Summary report of Latvia 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. 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 2018 Latvia together with Estonia and Lithuania participated in the Consultation Process under the Protocol on Water and Health and received advice provided by the Protocol Committee in order to support implementing the provisions of the Protocol in Latvia.

Regarding access to drinking water in 2012 82% of the population in Latvian agglomerations was provided with an access to drinking water supply that corresponds to the requirements of the legislation. In 2016 for 95.6 % of inhabitants in larger agglomerations (where population equivalent (p.e.) is above 2000) and 82.0 % of inhabitants in smaller agglomerations (p.e. is < 2000) an access to centralized water supply network was provided.

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. ≥ 2000) and 84,1 % of the population in smaller agglomerations (p.e. < 2000). However real connection rates are lower therefore the national Environmental Policy Strategy 2014-2020 establishes targets for further increase in number of population, which uses centralized water supply network was provided.

Progress has been achieved with regard to improvement of drinking water quality and availability. Drinking water management, surveillance and quality requirements are set under the national regulatory framework implementing Drinking Water Directive 98/83/EC including voluntary risk assessment and risk management approach. There were no significant outbreaks and incidence of infectious diseases related to water is low for many years. In 2017 research on drinking water risk assessment framework and water safety plans in line with Latvian conditions in accordance with European Union legislation and World Health Organization water safety plan guidelines was carried out and a tool for risk assessment was developed. The current challenges are related to readiness and ability of water suppliers to start using this tool. Additional education is needed for the water suppliers.

Water status assessment system has improved in Latvia since 2014, and includes biological, hydro-morphological and physico-chemical quality elements. The status of all the largest surface water bodies and groundwater bodies is assessed every 6 years. The value of ecological and chemical status of surface water bodies reported in the previous reporting cycle (2015) has not changed in 2018 because it is based on the same assessment that became known in 2015, when revision of the river basin management plans was completed. According to the assessment: ~ 21.5% of surface water bodies have high or good ecological status; ~ 62.5% surface water bodies are classified as having a moderate status; ~12% poor status; ~ 7% bad status. Chemical status of surface water bodies was assessed as good for 67% of water bodies and poor for 33%. Both chemical and quantitative status of groundwater has not changed since 2015 and is assessed as good and is also based on 2015 data. Taking into account that groundwater is the main source of drinking water used both for centralized and individual drinking water supply, in general the population have access to safe drinking water. Water abstraction is not regarded as a significant pressure on surface and groundwater bodies in Latvia. The next assessment of water status, including the assessment of ecological quality of water bodies, will be available at the end of 2020.

The main challenges remain in the area of funding and resources for water supply and sewage collection and treatment, and for the ageing infrastructure as financial capacity of municipalities and citizens is not sufficient.
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 ☒ NO ☐ IN PROGRESS ☐

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 MoH and MEPRD. 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 MoH: http://www.vm.gov.lv/lv/tava_veseliba/vides_veseliba1/unece_un_pvo_udens_un_veselibas_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, 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.

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 had 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 also evaluated. The development of urban wastewater collection and drinking water infrastructure was one of the main environmental investment priorities during the last 20 years 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.

Latvia has a centralized decision-making structure, but the primary responsibility for provision of water supply and sewerage services is under the local municipalities both in the case of drinking water supply and wastewater collection and treatment.

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.

Drinking water management, surveillance and quality requirements 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.

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).

New national regulatory act has been introduced- 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) which replaces the previous relevant national regulation. Compliance with this Regulation is controlled by the Food and
Veterinary Service by examining drinking water used in food establishments and Health Inspectorate which controls public drinking water supply objects from the water supply points to the consumer.

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 audit monitoring water samples that fail to meet the standard for chemical water quality in 2005 to 44.2% in 2009, 31.7% in 2012, 14% in 2015, 19.5% in 2016, 16.3% in 2017.

As regards the general microbiological parameters, no clear changes in dynamic of water quality are noticed but the number of bad samples is small and fluctuates mainly in the range of 3-6% 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, 5% in 2016 and 6.2% in 2017 correspondingly).

The proportion of inhabitants receiving water with good quality has increased from ~63% in 2005 to ~75% in 2009; ~79% in 2012; ~81% in 2015 and ~85% in 2017. 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.

In 2017 voluntary risk assessment and risk management approach has also been introduced in the Cabinet Regulations No. 671.

In 2017 research on drinking water risk assessment framework and water safety plans in line with Latvian conditions in accordance with European Union legislation and World Health Organization water safety plan guidelines was carried out and a tool for risk assessment was developed (https://www.bior.lv/lv/valsts-delegetas-funkcijas/dzerama-udens-riska-novertesana).

Since the last reporting period Laboratory Investigation Module of National Surveillance Information System has been improved – it helps to collect drinking water monitoring data. Health Inspectorate uses this system to create reports about drinking water quality. A tool for drinking water monitoring data results report was developed in to National Surveillance Information System which can be used by water providers. The system allows water providers to send data about their water quality via internet to the Health Inspectorate. (https://www.latvija.lv/lv/Epakalpojumi/EP184/Apraksts) Health inspectorate is publishing annual reports on its website and they are available to the public.

Informational/educational tools: water supply associations organised a social campaign “Ūvitamīns” (Vitamin U (‘Ūdens’ in Latvian - water) to popularize drinking water from centralized water supply systems (as opposed to choosing bottled water) with involvement of scientists and caterers - http://www.udensparbrivu.lv/kas-ir-u-vitamins. The most significant challenges 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 access to water for all.

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

N.a.
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).


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

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)]).

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 3 requires ensuring healthy lives and promoting the well-being at all ages and goal 6 requires ensuring access to water and sanitation for all. Low level of water related outbreaks and incidents is an aim to ensure health and well being.*

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

*Not relevant.*

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

The area of territory, or the population sizes or proportions, which should be served by collective systems for the supply of drinking water or where the supply of drinking water by other means should be improved.

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.

*National target*

To increase the percentage and number of population supplied with drinking water thus increasing access to safe and monitored drinking water.

*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 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.

Responsibility: MEPRD

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 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 Strategic Reference Framework 2007-2013 and its Operational Programme "Infrastructure and Services" for Cohesion Fund and European Regional Development Fund. At the moment of this report, targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan of Latvia for 2014–2020 and the Operational Programme "Growth and employment" (2014).

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 was provided with an access to drinking water supply that corresponds to the requirements of the legislation. In 2016 for 95,6% of inhabitants in larger agglomerations (where population equivalent (p.e.) is above 2000) and 82,0% of inhabitants in smaller agglomerations (p.e. is < 2000) an access to centralized water supply network was provided.

At the same time, that 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 territory. Additional work and resources will be needed in the following years to ensure full achievement of the targets. The main challenges are:

- Funding/resources issues - financial capacity of municipalities and citizens is not always sufficient to invest more in water supply and sewage collection and treatment.
- It is complicated to comply with the standards for specific parameters, naturally occurring in groundwater: iron, sulphate, ammonium.
- Remedial measures are not implemented or slowly taken.
- Ageing infrastructure.
- Insufficient data on the status of very small water supply systems.
- Cooperation within the sector is challenging due to cross sectoral nature of issues.

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1 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 O2 of biochemical oxygen demand per day.
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.

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

N.a.

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

The area of territory, or the population sizes or proportions, which should be served by collective systems of sanitation or where sanitation by other means should be improved

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.

National target
To increase the percentage and number of population having access to waste water collection and treatment services that corresponds to the requirements of the legislation.

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.

Responsibility:
Ministry of Environmental Protection and Regional Development of the Republic 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).

According to the Latvian Law on Local Governments 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 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. At the moment of this report, targets, priorities, activities and financing plans to ensure the EU funding are included in the National Development Plan of Latvia for 2014–2020 and the Operational Programme “Growth and employment” (2014).

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 - 2020, water-management companies qualifying for this funding developed so-called “connection plans”. Those plans included the specific activities, e.g. - information of 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 (not in all municipalities).

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

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. ≥ 2000) and 84.1 % of the population in smaller agglomerations (p.e. < 2000). Real connection rates are lower: ~ 84.1 % in larger agglomerations and ~ 70.0 % in smaller agglomerations. That is why the national Environmental Policy Strategy 2014-2020 establishes targets for further increase in number of population, which uses centralized water services. Those inhabitants who don’t have access to centralized water supply and sewerage services, use individual solutions or are provided with only one of the above-mentioned services – centralized water supply or centralized sanitation. Additional work and resources will be needed in the following years to ensure full achievement of the target. The main challenges are:

- Funding/resources issues - financial capacity of municipalities and citizens is not always sufficient to invest more in water supply and sewage collection and treatment.
- Remedial measures are not implemented or slowly taken.
- Ageing infrastructure.
- Insufficient capacity to detect outbreaks (statistical data collection).

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. 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.

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

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 5.5% of used water in 2017. The reduction of water losses in the centralized supply system is even greater - from 37.1 % of used water in 2004 to 9.3 % of used water in 2017.

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 Local Governments (1994) states that one of the principal tasks 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 m³/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. 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 of Latvia for 2014-2020 and the Operational Programme “Growth and employment” (2014).

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 organized to help local authorities and companies of water services to gain investments and 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.

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 mil 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. Therefore the target of the previous Environmental Policy Strategy 2009-2015 - to improve the access to drinking water supply services, was reached: according to the Strategy, the percentage of the population receiving drinking water that complies with the requirements of the legislation should be 66% in 2015.

In 2016 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 are 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). All problems related to any exceedance of chemical water quality parameters are associated with naturally occurring chemical elements (Fe, Mn, SO4²-, Cl), which are present in Latvian groundwater in rather high concentrations. 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. 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.

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.

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

N.a.

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

For each target set in this area:

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

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 1991 concerning urban waste water treatment. At that time 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.

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 Local Governments (1994) states that one of the main tasks 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 states 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 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 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. 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 of Latvia for 2014–2020 and the Operational Programme “Growth and employment” (2014).

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.

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 programs 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.

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. 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.

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

N.a.

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 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 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 m³/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 Regulations No 235 “Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control thereof” (2017) determine harmlessness and quality requirements (standards) for drinking water and procedures for its monitoring and control. The Regulations 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 shall 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 coordinate 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") shall be the competent institution in the risk assessment of drinking water in drinking water supply systems. The Regulations determine 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 Regulations state 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 Regulations also determine 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 5.5% of used water in 2017. The reduction of water losses in the centralized supply system is even greater - from 37.1% of used water in 2004 to 9.3% of used 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 new 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.

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

N.a.

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 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. 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 systems: 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 needed in 2014-2020 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 new 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).

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

N.a.

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. 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. 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 rainwater 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. 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 of Latvia for 2014–2020 and the Operational Programme “Growth and employment” (2014). 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 2016, only ~ 2 % of discharged wastewater from centralized systems did not comply with the treatment standards laid down by legislation. (in 2000 this share was ~ 18 %). However, additional work is needed regrading domestic wastewater that is not collected in the centralized sewers. It is the challenge of the future.
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.

N.a.

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 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.

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.

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.

N.a.

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 new 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.

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 1991 concerning 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. 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 of Latvia for 2014–2020 and the Operational Programme “Growth and employment” (2014). 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 targets 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 1990ties. During the last years 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 environment has decreased: in 2012 -2017 the total discharge of nitrogen with wastewater has decreased by 42.5 %, the total discharge of phosphorous- by 33.1 % and the total discharge of BOD5 - by 18.3 %.

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.

N.a.

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 new 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 is envisaged in the soil&subterranean depths chapter of the Strategy. At present, efforts are being made to find funding for the development of the intended planning document.
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).

Governmental Regulations No 34 “Regulations regarding Discharge of Polluting Substances into Water” (2002) require the operator of wastewater collection and treatment system to ensure utilisation of waste water and sewage sludge and to obtain a permit for the disposal of sewage sludge. Installations for the discharge of waste water and the disposal of sewage sludge shall be set up in such a way that they decrease the adverse effect of waste water and sewage sludge on the environment. The operator may agree with other operators regarding the collection and disposal of sewage sludge at the places of deposition of other treatment plants, but shall notify the regional environmental authority about such agreement.

Governmental Regulations No 362 “Regulations Regarding Utilisation, Monitoring and Control of Sewage Sludge and the Compost thereof” (2006) prescribe the procedures for the utilisation, monitoring and control of sewage sludge and its compost. The Regulations state that a producer of sewage sludge shall ensure its quality and obtain the quality certificate, which copy shall be issued to the user of the sewage sludge (a legal or natural person, who is engaged in the storage, utilisation and burial of sewage sludge). The Regulations also lay down requirements for temporary storage of sewage sludge at the place of utilisation and determine conditions, which shall be complied with if sewage sludge is used for soil fertilisation in agriculture or in forestry, for the greening and landscaping of territories or for the recovery of degraded areas. It is also stated for what agricultural activities use of sewage sludge is not allowed, for instance, for growing vegetables and berries in covered areas or in small fields. The Regulations also state that treated sewage sludge, which conforms to the criteria for waste acceptance at waste landfill sites, may be buried at waste landfill sites in accordance with the requirements of the legislation.

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 decreased from 4706 t in 2015 to 3316 t in 2017. 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 2016, the respective figures are the following: reuse: 68.7%, temporary storage: 30.7% and landfilling: 0.6%. In 2017, the figures are the following: reuse: 61.2 %; temporary storage: 38.7% and landfilling: 0.1%. 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.

N.a.

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.
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.

Latvia has sufficient amount of surface and groundwater resources therefore waste water is not used for irrigation purposes.

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 Strategy states that the percentage of water bodies with good and high water quality shall increase from 51% in 2013 up to 60% in 2016 and above 70% in 2020. Regarding groundwater the strategy states that the status of groundwater should be maintained good in all designated groundwater bodies. The measures to protect water resources and improve or maintain water quality are envisaged in river basin management plans and its programs of measures.

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 2015) 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 second 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, development of the management plan for Lake Mazais Baltezers establishing rules for the use of the lake and water (e.g. waste management, car washing on the shores of the lake etc.). Taking into account the assessment of groundwater in 2015 shows that all designated groundwater
bodies have good status (good chemical and quantitative status) the main efforts should be devoted to maintenance of the current status and prevention of undesirable impacts.

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 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 water-supply, 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 m³ 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. 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.
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

In the current river basin management plans for period from 2016 to 2021 all Latvian groundwater bodies are assessed as being in a good status. 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 78 % of all water bodies it is still a need to implement measures for the improvement of water quality. 12 % of surface water bodies are identified as exceptional, because they 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. The deadlines and reasons for extensions are provided in the second river basin management plans. Relevant measures are envisaged in the river basin management plans.

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.

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

N.a.

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. To 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 50 (2013) to 110 in 2019.
- Number of bathing water samples tested for quality to be increased from 260 (2013) to 580 in 2019.

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 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. 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 people to bathe..." is not fulfilled.

Over the past five years, the number of official bathing sites has increased from 54 to 56. But in recent years, the number of unofficial bathing sites in which local governments monitor bathing water from 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 2015 the number of bathing sites in Latvia, in which water quality is checked, has increased.

As no numerical criteria are set with respect to "large number of people to bathe" and it 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 according 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.

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

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

Overall in the country 56 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 56 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.

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 they do not have capacity to implement the required measures for maintenance and improvement. Number of sampling per season varies in those bathing sites and the Health Inspectorate shall assess this information for local municipalities as well as shall summarize and communicate it to the general public.

The Health Inspectorate shall also maintain 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.

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. Improving bathing water surveillance ensures better information on safety of the bathing water and reduces health risks of using potentially unsafe bathing waters.

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

N.a.
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.

Climatic conditions of Latvia do not allow production or harvesting of shellfish.

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.

No targets are set in this area.

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.

Latvia’s approach to the monitoring of bathing waters is largely in line with the provisions of 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 (merging previous Regulations of the Cabinet of Ministers Nr. 608 on the monitoring of bathing waters, quality assurance and requirements for public information and Regulations of the Cabinet of Ministers Nr. 38 on the establishment and maintenance of bathing sites).

The analysis of the data reported demonstrate improved water quality in the monitored bathing sites. Bathing water quality in Latvia has been stable in the recent years, with a substantial improvement since 2015, especially with regard to the number of waters with excellent quality. All bathing waters in Latvia shall qualify at least as sufficient quality waters and in 2018 the number of excellent bathing sites reached 52 (92.9%).
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 eutrophicated 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.

The Environmental Policy Strategy 2014-2020 aims 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.

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 dump “Kosmoss” - historically polluted site with area of 5.16 ha as well as in waste dump 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.

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 2016-2021.

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.

N.a.

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 2009-2015 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.

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](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.

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 contain 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.

2. 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. Much has already been done, however the data of surface water quality reassessment, 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 next assessment of water status (both for surface and groundwater) will be available.

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. 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.

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

N.a.

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.

Target: To inform public on safety of drinking water and bathing water and on negative impacts on health of contaminated water regularly until 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).
Health Inspectorate regularly publishes information on drinking and bathing water quality providing it to local municipalities and to the public through mass media and website of Health Inspectorate.

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

Information is being regularly published and no specific challenges are identified.

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 3 requires ensuring healthy lives and promoting the well-being at all ages and goal 6 requires ensuring access to water and sanitation for all. Improving public knowledge on safety of the drinking and bathing water increases trust in public services and reduces risk for well being and health.

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

N.a.

Part three
Common indicators

I. Quality of the drinking water supplied

1. Context of the data

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

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

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

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

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 audit monitoring 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.

2 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.
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.3


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.

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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>E. coli</em></td>
<td>Total</td>
<td>1.8</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Additional parameter 1:</td>
<td>Total</td>
<td>1.8</td>
<td>2.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Enterococci</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.


33
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 column “area/category” 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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Lead</td>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nitrate</td>
<td>Total</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Additional parameter 1: Iron</td>
<td>Total</td>
<td>62.8</td>
<td>8.2</td>
<td>9.6</td>
</tr>
<tr>
<td>Additional parameter 2: Manganese</td>
<td>Total</td>
<td>1.3</td>
<td>1.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Additional parameter 3: Sulphate</td>
<td>Total</td>
<td>7.0</td>
<td>3.4</td>
<td>4.2</td>
</tr>
</tbody>
</table>

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

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).

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

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

### Incidence rate per 100,000 population (all exposure routes)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Baseline 2005</th>
<th>Value reported in the previous reporting cycle 2015</th>
<th>Current value 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shigelliosis</td>
<td>0.81</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Entero-haemorrhagic E. coli infection</td>
<td>0</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>0.004</td>
<td>0</td>
<td>0.1</td>
</tr>
<tr>
<td>Viral hepatitis A</td>
<td>0.64</td>
<td>0.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>0</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Cryptosporiosis</td>
<td>0</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

### Number of outbreaks (confirmed water-borne outbreaks)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Baseline (specify year)</th>
<th>Value reported in the previous reporting cycle (specify year)</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shigelliosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Viral hepatitis A</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cryptosporiosis</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Additional disease 1:
Additional disease 2:
Additional disease 3:

### 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.

<table>
<thead>
<tr>
<th>Percentage of population with access to drinking water*</th>
<th>Baseline value (2012)</th>
<th>Value reported in the previous reporting cycle (2014)</th>
<th>Current value (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>89.9 % (62 %**)</td>
<td>90.9 % (67.7 %**)</td>
<td>91.4 % (74.9 % **)</td>
</tr>
<tr>
<td>Urban</td>
<td>95.2 %</td>
<td>96.4 %</td>
<td>97.2 %</td>
</tr>
<tr>
<td>Rural</td>
<td>76.8 %</td>
<td>77.0 %</td>
<td>77.6 %</td>
</tr>
</tbody>
</table>

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 households use an individual dug well in their own yard.

** The numbers in brackets refer to the share of population which has provided with access to the centralized supply of drinking water – both in urban and rural areas.

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.

<table>
<thead>
<tr>
<th>Percentage of population with access to sanitation*</th>
<th>Baseline value (2012)</th>
<th>Value reported in the previous reporting cycle (2014)</th>
<th>Current value (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>87.5 % (57 %**)</td>
<td>88.8 % (63.1 %**)</td>
<td>90.0 % (73.1 %**)</td>
</tr>
<tr>
<td>Urban</td>
<td>94.0%</td>
<td>95.1%</td>
<td>96.6%</td>
</tr>
<tr>
<td>Rural***</td>
<td>71.4%</td>
<td>72.9%</td>
<td>74.4%</td>
</tr>
</tbody>
</table>

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)
☑ Facilities not shared with other households
☑ Facilities from which excreta is safely disposed in situ.

* 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 on site.

** According to the state statistics for 2016 there are ~ 1.97 million inhabitants in Latvia. Approximately 68 % of Latvians live in the cities and towns and the rest 32 % live in the rural areas. The numbers in brackets refer to the share of the population (both in urban and rural areas), which is provided with centralized wastewater collection and treatment system. The Directive 91/271/EEC on urban wastewater collection and treatment applies only to the agglomerations of more than 2000 population equivalents (p.e.)4. In those agglomerations the most part of environmental investment projects were implemented to ensure development of water supply and sanitation services.

*** There is a very low population density in Latvia: 34.3 inhabitants per square kilometre on average. 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. Where a centralized sewer system is not available or feasible, individual systems are used.

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 water5 falling under each defined class (e.g., for European Union countries and other countries following the European Union Water Framework Directive6 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

<table>
<thead>
<tr>
<th>Percentage of surface water classified as:</th>
<th>Baseline value (2009)</th>
<th>Value reported in the previous reporting cycle (2015*)</th>
<th>Current value (2018*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High status</td>
<td>3%</td>
<td>1.5 %</td>
<td>1.5 %</td>
</tr>
<tr>
<td>Good status</td>
<td>47%</td>
<td>20.0 %</td>
<td>20.0 %</td>
</tr>
<tr>
<td>Moderate status</td>
<td>28%</td>
<td>62.5 %</td>
<td>62.5 %</td>
</tr>
<tr>
<td>Poor status</td>
<td>9%</td>
<td>12.5 %</td>
<td>12.5 %</td>
</tr>
<tr>
<td>Bad status</td>
<td>13%</td>
<td>3.5 %</td>
<td>3.5 %</td>
</tr>
</tbody>
</table>

5 Please specify.
Percentage of surface water classified as: | Baseline value (2009) | Value reported in the previous reporting cycle (2015*) | Current value (2018*)
---|---|---|---
Total number/volume of water bodies classified | 1.5 % | | |
Total number/volume of water bodies in the country | 463 | 462 | 462

* The status of all water bodies is reassessed once in six years. The numbers included in the table for 2015 and 2018 are identical because they are based on the same assessment value became known in 2015, when revision of the river basin management plans was completed. The value (2015 and 2018) is not directly comparable with this reported in 2009 (as baseline value) taking into account that the whole system to assess the ecological quality of water has been substantially developed and improved since 2009 as well as much more data regarding the biological quality elements were available during revision of the river basin management plans.

The next assessment of water status, including the assessment of ecological quality of water bodies, will be available at the end of 2020.

(ii) Chemical status of surface water bodies

Percentage of surface water bodies classified as | Baseline value (2009) | Value reported in the previous reporting cycle (2015*) | Current value (2018*)
---|---|---|---
Good status | 100% | 67% | 67%
Poor status** | 0% | 33% | 33%
Total number/volume of water bodies classified | 21 | 39 | 39
Total number/volume of water bodies in the country | 463 | 462 | 462

** There are no exceedances of the environmental quality standards (EQS) - content of chemical substance determined in water samples. Non-compliance with the EQS has been established in 2015 when biota samples (fish) were analysed to determine the content of mercury and brominated diphenyl ethers. Both pollutants belong to the specific group of substances behaving like ubiquitous PBTs (persistent, bioaccumulative and toxic) and can be found for decades in the aquatic environment. It should be also taken into account that the EQS established for mercury in biota (fish) by the EU Directive 2008/105/EC is much lower if compare to the maximum allowable levels of concentrations for mercury in foodstuffs set by Commission Regulation (EC) No 1881/2006. The maximum levels regarding the mercury content in fish were not exceeded.

(iii) Status of groundwaters

---|---|---|---
Good quantitative status | 100% | 100% | 100%
Good chemical status | 100% | 100% | 100%
Poor quantitative status | 0% | 0% | 0%
Poor chemical status | 0% | 0% | 0%
Total number/volume of groundwater bodies classified | 16 | 16 | 16
Total number/volume of groundwater bodies in the country | 16 | 16 | 16
*The status of all water bodies is reassessed once in six years. The values indicated for 2015 and 2018 is based on the assessment became known in 2015, when revision of the river basin management plans was completed. The next assessment of groundwater status will be available at the end of 2020.

(b) For other countries

(i) Status of surface waters

<table>
<thead>
<tr>
<th>Percentage of surface water falling under class&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Baseline value (specify year)</th>
<th>Value reported in the previous reporting cycle (specify year)</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number/volume of water bodies classified

Total number/volume of water bodies in the country

<sup>a</sup> Rename and modify the number of rows to reflect the national classification system.

(ii) Status of groundwaters

<table>
<thead>
<tr>
<th>Percentage of groundwaters falling under class&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Baseline value (specify year)</th>
<th>Value reported in the previous reporting cycle (specify year)</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number/volume of groundwater bodies classified

Total number/volume of groundwater bodies in the country

<sup>a</sup> 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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>0.16 %</td>
<td>0.13 %</td>
<td></td>
</tr>
<tr>
<td>Industry&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.35 %</td>
<td>0.08 %</td>
<td></td>
</tr>
</tbody>
</table>
### Water exploitation index

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic use&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.25 %</td>
<td></td>
<td>0.19 %</td>
</tr>
</tbody>
</table>

<sup>a</sup> the figure includes both water abstraction for manufacturing industry and for energy cooling.

<sup>b</sup> 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 ☒
   - NO ☐
   - IN PROGRESS ☐

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 ☒
   - NO ☐
   - IN PROGRESS ☐

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 ☒
   - NO ☐
   - IN PROGRESS ☐

2. If yes or in progress, please provide summary information about key elements of the water-related disease surveillance and outbreak response systems (e.g., identification of water-related disease outbreaks and incidents, notification, communication to the public, data management and reporting). Please also provide reference to existing national legislation and/or regulations addressing water-related disease surveillance and outbreak response.


   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 regularly assessed and the necessary amendments are performed. For instance, several amendments were performed in the Epidemiological Safety Law in 2018.
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

Public awareness, education, training, research and development and information (article 9);

The protection and quality of water is one of the main issues of public interest, therefore the quality of drinking water and the safe collection and treatment of waste water (sanitation) are constantly addressed to the public. For this reason the capacity building for water suppliers, municipalities and others as well as awareness raising among policy makers and consumers is very important. The last events related to this topic are indicated below.

In March – April 2018, there was an acute public interest about the establishment of commercial meters (water/wastewater quantity metering devices) that led to numerous articles in media. Using this interest, the MEPRD explained why new legislation on individual wastewater treatment and collection systems was adopted in 2017 and what it requires from their users.

The association of Latvian water companies is promoting the safety and quality of tap water, there were several events in 2018.

In September – October 2018, there was a public information campaign commissioned by the MEPRD to promote connections to centralized sewerage networks, where they exist or are under construction. It included also information on the requirements for those who will still be reliant on individual wastewater treatment and collection systems.

Information about the new developments in the EU (e.g. amendments to the Drinking Water Directive and new proposal on water reuse) was provided to the consultative boards of the river basin districts and to the municipalities and water companies throughout the period.

In October 2018, internal capacity building seminar for inspectors and hygiene specialists of the Health Inspectorate took place, information on drinking water risk assessment aspects and assessment tools was discussed.

Public information (article 10);

Public consultations with regard to environment protection, including water protection and management issues, are provided in different ways. Policy papers are subject to public consultation, which usually involves public authorities, municipalities, non-Cabinet organisations. For legislation there is also a procedure for coordination before its adoption, which usually involves abovementioned stakeholders. Information on water quality is publicly available and annual reports are prepared. Society is regularly informed about the general quality of drinking water and bathing water by means of mass media periodically covering "hot" issues as well as by yearly reports freely available on internet homepage of the competent authority. There are various ways how the public can inform enforcement authorities on present or potential pollution of the environment, thereby preventing violation of legislation. Public is involved in the management of bathing water quality having possibility to suggest bathing sites to be monitored and to submit its own water quality observations to the state competent authority.

International cooperation (article 11);

International cooperation regarding transboundary waters takes place in three international river basins. Latvian authorities regularly participate in common meetings as well as exchange information with relevant authorities in Lithuania, Estonia, Russia and Belarus. There are many bilateral as well as larger-scale projects which have been implemented or are taking place, and contribute to improving the status of water. Latvia has signed a number
of international bilateral agreements with neighbour countries sharing common surface and groundwater bodies:

- In October 2003, Latvian and Estonian ministers of the environment signed an agreement on cooperation within the Gauja/Koiva river basin district, which is shared by both countries. The agreement provided for the establishment of groups of experts from the competent authorities, which meet regularly to exchange information and to coordinate issues important for the development of the river basin management plans.

- The framework for Latvian – Lithuanian coordination within the Daugava, Lielupe and Venta river basin districts was established by a technical protocol on their joint management and signed by Latvia and Lithuania in 2003. The technical protocol envisages regular meetings of the competent authorities and experts. Meetings of the competent authorities are used to discuss problems and issues that need coordination.

- A general agreement on cooperation within the field of environmental protection exists among all 3 Baltic States: Latvia, Estonia and Lithuania (signed on 4 June 2010).

- Inter-Cabinet agreement between the Latvian Republic and the Russian Federation on cooperation in the field of environmental protection, signed on 20 December 2010.

- Inter-Cabinet agreement between Latvia and Belarus on cooperation in the field of environmental protection, signed on 21 February 1994.

- The public authority under the MEPRD, the Latvian Environment, Geology and Meteorology Centre, also has agreements with relevant institutions in neighbouring countries on the exchange of data and other relevant cooperation activities;

- In 2018, the MEPRD and the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus have adopted a cooperation program 2018-2021. The program envisages regular meeting of environmental and nature conservation experts, information and data exchange, sharing of experience, elaboration of joint proposals for monitoring and projects.

Joint and coordinated international action (article 12);
Cooperation in relation to transboundary waters (article 13);
International support for national action (article 14).

Latvia participates in several projects implemented within the framework of cross-border cooperation programs, such as the Latvia-Lithuania Cross-Border Cooperation Program, the Baltic Sea Region Program, the Central Baltic Sea Program:
For example State Ltd "Latvian Environment, Geology and Meteorology Centre" participates at projects to development of environmental monitoring and control system and promotion of public participation in environmental management; transboundary cooperation in groundwater, lakes, Baltic sea, river basins management with Lithuania and Estonia; Geospatial data improvement; inventory of priority substances and pharmaceuticals etc.

Water Research Laboratory of Riga Technical University participates in many projects for drinking water quality technology and wastewater treatment research:
http://wrl.rtu.lv/international-projects/

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 (-).

<table>
<thead>
<tr>
<th>Institutional setting</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td></td>
</tr>
<tr>
<td>Basic sanitation service</td>
<td>100%</td>
</tr>
<tr>
<td>Basic drinking-water service</td>
<td>100%</td>
</tr>
<tr>
<td>Basic hygiene service</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>Health-care facilities</td>
<td></td>
</tr>
<tr>
<td>Basic sanitation service</td>
<td>100%</td>
</tr>
<tr>
<td>Basic drinking-water service</td>
<td>100%</td>
</tr>
<tr>
<td>Basic hygiene service</td>
<td>&lt;100%</td>
</tr>
</tbody>
</table>

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

2. Has the situation of WASH in schools been assessed in your country?
   YES ☒ NO ☐ IN PROGRESS ☐

3. Has the situation of WASH in health-care facilities been assessed in your country?
   YES ☒ NO ☐ IN PROGRESS ☐

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).

The minimum hygiene requirements are set by regulatory for schools and hospitals in Latvia:
- 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 Latvian construction standard LBN 208-15, “Public 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”: Out-patient medical treatment institution has toilet facilities for patients and staff. If out-patient medical
treatment institution is located in a residential building, sanitary facilities are equipped separately.

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 ☒ NO ☐ IN PROGRESS ☐

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. On the risk management tool please look in Part Two: I. Quality of the drinking water supplied (art. 6, para. 2 (a)).

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 (-).

<table>
<thead>
<tr>
<th>Percentage of population</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>-</td>
</tr>
</tbody>
</table>

3. Equitable access to water and sanitation

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

YES ☐ NO ☒ IN PROGRESS ☐

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 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 households 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).

N.a.
Although there is no national level overall policy to promote connections to the centralized networks the Law on Water Management Services (2016) gave rights to the municipalities to co-finance connection of properties to the centralized sewer and water supply infrastructure including rights to set provisions for co-financing vulnerable and marginalized groups. Up to date ~ 23 % of municipalities have such support mechanisms.

Part seven
Information on the person submitting the report

The following report is submitted on behalf of State Secretary of Ministry of Health Republic of in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: Ms. D.Bumane – Senior officer of Environmental Health Division, Department of Public Health, Ministry of Health, Republic of Latvia.

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: 23.04.2019.

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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