.7% of supplied water in 2017.

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of access to drinking water supply services as well as for the decrease of water losses in the supply system from 6.5 % in 2013 to 5.5% in 2020.

According the new Environmental Policy Strategy 2021 -2027 the decrease of water losses in the supply systems should be from 6.0 % in 2019 to less 6.0 % in 2027.

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

Not relevant

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.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The following action is envisaged in the water chapter of the Strategy: to continue to increase the availability and quality of centralized sewer and drinking water services by expanding sewer networks and reconstructing water supply networks that do not meet the quality requirements for reducing the pollution discharged into the environments and the loss of water from supply networks.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. The Strategy envisages several actions for that: to continue to increase the availability and the quality of drinking water supplied by centralized networks and improve the capacity and efficiency of waste water treatment by expanding and reconstructing sewer and water supply networks as well as improving technologies used for wastewater treatment. These actions will reduces pollution discharged into the environment and the loss of water from supply networks.

Construction normative LBN 223-15 "Sewer buildings" (2015) sets requirements for construction of new sewer systems, as well as for reconstruction of the old ones. In the design of sewer infrastructure, including external sewer engineering networks (sewer system), the requirements of the standards, the list of which has been published by the national standardization body on the website of www.lvs.lv shall be applied. The Construction normative is binding from the date of entry into force and therefore any other objectives are not set, because these requirements are considered as an objective for good practice regarding sewer systems. Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) lay down requirements for designing, construction and maintaining of centralised collecting system: the best technical solutions shall be used, taking into account the amount and content of urban wastewater to be collected, the necessity to eliminate leakage and the necessity to restrict surface water pollution, which is caused due to overload of the collecting system. The permissible level of dilution and the frequency of overflow shall be determined in accordance with the construction normatives of Latvia.

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).

Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) lay down numerous requirements for wastewater collection, treatment, discharge and monitoring. The following requirements are the most important for the management of sanitation services. The operator, who ensures collection and treatment of wastewater, shall use the best available technical methods or environmental abatement technologies. If the centralised collecting system is set up in a settlement, the municipality shall ensure regular collection and treatment of the waste water collected in decentralised (individual) collecting systems. If industrial waste water is discharged into a centralised collecting system or to municipal treatment plant, the operator of industrial installation shall conclude an agreement with the owner or possessor of the collecting system or treatment plant.

As already stated, Cabinet Regulations No 1082 "Procedure by Which Polluting Activities of Category A, B and C Shall Be Declared and Permits for the Performance of Category A and B Polluting Activities Shall Be Issued (2010) require a category B permit for all discharges of wastewater if daily discharge exceeds 20 m3. For discharges from 5 to 20 m3 of wastewater per day, a category C confirmation is needed. The environmental authorities include in the permits, inter alia, emission limits, requirements for monitoring to be performed by the wastewater discharger, including a requirement to obey the procedures and reference methods of analysis specified in the legislation. If non-conformity of discharge with the permit conditions is detected, the discharger shall notify the environmental and sanitary authorities and carry out the necessary measures to ensure conformity and to prevent environmental pollution.

According to the Cabinet Regulations No 30 "Procedure for issuing of technical provisions for proposed activities" (2015), technical provisions shall be obtained from the regional environmental authority for the building of new or reconstruction of the existing waste water treatment plant having an average load of 5 m3 and more wastewater per day. The technical provisions include emission limits and other requirements to protect the environment during the construction.

In terms of domestic wastewater that is not collected in the centralized sewers, new legislation was introduced in 2017. Cabinet Regulations No. 384 "Regulations Regarding the Management and Registration of Decentralised Sewerage Systems" (2017) determines the responsibilities of the owners of so-called decentralized wastewater systems, municipalities and wastewater collectors. This Regulations shall apply to the decentralised sewerage systems situated in the territories of villages and towns. An owner of the decentralised sewerage system shall be responsible for the exploitation and technical maintenance of the system in his property in accordance with the requirements in the field of environmental protection. To prevent any hazard caused by the relevant decentralised sewerage system to human health and the environment, the owners of such systems shall ensure regular transfer of the collected wastewater and sediment to the waste collector. The frequency of wastewater and sediment transfer shall be selected, taking into account water consumption at the relevant immovable property, capacity of the decentralised sewerage system installation, and also the minimum disposal frequency specified in the binding regulations of the local government regarding the provision of decentralised sewerage services. The wastewater collector is also required annually submit data about the amounts of collected wastewater to the municipality. Besides, all decentralised wastewater systems shall be registered in the respective municipality and municipalities have a mandate to determine procedures for their supervision and control in their binding regulations.

According to the Natural Resources Tax Law (2005), this tax shall be also paid for emission of wastewater into the environment; its rate depends on the substances present in the wastewater. The tax for emitted pollution above the volume specified in the permit is calculated applying the tenfold tax rate.

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

Local authorities actively implement projects aimed at improvement of water supply and sewerage services. Since the end of the 1990s, more than 848 million euros (~71% of total environmental investment in Latvia) were invested in the development of water services (including both water supply and sanitation)in urban areas. However, additional investments are also needed in 2021-2027 period to ensure achievement of all targets.

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

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of sanitation services. According to the Strategy, the percentage of the population living in agglomerations with p.e. >2000 and receiving waste water management (i.e. sanitation) should be 95.9% in 2023.

The following actions are envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue the improvement of the out-of-date water management infrastructure for reducing the loss of water and wastewater from networks, to implement measures for the improvement of accounting of water supply and sanitation services, as well as to set requirements for provision and use of water management services (water supply and sanitation).

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. According to the Strategy targets regarding sanitation services focuses on improvement of wastewater treatment quality and efficiency. The targets established are the following: additional or improved capacity of waste water treatment, expressed as p.e., should be 23 400 in 2029; the number of inhabitants which use centralized waste water collection and collected waste water is treated using at least secondary treatment technology should be 1 327 828 inhabitants in 2029; the number of inhabitants provided with improved waste water treatment quality and efficiency should be 713 570 inhabitants in 2029.

The following actions are envisaged in the water chapter of the Strategy: to continue to implement measures for the improvement of the out-of-date water management infrastructure for reducing the loss of water and wastewater from networks, to implement measures for better management of rainwater in cities and towns to reduce the amount of rainwater entering sewage networks, to improve requirements for decentralised (individual) collecting systems as well as to ensure traceability of wastewater collected from those systems, to establish the list of waste water treatment plants for which improve treatment technologies are needed as a priority.

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

Not relevant

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.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The Strategy also sets targets for the improvement of sanitation services. One of the policy results envisaged in the Strategy is to ensure water quality that does not compromise human health.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. The Strategy includes the following target: the percentage of the discharged wastewater that corresponds to the treatment standards shall increase from 93.6 % (in 2019) to 95% (in 2027). According to the Strategy targets regarding sanitation services focuses on improvement of wastewater treatment quality and efficiency. Measures related to those targets will promote reduction of pollution discharged in receiving water bodies and better quality of water.

According to national law discharge of polluting substances into groundwater and 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 wastewater is discharged into a centralized collecting system or municipal wastewater treatment plant, the operator is obligated to pre-treat it. For mentioned reasons quantitative targets are not set, however legal framework and legislative amendments as well as the activities of the inspection authority shall aim at ensuring that the discharge of untreated waste water does not take place.

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).

Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) prohibit discharge of non-treated industrial waste water and urban waste water, as well as sewage sludge into surface waters, into the environment, and into the rain water collection system.

Latvian environmental enforcement and inspection authority – the State Environmental Service (SES) – inspects both urban wastewater treatment plants and enterprises that are holders of integrated permits for polluting activities and may discharge wastewater into the environment. Inspection plan is developed by SES every year and there are clear requirements on how often the holders of permits for polluting activities shall be inspected, taking into account their potential impact. The SES has a methodology to prioritize those wastewater treatment plants that shall be visited and inspected first of all. Among the other things, performance of the treatment plant, compliance with the treatment requirements and previous problems are taken into account, when the decision of the inspection frequency is taken. If any non-compliance is detected, the SES starts an administrative procedure and requires action to ensure compliance; it also has a rights to impose administrative penalties. Therefore the inspection work is targeted to pay more attention to potentially problematic wastewater dischargers and there is a mechanism in place to reduce the cases of discharges of untreated wastewater.

In terms of domestic wastewater that is not collected in the centralized sewers, new legislation was introduced in 2017 – Cabinet Regulations No. 384 "Regulations Regarding the Management and Registration of Decentralised Sewerage Systems". It determines the responsibilities of the owners of so-called decentralized wastewater systems, municipalities and wastewater collectors. Besides, the legislation establishes a mechanism for collection and treatment of wastewater that is not collected via centralised sewers. Only wastewater collector that has registered for provision of such services in the respective municipality may collect wastewater from decentralised systems. Binding regulations of municipalities determine minimum requirements for wastewater collectors; these requirements include an obligation to conclude an agreement with the wastewater treatment plant about delivery of collected wastewater. Besides, binding regulations of municipalities prohibit discharge of collected wastewater in the environment or inappropriate places. The wastewater collector is also required annually submit data about the amounts of collected wastewater to the municipality. Besides, all decentralised wastewater systems shall be registered in the respective municipality and municipalities have a mandate to determine procedures for their supervision and control in their binding regulations.

Extension and restoration of sewerage systems is largely funded by the EU funds (Cohesion Fund and ERDF). To ensure resources necessary for the achievement of the abovementioned targets, relevant targets, priorities, activities and financing plans to ensure EU funding were included in the National Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund. For the next planning period revised targets, priorities, activities and financing plans to ensure the EU funding were included in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014). At the moment of this report revised targets, priorities and financing plans to ensure the EU funding are included in the National Development Plan 2021-2027 and the European Union Cohesion Policy programme (2021-2027) for Latvia

According to the Natural Resources Tax Law (2005), this tax shall be also paid for emission of wastewater into the environment; its rate depends on the substances present in the wastewater. The tax for emitted pollution above the volume specified in the permit is calculated applying the tenfold tax rate.

Information on water quality is publicly available and annual reports are prepared. There are various ways how the public can inform enforcement authorities on present or potential pollution of the environment, thereby preventing violation of legislation.

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

The amount of insufficiently treated wastewater discharged to the environment gradually decreases owing to water infrastructure development projects. Since the end of the 1990s, the amount of discharged wastewater has decreased significantly. In 2019 93.6 % of discharged wastewater from centralized systems comply with the treatment standards laid down by legislation. (in 2000 this share was ~ 85 %.). During next years additional work is needed regarding domestic wastewater that is not collected in the centralized sewers to improve system for counting-up and control regarding their compliance with operational rules.

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

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

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

Not relevant

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.

The new Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. One of the policy results envisaged in the Strategy is to ensure water quality that does not compromise human health.

The new Environmental Policy Strategy 2021 -2027also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. According to the Strategy targets regarding sanitation services focuses on improvement of wastewater treatment quality and efficiency. Measures related to those targets will promote better quality of water.

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).

Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) state that the most advanced and cost-efficient technical solutions shall be used for designing, constructing and maintaining of centralised collecting system, taking into account, inter alia, the necessity to restrict surface water pollution, which is caused due to overload of the collecting system or in case of accidents during rainfall. The permissible level of dilution and the frequency of overflow shall be determined in accordance with the Latvian construction normative.

Construction normative LBN 223-15 "Sewer buildings" (2015) sets requirements for construction of new sewer systems, as well as for reconstruction of the old ones. Among the other things, it is required to take into account the volume of additional water that will enter into the sewer system during rain or snow melting. The normative provides formulas for calculation of this volume so that to choose a correct size of pipes. The normative also states that to regulate inflow of storm water, special ponds or tanks may be constructed and determines requirements for placement and construction of storm drains and their connection to sewers. There are also some requirements for construction of storm water outlets.

River basin management plans for the period 2016-2021 included programmes of measures for the achievement of good water status. Among the other measures, they envisage putting in order of the storm sewers in several cities and towns.

The new Environmental Policy Strategy 2021 - 2027 envisages measures to improve management of rainwater. Those measures are focused on improvement of rainwater management in cities and towns, promotion of the use of rain water for economic purposes, including providing support for pilot projects for the development of green infrastructure in appropriate areas as well.

The draft European Union Cohesion Policy programme (2021-2027) for Latvia, inter alia, envisages support for climate adaptation activities, which may also include projects aimed at improvement of rainwater management, especially by means of blue and green infrastructure. Such support will be available to municipalities, if relevant activities are envisaged in the climate adaptation strategies of municipalities.

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

The abovementioned requirements of the legislation ensure appropriate planning and designing of sewer systems and wastewater treatment plants and diminish discharges of storm water overflows. Besides, the EU funding is used for improvements of storm sewers in several Latvian cities and towns in the planning period from 2014 to 2020.

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

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

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

Not relevant.

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.

The Environmental Policy Strategy 2014 -2020 aims to ensure good water status and sustainable use of water resources. The following action is envisaged in the water chapter of the Strategy: to continue to increase the availability and quality of centralised sewer and drinking water services by expanding sewer networks and reconstructing water supply networks that do not meet the quality requirements for reducing the pollution discharged into the environments and the loss of water from supply networks.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing pollution. According to the Strategy targets regarding sanitation services focuses on improvement of wastewater treatment quality and efficiency. The following actions are envisaged in the water chapter of the Strategy: to continue to implement measures for the improvement of the out-of-date water management infrastructure for reducing the loss of water and wastewater from networks, to implement measures for better management of rainwater in cities and towns to reduce the amount of rainwater entering sewage networks, to establish the list of priority waste water treatment plants for which improved treatment technologies are needed.

According to national law discharge of polluting substances into groundwater and discharge of non-treated industrial wastewater and sewage sludge into surface waters or the environment is prohibited. Treatment standards for urban wastewater is laid down by law. If industrial wastewater is discharged into a centralized collecting system or municipal wastewater treatment plant, the operator is obligated to pre-treat it. All mentioned requirements are mandatory and should be complied with. Therefore quantitative targets

are not set, however legal framework and amendments in laws or regulations as well as the activities of the inspection authority shall aim at ensuring that the discharge of untreated waste water does not take place. According to the Natural Resources Tax Law (2005), the tax shall be paid for emission of wastewater into the environment. Its rate depends on the substances present in the wastewater. The tax for emitted pollution above the volume specified in the permit is calculated applying the tenfold tax rate.

Joining the European Union Latvia made a commitment to fulfil the requirements of the EU legislation, inter alia, the Council Directive 91/271/EEC of 21 May 1991concerning urban waste water treatment. At that time water supply and sanitation infrastructure in Latvia was outdated and was not in line with the requirements of the Directive 91/271/EEC. Since enormous financial investments were needed for the reconstruction of the existing infrastructure and for the construction of a new one, during the EU accession negotiations a transitional period was agreed for implementation of the Directive 91/271/EEC, namely that as from 31 December 2015 collecting systems and treatment that complies with the Directive requirements will be provided in all agglomerations above 2000 p.e. At the moment the transitional period has ended.

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).

Cabinet Regulations No 34 "Regulations regarding Discharge of Polluting Substances into Water" (2002) prohibit discharge of non-treated industrial waste water and urban waste water, as well as sewage sludge into surface waters, into the environment, and into the rain water collection system. The Regulations also lay down standards for wastewater treatment (for the parameters BOD5, COD, suspended solids, N and P).

According to the Natural Resources Tax Law (2005), this tax shall be also paid for emission of wastewater into the environment; its rate depends on the substances present in the wastewater. The tax for emitted pollution above the volume specified in the permit or for emissions without a relevant permit is calculated applying the tenfold tax rate.

Extension and restoration of sewerage systems is largely funded by the EU funds (Cohesion Fund and ERDF). To ensure resources necessary for the achievement of the abovementioned targets relevant targets, priorities, activities and financing plans to ensure EU funding were included in the National Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund. For the next period revised targets, priorities, activities and financing plans to ensure the EU funding were included in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014). At the moment of this report relevant targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan 2021-2027 and the European Union Cohesion Policy programme (2021-2027) for Latvia, which, inter alia, envisages support for improvement of wastewater treatment installations.

Investments in the water sector are enormous. Since the end of the 1990s, more than 848 million euros (71 % of total environmental investment in Latvia) were invested in the development of water services, mainly in wastewater collection & treatment and water preparation and supply infrastructure.

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

By the end of 2015, 117 infrastructure projects in larger agglomerations with p.e. >2000 as well as 418 infrastructure projects in smaller agglomerations with p.e. <2000 were completed. 178 new wastewater treatment plants were built or reconstructed, wastewater collection networks were extended by building new pipelines, part of existing old ones were reconstructed. The total amount of discharged wastewater has decreased about two times, comparing with the beginning of 1990tie. Since 2012 the total amount of counted up wastewater discharges slightly fluctuates as completed water services infrastructure projects increase the number of population connected to centralised sewerage system, therefore increasing the amount of wastewater discharged into the environment through municipal wastewater treatment plants. At the same time due to reconstructed and new wastewater treatment plants the total amount of polluting substances discharged by these treatment plants to the environment has decreased: in 2012 - 2020 period the total

discharge of nitrogen with wastewater has decreased by 52 %, the total discharge of phosphorous - by 61 % and the total discharge of BOD_5 - by 39 %.

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

Safe collection and treatment of waste water is important both for human health and environmental protection. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

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

Not relevant

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.

The Environmental Policy Strategy 2014 -2020 aims to ensure sustainable use and protection of soil. The following action - to develop the national planning document for the management of sewage sludge was envisaged in the soil&subterranean depths chapter of the Strategy. The document was not developed due lack of necessary funding.

The new Environmental Policy Strategy 2021 -2027 aims to increase the use of sewage sludge. Several measures are envisaged in the chapter "Efficient use of resources and implementation of circular economy" and one of the directions of action envisages the establishment of a sustainable sewage sludge management system.

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).

Several measures are envisaged in the new Environmental Policy Strategy 2021 -2027 chapter regarding efficient use of resources and implementation of circular economy - to develop the national strategy for the management of sewage sludge; to establish infrastructure for the management of sewage sludge, as well as implement in practice pilot projects with appropriate solutions for recovery of nutrients. At the moment of this report the draft of the National sewage sludge management strategy and its implementation plan are developed. Discussions about the most effective solutions in terms of infrastructure, future needs/use of recycled sewage sludge and availability of resources needed to implement the strategy are ongoing with the wide range of stakeholders. The vision of the draft sewage sludge management strategy is to ensure sustainable use of all sewage sludge produced in Latvia.

The European Union Cohesion Policy programme (2021-2027) for Latvia, inter alia, envisages support for iprovement of sewage sludge management in wastewater treatment installations and for establishement of new sewage sludge management infrastructure.

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

Since 2015 amount of sewage sludge used in agriculture has increased from 4706 t in 2015 to 6460 t in 2020.

In 2015, almost 67.6% of sludge was reused (in agriculture, for greening or recultivation and for composting and other needs), 1.7% of the produced sludge was disposed in waste landfills and 30.7% placed for temporary storage. In 2020, the respective figures are the following: reuse 80.7%, temporary storage: 16.0% and landfilling: 3.3%. It is necessary to further reduce amounts of sewage sludge placed for a temporary storage.

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

Sustainable management of sewage sludge is intended to ensure sustainable use and protection of soil as well as to protect surface and groundwater, thereby improving the quality of the environment and contributing to the promotion of human health. According to the UN and WHO, access to safe drinking water is one of the basic human rights.

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

Not relevant

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.

No targets are set in this area as wastewater use for irrigation is not practised in Latvia.

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).

Not relevant

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

Not relevant

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

Not relevant

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

Not relevant

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.

The Environmental Policy Strategy 2014-2020 aims to ensure good water status and sustainable use of water resources. The following action is envisaged in the water chapter of the Strategy: to continue to increase the availability and quality of centralised sewer and drinking water services by expanding sewer networks and reconstructing water supply networks that do not meet the quality requirements for reducing the pollution discharged into the environments and the loss of water from supply networks. Besides, one of the policy results of the Strategy is to ensure water quality that does not compromise human health.

The new Environmental Policy Strategy 2021 -2027 also aims to ensure good water status, safe and sustainable use of water resources by reducing water pollution. The actions envisaged in the water chapter of the Strategy are the following: to continue to increase the availability and quality of centralised sewer and drinking water services by expanding sewer networks and increasing treatment quality and efficiency of collected waste water for reducing the pollution discharged into the environments; expanding and reconstructing water supply networks that do not meet the quality requirements to prevent the loss of water from supply networks as well as to carry out a risk assessment in the groundwater and surface water catchment areas used for the centralised supply of drinking water. The new Strategy envisages that the percentage of water bodies with good and high water

quality shall increase from 33 % in 2020 up to 35 % in 2027. Regarding groundwater, the strategy states that the status of groundwater should be maintained good in 88 % designated groundwater bodies. The measures to protect water resources and improve or maintain water quality are envisaged in river basin management plans 2022 - 2027 and their programs of measures. It should be noted that the system for assessment of ecological quality of surface water was significantly improved and changed during the last decade. Therefore target set up in the Environmental Policy Strategy 2014-2020 regarding ecological quality of surface water is not directly comparable with the target established in the Environmental Policy Strategy 2021-2027, because targets in both strategies are based on different data and criteria used for assessment of water quality. Additionally a lot of monitoring data regarding the biological quality elements were collected and available during revision of the river basin management plans.

Only the capital Riga uses surface water for the drinking water production. Groundwater is used both for centralized and individual drinking water supply in the rest of Latvia. Surface waters for the supply of the capital are extracted from 2 water bodies – the Daugava River (a reservoir of Riga hydropower plant) and Lake Mazais Baltezers. Waters of Lake Mazais Baltezers are not used directly, but for artificial recharge of groundwater resources, from which later drinking water is produced. It is not planned to use any other surface waters for drinking water production. According to the last assessment (in 2020) both mentioned surface water bodies have moderate ecological quality, mainly due biological elements- flora and fauna. The objective set out in the river basin management plans is to improve the water quality and to achieve good ecological status of both surface water bodies. The deadlines and reasons for extensions are provided in the third river basin management plans. To ensure that this objective is achieved relevant measures are envisaged in the Programme of measures for the Daugava river basin district -e.g., improving the operation of centralised waste water collection systems by increasing the actual connection rate and the extension of sewage networks in agglomerations which affect water bodies, development of the rainwater management system in the villages, remediation of the contaminated site. The management plan for Lake Mazais Baltezers was developed in 2017 and establishes rules for the use of the lake and water (e.g. waste management, car washing on the shores of the lake etc.). The assessment of groundwater in 2020 shows that 88% designated groundwater bodies have good status (good chemical and quantitative status). The remaining 12% groundwater bodies are small and impacted either by historical pollution or by intense water abstraction several decades ago; they are not used for drinking water abstraction. The main efforts should be devoted to maintenance of the current status and prevention of undesirable impacts.

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).

There are numerous actions to ensure quality of waters used as sources of drinking water.

Law on Water Management (2002) sets the general framework for integrated water management and aims at good status of all surface waters and groundwater. Safeguard zones (we call them protection zones) around drinking water extraction sites are in place for a very long period of time. Latvian Protection Zones Law (1997) defines the types of protection zones around surface water and groundwater water intakes. The Law requires to maintain and fence all protection zones around water intakes and to obey other requirements aimed at protection of drinking water sources. For instance, it states: if shallow groundwater or artificially recharged groundwater is used for a centralised watersupply, a strict regime protection zone shall be sufficient to ensure that the period of time for water filtration from the protection zone to the water intake is no less than a year. Any activity planned within bacteriological protection zone is subject to initial environmental impact assessment. Cabinet Regulations No 43 on methodology for setting of protected zones around water abstraction sites (2004) determine how to set protection zones to eliminate drinking water pollution.

Direct discharge of pollutants into groundwater is prohibited in Latvia (there are some exceptions as required by the EU Water Framework Directive, but they are hardly ever applied). Dischargers of wastewater above a certain threshold (more than $5 m^3$ per day) shall obtain either a permit or consent, where emission limits and other conditions are included. Various construction activities are subject either to the EIA, initial assessment or

(smaller scale projects) technical provisions (a kind of authorisation), which include environmental conditions. For construction activities also a construction permit shall be obtained.

A licence for the use of subterranean depths shall be obtained to establish a new drilled well. Besides, for groundwater use, the passport of the water abstraction borehole shall been obtained, the stocks of groundwater resources shall be accepted and the passport of the deposit shall be received. The rate of natural resources tax for groundwater abstraction depends on the value of groundwater (high, medium or low value is defined by the legislation taking into account natural content of groundwater).

There are several codes of good practice, for instance, a code of good agricultural practice, environmental protection requirements for animal husbandries, petrol stations, sawmills etc. They are not especially devoted to the drinking water protection, but may contribute to it.

River basin management plans (from 2010 to 2015 and from 2016 to 2021) are developed. At the moment of this report the third river basin management plans for 2022-2027 period are recently adopted. They include the assessment of current water quality, evaluation of the causes of the problems and the measures aimed at improvement of water status.

To reduce the potential impact of domestic wastewater that is not collected in the centralized sewers, new legislation was introduced in 2017 - Cabinet Regulation No. 384 "Regulations Regarding the Management and Registration of Decentralised Sewerage Systems". It determines the responsibilities of the owners of so-called decentralized wastewater systems, municipalities and wastewater collectors. The legislation establishes a mechanism for collection and treatment of wastewater that is not collected via centralised sewers. Binding regulations of municipalities determine minimum requirements for wastewater collectors; these requirements include an obligation to conclude an agreement with the wastewater treatment plant about delivery of collected wastewater. Besides, binding regulations of municipalities prohibit discharge of collected wastewater in the environment or inappropriate places. The wastewater collector is also required annually submit data about the amounts of collected wastewater to the municipality. All decentralised wastewater systems shall be registered in the respective municipality and municipalities have a mandate to determine procedures for their supervision and control in their binding regulations.

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

In the river basin management plans for period from 2016 to 2021 all Latvian groundwater bodies are assessed as being in a good status. In the new river basin management plans from 2022 to 2027 88% of groundwater bodies are assessed as being in a good status. It should be highlighted that in general the status of groundwater has not deteriorated since 2015. During the development of the third river basin management plans 2022-2027, the borders of groundwater bodies have been reviewed and updated to better assess all impacts on groundwater as well as their status. As a result of that revision risk zones from previously designated large groundwater bodies have been establishedd as separate, but small-size groundwater bodies. Thereby the number of groundwater bodies increased from 16 to 25 water bodies. So the main efforts should be devoted to maintenance of the current status and prevention of undesirable impacts. The ecological quality of surface water, mainly regarding its biological elements- flora and fauna, is the topical issue in the context of the EU Water Framework Directive provisions. The status of surface water bodies is also reassessed – for 68 % of all water bodies it is still a need to implement measures for the improvement of water quality. 33.8 % of surface water bodies are identified as exceptional, because they will not achieve a good status by 2027, and 70 % of all water bodies were identified as being at risk of failing to meet their environmental objectives. The deadlines and reasons for extensions are provided in the third river basin management plans for the period from 2022 to 2027. Relevant measures are envisaged in the river basin management plans.

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Sustainable development goal 6 also requires ensuring access to water and

sanitation for all. In Latvia, development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities since the mid-1990s.

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

Not relevant

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.

To promote healthy and safe recreational environment - increase the number of bathing sites where bathing water quality is tested. Responsibility - Ministry of Health, Health Inspectorate.

Target indicators and deadlines:

- Number of bathing sites where bathing water quality is tested to be increased from 170 (2018) to 228 in 2021.

- Number of bathing water samples tested for quality to be increased from 850 (2018) to 900 in 2021.

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).

There are two lists of bathing sites in Latvia - the list of those bathing sites where the monitoring of bathing water is carried out by Health Inspectorate and financed from the state budget (official bathing sites) and the list of unofficial bathing sites where the monitoring is carried out by local municipalities and financed by themselves. This is due to the fact that Latvia is rich in both coastal and inland waters and in many of them it is possible to swim. On the other hand, the population density in Latvian rural areas is low and due to internal and external migration processes the amount of population continues to decrease (from ~2,5 millions in the 90-ties to ~2,0 millions now). Many of those bathing sites are used by a limited number of local bathers only and the criterion stated in the Bathing Water Directive (BWD) "...any element of surface water where the competent authority expects a large number of popule to bathe..." is not fulfilled.

Over the past three years the number of official bathing sites has increased from 55 to 57. In recent years, the number of unofficial bathing sites in which local governments monitor bathing water for their resources and the Health Inspectorate informs the public about the results, has increased.

Thanks to the fact that more and more local governments have also been involved in their bathing water quality inspections, since 2018 the number of bathing sites in Latvia, in which water quality is checked, has increased.

As no numerical criteria are set in the with respect to "large number of people to bathe" and they can be different even within one country's different regions Latvia has delegated to local authorities to decide if the local bathing place is attracting "many bathers" taking into account the local circumstances. Afterwards the local municipality submits the request to the Health Inspectorate to include the bathing site in the list of "official" bathing sites. The Health Inspectorate ensures monitoring, assessment and reporting acc. to requirements of the Bathing Water Directive, but the municipality takes responsibility for the maintenance and improvement of the bathing site in question. Maintenance and improvement are considered as crucial prerequisites for attraction of "large number of people to bathe" and it is stated in the Cabinet Regulation No 692 of 28 November 2017 on the Procedures for Establishing, Maintaining Bathing Sites and the Management of Bathing Water Quality as obligatory criterion for "official" bathing site.

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

In 2021, approximately 228 bathing sites were tested for water quality in Latvia (In 2018 170 bathing sites) and around 900 samples were taken during the bathing season (in 2018 850 samples). Only a third of all bathing sites where water quality is determined are official bathing sites.

Overall in the country 57 bathing sites declared in the national legislation as "official" sites are those attracting many bathers due to socioeconomic reasons (located in bigger towns or resort areas), including travellers. These 57 bathing sites are facilitated areas almost fully implementing the provisions laid down by national legislation. The local municipalities are responsible for their improvement and maintenance but the monitoring and informing of the public as well as reporting both at national and EU level is carried out by Health Inspectorate. The rest are "unofficial bathing sites".

In the meanwhile a number of bathing sites will remain as "unofficial" due to generally large amount of potential places where it is possible to bathe in Latvia and due to several other reasons, but mainly by considerations of the local municipality that there is a limited number of local bathers and municipalities do not have capacity to implement the required measures for maintenance and improvement. Municipalities can order some indicative sampling and laboratory analysis in order to get the general picture about the bathing water quality. Sometimes it can be only one sampling per season, sometimes more. Health Inspectorate does assess this information for local municipalities as well as summarizes and communicates it to the general public.

The Health Inspectorate maintains a database available to the public regarding bathing sites which are not on the official bathing list, but in which water quality checks are carried out.

The Health Inspectorate shall support the local government in the performance of bathing water monitoring, evaluating the results and providing advice where necessary.

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

Sustainable development goal 6 requires ensuring access to water and sanitation for all. SDG Goal 3 requires ensuring healthy lives and promote well-being for all at all ages. Availability of safe bathing waters ensures more healthy lives and promote well-being.

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

Not relevant

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.

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).

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

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

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

Not relevant for Latvia as shellfish aquaculture is not undertaken in natural waters.

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.

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).

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

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

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

Latvia's approach to the monitoring of bathing waters is in line with the provisions of the the Bathing Water Directive (BWD). The BWD has been transposed into the Latvian legislation by Cabinet Regulation No 692 of 28 November 2017 on the Procedures for Establishing, Maintaining Bathing Sites and the Management of Bathing Water Quality. Bathing water quality in Latvia has been stable in the recent years and the majority of bathing sites meet the quality requirements in a long-term perspective. In 2021 two bathing waters were classified as poor quality. The number of bathing waters classified as 'excellent' or 'good' reached (94%), as sufficient quality 2% and poor quality 4%. Water quality has deteriorated slightly due to climate change - both more frequent rain and heat waves which cause water levels to fall.

All bathing waters in Latvia shall qualify at least as sufficient quality waters.

BWD provides that the quality assessment is based on the long-term quality of bathing water, taking into account all the data and statistical analyses of the microbiological analyses of the last four bathing seasons. However, an immediate water quality assessment is also carried out in Latvia after each sampling.

The operational assessment is actually focused on an additional assessment of the overall risk and serves as a means of communicating with the public during the bathing season.

According to the Regulations of the Cabinet of Ministers No. 692 Latvia has set the limit values- for intestinal enterococci (300 cfu/100 ml) and for Escherichia coli (1000 cfu/100 ml). The operational assessment shall evaluate the exceedances of the microbiological limits in each individual water sample for the purpose of deciding whether to ban bathing or not to recommend bathing. The operational assessment of bathing water quality shall be based on an expert's conclusion on the size and nature of microbiological contamination. The criteria are the same for all bathing sites, both inland and coastal.

Future challenges relate both to potential changes to the bathing water monitoring system in general and to the introduction of new identifiable indicators and methods of analysis, such as molecular biological methods, and specifically to the impact of climate change. Increasing the growing season and the temperature of natural waters during the summer period, when hot and dry weather persists, the risk of mass proliferation of blue algae is also increasing, particularly in eitroficated water bodies and slow-flowing watercourses, as well as in the coastal zones of the Gulf of Riga and the Baltic Sea of Latvia, which can make the waters unusable for recreation activities.

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.

30

The Environmental Policy Strategy 2014-2020 aimed to ensure sustainable use and protection of natural resources by promoting the mitigation and management of environmental risks. So, the area of contaminated (polluted) sites that has undergone remediation shall be 5 ha in 2012, 83.45 ha in 2016 and 7.7 ha in 2020.

The new Environmenta Policy Strategy 2021-2027 aims to promote the reduction of pollution, including the rehabilitation of contaminated sites, as well as to reduce the negative effects of hazardous chemicals on the environment and human health.

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).

Law on Pollution (2001) establishes a legal framework for identification and registration of polluted and potentially polluted sites in Latvia, stating that local governments shall identify them in cooperation with regional environmental authorities. Regional environmental authorities are responsible for registration of polluted and potentially polluted sites. The Ministry of Defence is involved regarding military polluted sites in its possession. The law also specifies the measures for investigation of polluted and potentially polluted sites and for remediation of polluted sites and determines the persons who shall cover related expenses.

The register of polluted and potentially polluted sites is established and includes information about more than 3500 such sites in Latvia; more than 200 of the registered sites are classified as polluted, for the remaining investigations are necessary to establish the presence, amount, contents and other characteristics of pollution.

It should be taken into account that most of polluted sites originated during the Soviet Era (1945 – 1991). After that land property rights have been transferred and production companies liquidated, therefore in many cases it is not possible to apply "the polluter pays" principle. The State and municipalities are in charge of a part of the deserted and polluted sites now. It is necessary to specify the area of pollution and carry out rehabilitation to improve environmental quality and ensure compliance with the requirements laid down in the national and the EU legislation concerning surface waters and groundwater, quality of soil and ground, as well as to appraise further usage of these sites for commercial and other needs.

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

Remediation of contaminated sites requires enormous investments. Initially State budget funded preparation of the necessary documentation and research of the four most dangerous polluted sites: 1) Inčukalns acid tar ponds, 2) waste dump "Kosmoss", where liquid hazardous waste was stored, 3) channel of the former military sea port in Liepaja, 4) waste dump in Olaine, where hazardous liquid waste was stored. In 2007 – 2013 the EU funding was attracted for remediation works and remediation of these sites was started. Remediation works are still ongoing in two sites - Inčukalns acid tar ponds and the channel of the former military sea port in Liepaja. Regarding the channel of the sea port, remediation work planned for the first round is completed by removing and disposing technogenic contamination in the area of 78 ha as well as removing chemically polluted sediment in the area of 10 ha. Remediation of the object in the remaining 68 ha and restoration is scheduled to be completed by 2023, provided that additional funding is available within the 2014-2021 period.

Remediation was completed in waste damp "Kosmoss" - historically polluted site with area of 5.16 ha as well as in waste damp in Olaine, where the restoration works have been carried out in area of nearly 3 ha.

In 2013 in the frame of bilateral cooperation programme between Latvia and Switzerland remediation of historically polluted sites in Sarkandaugava started. This area was considered as one of the most polluted in the territory of Latvia, because it has been historically used for storage and transhipment of petroleum products. Pollution by oil products in Sarkandaugava occurred in the 60-70s of the 20th century, when the site belongs to the army of the Soviet Union. At present, all planned remedial work in area of 8 ha has been fully completed.

The most dangerous historically polluted site in Latvia was Inčukalns acid tar ponds. They were located in the country area of Inčukalns in former sand careers. In the 50-80s of the 20th century the waste of sulfur gudrone from the former Riga oil refinery and lubricating

oil plant was dumped in sand careers without any hydroisolation of base and onboard. The project was very important to minimise the risk of contamination of water rersources (surface and groundwater), human health and prevent further impact of the contaminated site to the environment. As a result of the implementation of the project, the total area remediated is 8.4 ha, including remediated area about 2,4 ha what was contaminated by mixture of dangerous chemicals. It is planned to finish all remedial work in 2023.

Additional work and resources will be needed in the following years to continue remediation of contaminated sites. It is envisaged in the relevant programmes of measures of the river basin management plans 2022-2027. Also, the European Union Cohesion Policy programme (2021-2027) for Latvia envisages, inter alia, support for remediation of historically polluted sites.

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

Remediation of historically contaminated sites are intended to improve the quality of groundwater, surface water and soil in contaminated areas, thereby improving the quality of the environment and contributing to the promotion of human health. According to the UN and WHO, access to safe drinking water is one of the basic human rights.

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

Not relevant

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.

The Environmental Policy Strategy 2015-2020 and also the Environmental Policy Strategy 2021-2027 aims to ensure good water status and sustainable use of water resources. In order to meet those aims, the strategy indicates results to be achieved and steps to be taken, which are related to the management and protection of water resources.

Joining the European Union Latvia pledged to fulfil requirements of the EU legislation, inter alia, of the 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. For this purpose, Latvia had the following obligations: to establish river basin districts and to identify competent authorities responsible for the river basin management by the end of 2003, to elaborate river basin management plans by the end of 2009 and afterwards to update them once in six years, and to cooperate with the neighbouring countries. The target - to establish such a system for the protection and management of surface water and groundwater which facilitates sustainable and rational use of water resources, prevents the deterioration of water and protects ecosystem, gradually reduces emission and discharge of polluting substances, as well as ensures the protection of the marine waters of Latvia, is established in the Water Management Law. The timetable for establishing water management and protection system is laid down in the Transitional provisions of the Law. In general the system is set up, attention is paid to the maintenance and improvement of the existing system. Therefore no new targets are developed.

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 competences are divided on a basis of the legal acts that determine each institution's responsibility in the public administration system. The Ministry of Environmental Protection and Regional Development and its institutions are responsible for the implementation and enforcement of the Water Framework Directive (WFD) and most of the water sector legislation. The Ministry of Health and its institutions hold responsibility for the State control of the quality of drinking water and bathing waters. The Ministry of Agriculture and its institutions are responsible for implementation of the Drinking Water Directive as well as the State control of water, used for food production, including bottled

water. Figure 1 shows the system for Water Framework Directive implementation established in Latvia.



Figure 1: WFD implementation structure in Latvia

Source: Source: European Commission, 2012. Commission Staff Working Document, Member State: Latvia. Accompanying the document Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive (2000/60/EC) River basin management plans. {COM (2012) 670final} URL: http://ec.europa.eu/environment/water/water-framework/pdf/CWD-2012-379_EN-Vol3_LV.pdf

An advisory Council is established for each river basin district, where various stakeholders are involved in the process of planning and management of water resources.

The first river basin management plans for Daugava, Gauja, Lielupe and Venta were developed and published in December 2009 to facilitate water management and improve water status. The next river basin management plans for the second period from 2016 to 2021 were published in December 2015. At the moment of this report the third river basin management plans for the period from 2022 to 2027 are approved.

River basin management include the assessment of current water quality, evaluation of the causes of the problems, determine water quality objectives and indicate measures for improvement and protection of water status. Programmes of measures of the river basin management plans contains basic measures, which originates from the national and the EU regulations, and supplementary measures for improvement of water quality.

During the last few years several cross-border projects were implemented to enhance cooperation in the river basin management with the neighbouring countries Lithuania and Estonia. Since 2020, Latvia implements a LIFE project "Implementation of River Basin Management Plans of Latvian towards good surface water status" (LIFE GoodWater IP). The overall aim of LIFE GoodWater IP is to improve the status of water bodies at risk in Latvia by means of the full implementation of the measures laid down in the Daugava, Gauja, Lielupe and Venta river basin management plans. For more information, please, see: https://goodwater.lv/en/home/

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

Our obligations in management and protection of water resources are implemented in accordance with the timetable required by the national and the EU legislation.

However ecological quality of surface water, mainly regarding its biological elements – flora and fauna, is the topical issue in the context of the EU Water Framework Directive provisions. Water quality assessment, included in the river basin management plans for 2016-2021, shows that for 78 % of all water bodies it is still a need to implement measures for the improvement of water quality; 12 % of surface water bodies will not achieve a good status by 2021 and 35.5 % of all water bodies were identified as being at risk of failing to meet their environmental objectives. At the end of 2020 the new assessment of water status was available. It shows that for 68 % of surface waterbodies it is a need to implement measures for the improvement of water quality; 33.8 % of surface water bodies will not

achieve a good status by 2027 and 70 % of all water bodies were identified as being at risk of failing to meet their environmental objectives.

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

According to the UN and WHO, access to safe drinking water is one of the basic human rights. Sustainable development goal 6 also requires ensuring access to water and sanitation for all. Clean, accessible water is an essential for all countries worldwide. The river basin management plans and their programmes of measures are the main national planning documents aimed to protect and ensure sustainable use of water resources.

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

Not relevant.

XX. Additional national or local specific targets

In cases where additional targets have been set, for each target:

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.

Protocol reference: 6.2 n) - The frequency of the publication of information on the quality of bathing waters relevant to the targets set out in paragraph 6 of the Protocol. Availability of information on safety of drinking water and bathing water, on negative impacts on health of contaminated water and individual possibilities of dealing with the contaminated water.

National target - To inform public on safety of drinking water and bathing water and on negative impacts on health of contaminated water regularly until 2020. Also the Public Health Strategy 2021-2027 includes targets to raise public awareness on environmental health and safety issues and improve habits that promote safe environment.

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 for informing the public and the procedures for placing informative signs or symbols for "official" bathing site in Latvia is stated in the Cabinet Regulation No 692 of 28 November 2017 on the Procedures for Establishing, Maintaining Bathing Sites and the Management of Bathing Water Quality.

Requirements for Informing the Public and the Procedures for Placing Informative Signs or Symbols regarding a Bathing Water Site: "After obtaining results of the bathing water quality the Health Inspectorate shall publish the results of inspection on the website of the Health Inspectorate as soon as possible, and also provide the following information to the mass media and the manager of the bathing water site regarding those bathing water sites and their water quality where the monitoring has been carried out by using resources allocated from the State budget.

The requirements for informing the public and the procedures for Non-packaged drinking water is stated in the Cabinet Regulation Republic of Latvia Cabinet Regulation No. 671 "Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control Thereof" (14.11.2017). The Inspectorate shall collect the monitoring results, draw up a report once a year, publish it on its website and inform thereon the Ministry of Health, the Ministry of Environmental Protection and Regional Development and the Service.Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

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

Information on drinking and bathing water quality is regularly provided – operational data eventually for involved parts and/or for public needs, annual reports, and information for specific issues (for example, information for public about water concerns and health risks at flooding).

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

Sustainable development goal 6 requires ensuring access to water and sanitation for all. SDG Goal 3 requires ensuring healthy lives and promote well-being for all at all ages. Availability of information on safety of drinking water and bathing water, on negative impacts on health of contaminated water and individual possibilities of dealing with the contaminated water helps to ensure healthy lives and promote well-being.

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

Not relevant.

Part three Common indicators⁵

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 population coverage reported under this indicator is approximately 73 % of total population - share of population that has access to the centralized supply of drinking water from medium and large water supply systems (production of drinking water more than 100 m3/day). Reporting on this indicator is based on auditmonitoring including the baseline year.

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.

The samples were taken at 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.⁶ The national standards for reported parameters correspond to criteria given in the Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.

2. Bacteriological quality

4. 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 renaming the rows in the column "area/category" in the table below accordingly.

⁵ 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.

⁶ The latest edition of the WHO *Guidelines for Drinking-water Quality* is available at: http://www.who.int/water_sanitation_health/publications/dwq-guidelines-4/en/.

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

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

Parameter	Area/categor y	Baseline value (2005)	Value reported in the previous reporting cycle (2018)	Current value (2021)
E. coli	Total	1.8	0.4	0
Additional parameter 1:	Total	1.8	5.4	0.6
Enterococci				

Microbiological quality expressed as percentage of samples that fail to meet the national standard for E. coli or Enterococci is fluctuating over the years within the range of a few percent. As the actual numbers of bacterial cells in the samples are very low, partly they could be attributed to unintentional and accidental pollution of samples during sampling. Repeated samples in the next week after the initial sampling are usually meeting the required standards.

3. Chemical quality

5. 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;
- (b) Fluoride;
- (c) Lead
- (d) Nitrate.

Results of sample analysis are reported in the table below.

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

Iron, Manganese and Sulphate - chemical parameters that are common in groundwater in Latvia.

Parameter	Area/category	Baseline value (2005)	Value reported in the previous reporting cycle (2018)	Current value (2021)
Arsenic	Total	0	0	0
Fluoride	Total	0	0.4	0
Lead	Total	0	0	0
Nitrate	Total	0.2	0	0
Additional parameter 1: Iron	Total	62.8	9.6	6.9
Additional parameter 2: Manganese	Total	1.3	7.1	4.1

Parameter	Area/category	Baseline value (2005)	Value reported in the previous reporting cycle (2018)	Current value (2021)
Additional parameter 3:	Total	7.0	4.2	4.1
Sulphate				

Chemical quality expressed as percentage of samples that fail to meet the national standard for the so called chemical indicator parameters are steadily improving over years due to improvement of drinking water purification systems – especially in relation to removal of iron and sulphates. In Latvia drinking water is free of dangerous chemical elements like arsenic and lead. There were some irregular exceedances of fluoride levels found at Rucava, South Western of Latvia. It depends on groundwater exctraction levels. Challenges related to the drinking water quality are solved through modernisation of water preparation and purification technologies and installation of water improvement equipment in water supply systems.

II. 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).

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

Both incidence-based (indicator-based) and event-based surveillance systems are place in Latvia.

	Incid	Incidence rate per 100,000 population (all exposure routes)		Number of outbreaks (confirmed water-borne outbreaks)		
Disease	Baseline (2005)	Value reported in the previous reporting cycle (2018)	Current value (2021)	Baseline (specify year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
Shigellosis	0.81	1.2	0.3	0	0	0
Entero-haemorrhagic <i>E. coli</i> infection	0	0.3	0.77	0	0	0
Typhoid fever	0.004	0.1	0.1	0	0	0
Viral hepatitis A	0.64	3.5	1.27	0	0	0
Legionellosis	0	1.9	2.27	0	0	0
Cryptosporiosis	0	0.1	0.1	0	0	0

III. 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 number-based categories. If you do so, please indicate the reported categories by renaming the rows 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.

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

Percentage of population with access to drinking water*	Baseline value (2012)	Value reported in the pre reporting cycle (2016)	vious Current value (2020)
Total	89,9 %	91,4 %	94.7 %
Urban	95,2 %	97,2 %	97.9 %
Rural	76,8 %	77,6 %	86.7 %

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/definitionsmethods/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.*

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

- 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

*The values refer to the share of households for which water is provided by pipeline using different water supply systems - centralised supply or individual solutions. It should be taken into account that lack of water is not an issue in Latvia. Those inhabitants, which do not use centralized water supply, commonly have an individual artesian well and a household connection (pipeline) to it. Other hoseholds use an individual dug well in their own yard.

IV. 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 number-based categories. If you do so, please indicate the reported categories by renaming the rows 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.

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

Percentage of population with access to sanitation*	Baseline value (2012)	Value reported in the previous reporting cycle (2016)	Current value (2020)
Total	87,5 %	90.0 %	93.0 %
Urban	94.0 %	96,6 %	96.9 %
Rural	71,4 %	74,4 %	83.3 %

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.*

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

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

* The values refer to the share of households for which water is provided by pipeline and which use centralized wastewater collection and treatment system or wastewater is collected and transported to municipal wastewater treatment plants or treated in situ.

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 water⁷ falling under each defined class (e.g., for European Union countries and other countries following the European Union Water Framework Directive⁸ 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.).

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

(i) Ecological status of surface water bodies

Percentage of surface water classified as:	Baseline value (2009)	Value reported in the previous reporting cycle (2018*)	Current value (2021**)
High status	3%	1.5 %	1.0 %
Good status	47%	20.0 %	32.0 %
Moderate status	28%	62.5 %	56.0 %
Poor status	9%	12.5 %	9,5 %
Bad status	13%	3.5 %	1.5 %
Total number/volume of water bodies classified	463	462	767
Total number/volume of water bodies in the country	463	462	767

⁷ Please specify.

⁸ 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.

		Value reported in the	
	Baseline value	previous reporting	Current value
Percentage of surface water classified as:	(2009)	cycle (2018*)	(2021**)

* The status of all water bodies is reassessed once in six years. The numbers included in the table for 2018 are based on the assessment, when revision of the river basin management plans was completed. The value of 2018 is not directly comparable with the one reported in 2009 as a baseline value, as the whole system for assessessment of water ecological quality has been substantially upgraded and improved since 2009. Besides, much more data on the biological quality criteria were available during revision of the river basin management plans in 2020-2021.

**The assessment of water status, including the assessment of ecological quality of water bodies, was carried out during the development of the third river basin management plans for 2022-2027. During the development of river basin management plans, the network of river and lake water bodies was reviewed, updated and significantly extended. The main reason for these changes was too large size of the river water bodies identoioified in 2004; the size hindered correct estimation of pressures. Therefore it was difficult to carry out a reliable ecological and chemical quality assessment.

(ii) Chemical status of surface water bodies

Percentage of surface water bodies classified as	Baseline value (2009)	Value reported in the previous reporting cycle (2018)*	Current value (2021*)
Good status	100%	67%	0 %
Poor status**	0%	33%	100 %
Total number/volume of water bodies classified	21	39	119
Total number/volume of water bodies in the country	463	462	767

*The status of all water bodies is reassessed once in six years. The numbers included in the table for 2018 are based on the assessment when revision of the river basin management plans was completed in 2015. ** The assessment of water status, including the assessment of chemical quality of water bodies was carried out during the development of the third river basin management plans for 2022-2027. Non-compliance with the EQS has been established in biota samples (fish) and water samples when analyzing the specific group of substances behaving like ubiquitous PBTs (persistent, bioaccumulative and toxic) and can be found for decades in the aquatic environment (e.g. mercury, brominated diphenyl ethers, several polyaromatic hydrocarbons, fluorinated organic compaunds). Without uPBT compounds, the chemical quality of surface water could be rated as good.

(iii) Status of groundwaters

Parcentege of aroundwaters classified as	Baseline value	Value reported in the previous reporting	Current value
rercentage of groundwaters classified as	(2009)	cycle (2018*)	(2021***)
Good quantitative status	100%	100%	100 %
Good chemical status	100%	100%	88 %
Poor quantitative status	0%	0%	0 %
Poor chemical status	0%	0%	12 %
Total number/volume of groundwater bodies classified	16	16	25
Total number/volume of groundwater bodies in the country	16	16	25

*The status of all water bodies is reassessed once in six years. The values indicated for 2018 is based on the assessment became known in 2015, when revision of the river basin management plans was completed.

** During the development of river basin management plans for the third management cycle, the network of groundwater bodies was reviewed and updated. The 16 goundwater bodies initially determined were too large and unhomogeneous in terms of water composition and essential loads, which limited the assessment of reliable chemical and quantitative status.

(b) For other countries

(i) Status of surface waters

Percentage of surface water falling under class ^a	Baseline value (specify year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
I			
II			
III			
IV			
V			
Total number/volume of water bodies classified			
Total number/volume of water bodies in the country			

^{*a*} Rename and modify the number of rows to reflect the national classification system.

Percentage of groundwaters falling under class ^a	Baseline value (specify year)	Value reported in the previous reporting cycle (specify year)	Current value (specify year)
Ι			
П			
III			

III IV

v

Total number/volume of groundwater bodies classified

Total number/volume of groundwater bodies in the country

^{*a*} Rename and modify the number of rows to reflect the national classification system.

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).

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.

Water exploitation index	Baseline value (2014)	Value reported in the previous reporting cycle (2017)	Current value (2020)
Agriculture	0.16 %	0,13 %	0,16 %
Industry ^a	0.35 %	0,08 %	0.08 %
Domestic use ^b	0.25 %	0,19 %	0.5 %

^{*a*} The figure includes both water abstraction for manufacturing industry and for energy cooling.

^b The figure only refers to public water supply systems and also individual supply systems if water abstraction from surface waters or groundwater exceeds 10 m3/day or if more than 50 persons are served.

Part four Water-related disease surveillance and response systems

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

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

YES \boxtimes NO \square IN PROGRESS \square

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)?

YES \boxtimes NO \square IN PROGRESS \square

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)?

YES \bowtie NO \square IN PROGRESS \square

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.

Surveillance and control of infectious diseases in Latvia is based on comprehensive framework of legislative acts in the field of epidemiological safety (Epidemiological Safety Law: https://likumi.lv/ta/en/en/id/52951-epidemiological-safety-law; Cabinet Regulation No.7 (adopted 5 January 1999) "Procedures of Registration of Infectious

Diseases": https://likumi.lv/ta/en/en/id/20667-procedures-for-registration-of-infectious-diseases etc.) The legislative system defines in details responsibilities of health practitioners/healthcare institutions, public health and other institutions and physical persons in relation to surveillance, control and prevention of infectious diseases, including waterborne infections. For instance, the Centre for Disease Prevention and Control of Latvia receives notifications about infectious diseases/outbreaks, conducts epidemiological investigation and risk assessment, organises and coordinates control measures, analyses surveillance data, develops recommendations for different target groups, and provides the necessary risk communication activities. Centre for Diseases Prevention and Control of Latvia performs its functions in close collaboration with other involved institutions such as Health Inspectorate, Food and Veterinary Service, the National Reference Laboratory, local municipalities etc.

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.

The existing regulatory framework is regulary assessed and the necessary amendments are performed.

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

The latest national policy planning documents - the new Environmental Policy Strategy 2021 - 2027, the third river basin management plans for the period of 2022 - 2027 as well as the European Union Cohesion Policy programme (2021-2027) for Latvia includes targets and actions related to protection and sustainable use of water resources. The Water Supply Investment Plan for 2021-2027 approved in 2020 provides information on technically justified investments needed to improve and renovate the existing water supply infrastructure in the whole country as well as for each agglomeration (p.e.>2000). The Public Health Strategy 2021-2027 includes targets and actions related to achievement of safe drinking and bathing water, reduction of impact from communicable diseases by improving hygiene and sanitation and targets to raise public awareness on environmental health and safety issues.

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 sex-separated 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 renaming the rows in the table below accordingly.

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

Institutional setting	Current value (2021)	
Schools		
Basic sanitation service	100%	
Basic drinking-water service	100%	
Basic hygiene service	<100%	
Health-care facilities		
Basic sanitation service	100%	
Basic drinking-water service	100%	
Basic hygiene service	<100%	

Basic sanitation, drinking water and hygiene services are provided in Latvia, but in some cases there is lack of soap, hand washing liquid. Advanced service: toilet paper, hand towels or other hand-drying devices are also provided usually.

The minimum hygiene requirements are set by regulations for schools and hospitals: - Cabinet Regulation No. 610 (Adopted 27 December 2002) "Hygiene Requirements for Educational Institutions Implementing the General Basic Education, General Secondary Education, Vocational Basic Education, Industrial Education, or Vocational Secondary Education Programmes". There shall be the toilet facilities (separate for boys, girls, and employees) in the schools. Toilet facilities, toilet bowls and sinks shall be arranged in accordance with the requirements specified in the Appendix 3 of Latvian construction standard LBN 200-21, "Overall construction requirements for buildings". The toilet facility shall be provided with a toilet paper or wipes, soap and a device or means for hand drying.

- Cabinet Regulation No. 60 (Adopted 20 January 2009) "Regulations Regarding Mandatory Requirements for Medical Treatment Institutions and Their Structural Units": Outpatient medical treatment institution has WC for patients and staff. If out-patient medical treatment institution is located in a residential building, sanitary facilities are equipped separately -WC for patients and staff suitable for use by persons with functional disorders.

2.Has the situation of WASH in schools been assessed in your country?YES \boxtimes NO \square IN PROGRESS \square

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

YES \bowtie NO \square IN PROGRESS \square

- 4. Do approved policies or programmes include actions (please tick all that apply):
 - ☑ To improve WASH in schools

To improve WASH in health-care facilities

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

Under the the Public Health Strategy 2014-2020 an activity of training teachers on the issues of health education in order to improve the professional competence and to ensure successive acquisition of health issues in general and vocational education was carried out until 30.12.2020. Several methodological materials for working with students on various health-related issues have been developed, including- recommendations for teachers to work with the educational film on the observance of hand hygiene for preschool and primary school children, recommendations for teachers working with 5th - 7th grade for students on the observance of hand hygiene. Informative materials were issued to children within the framework of educational activities implemented for

teachers. Electronic versions of the materials are available on the website of Centre of Disease Prevention and Control (CDPC) www.spkc.gov.lv.

In 2020 under the the Public Health Strategy 2014-2020 an activity under Action 5.1. "To improve public education on communicable disease prevention measures, including the importance of vaccination" was carried out. It included a public information campaign "Wash your hands clean to keep them free of germs". During the campaign, advertising activities were implemented on the Internet, on radio and environmental stands, printed advertisements were developed and placed, the domain www.ziepiņš.lv and www.ziepins.lv were created, a coloring and assignment book for children was developed, and advice material for parents was developed. During the campaign, a sociological survey was conducted on washing parents' hands and developing habits for children, communication on social networks took place.

In 2020 413 educational activities were carried out for grades 5–7 on hand hygiene. The total number of students who took part in the events was 7696. In addition, the development of informative materials was provided - educational material for students "Your health in your hands" and "Recommendations for teachers working with 5. – 7. classes on hand hygiene'. Posters on proper hand washing "Have you washed your hands?" and "Wash your hands clean to keep them free of germs." were developed.

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?

YES \boxtimes NO \square IN PROGRESS \square

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

Republic of Latvia Cabinet Regulation No. 671 "Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control Thereof" (14.11.2017) Part IV: Use of Risk Assessment in the Development of the Monitoring Programme for Drinking Water: The risk assessment of drinking water shall be voluntary. If the risk assessment has been conducted, deviations from the water parameters and sampling frequency are possible.

8. 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 (-).

Percentage of population	Current value (specify year)
Total	N.A.

3. Equitable access to water and sanitation

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

YES \Box NO \boxtimes IN PROGRESS \Box

In Latvia, access to centralised water supply and sanitation services depends on the low density of the population, as it determines where the construction of centralised networks and the development of such services is economically justified. For this reason the most part of environmental investment projects to ensure development of drinking f water supply and sanitation services were implemented in urban areas with p.e. above 2000. Projects aimed at improvement of wastewater collection and treatment infrastructure are implemented also in small settlements (of less than 2000 p.e.) as far as financial resources are available, however the essential factor is the lack of funding and the paying ability of population to continue development of water services. It should be taken into account that lack of water is not an issue in Latvia. Those inhabitants, which do not use centralized

water supply, commonly have an individual artesian well and a household connection (pipeline) to it. Other hoseholds use an individual dug well in their own yard.

10. Do national policies or programmes include actions to improve equitable access to water and sanitation (please 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).

Part seven Information on the person submitting the report

The following report is submitted on behalf of the Ministry of Health and Ministry of Ministry of Environmental Protection and Regional Development of Latvia [name of the Party, Signatory or other State] in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: Ms.Dace Bumane

E-mail: dace.bumane@vm.gov.lv

Telephone number: +371 67876148

Name and address of national authority: Ministry of Health of The Republic of Latvia, Brivibas street 72, Riga, LV-1011, Latvia Signature:

Date: 05.05.2022.

Submission

1. Parties are required to submit their summary reports to the joint secretariat, using the present template and in accordance with the adopted guidelines on 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 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 and an electronic copy by e-mail. Electronic copies should be available in word-processing software.

Joint Secretariat to the Protocol on Water and Health

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