

Template for summary reports under the Protocol on Water and Health

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 Three.

YES NO IN PROGRESS

If targets have been revised, please provide details here.

Specific targets related specifically to the Protocol on Water and Health were not set as the related aspects were covered by a number of the Latvian policy papers and legislation. In the environmental sector the relevant policy papers are the following: Environmental Policy Strategy 2009 – 2015, River Basin Management Plans for the period of 2010 – 2015, Environmental Policy Strategy 2014 – 2020, Public Health Strategy 2014-2020, River Basin Management Plans for the period of 2016 – 2021, National Development Plan of Latvia, 2014-2020, Operational Programme “Growth and employment” (2014). Relevant environmental legislation includes both laws and governmental regulations. The main relevant Laws are named here: Law on Local Governments (1994), Protection Zone Law (1997), Law on Pollution (2001), Law on Water Management (2003), Natural Resources Tax Law (2005), (Law on Water Services, 2015), Epidemiological Safety Law (1998) but the names of the relevant regulations are provided under each question.

2. Were they 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.

All these policy papers and pieces of legislation are publicly available both in the website of the Ministry of Environmental Protection and Regional Development (MEPRD): <http://www.varam.gov.lv/> and in the other public websites: www.likumi.lv and <http://polsis.mk.gov.lv/news.do>

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.

All 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.

4. Which existing national and international strategies and legislation were taken into account?

Please briefly mention the most relevant national and international strategies and instruments that were taken into account when setting targets (only a limited number of references are required under this question; indicatively, five references are considered appropriate, but the number will depend on your national situation).

Relevant EU directives, namely: Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption, 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; Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC.

5. Was cost-benefit analysis of targets set performed, and if so how?

Alternatively, please explain to what extent financial implications were taken into account when setting targets.

All abovementioned policy papers include either financing plan or information about the funding necessary for their implementation. During the development of river basin management plans, cost-effectiveness of the measures envisaged for the improvement of water status was evaluated.

6. 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 public authorities, municipalities, non-governmental organisations. Consultation may be organized differentially, sometimes special public events are organised, in other cases written procedures are used. Received comments are usually evaluated and taken into account as far as possible. For legislation there also is a procedure for coordination before its adoption, which usually involves abovementioned stakeholders.

7. Provide information on the process by which this report has been prepared, including information on which public authorities had the main responsibilities, which other stakeholders were involved, etc.

This report is prepared by the Ministry of Health, Ministry of Environmental Protection and Regional Development, Health Inspectorate of Latvia (subordinated institution of the Ministry of Health) and by the Centre for Disease Prevention and Control of Latvia (subordinated institution of the Ministry of Health).

8. Report any particular circumstances that are relevant for understanding the report, e.g., whether there is a federal and/or decentralized decision-making structure, or whether financial constraints are a significant obstacle to implementation (if applicable).

Latvia has centralized decision-making structure, but the primary responsibility for local "water services" is put on local municipalities both in the case of drinking water and bathing waters. Financial constraints may have impact on implementation of targets set especially starting from 2008 due to global financial crisis and geopolitical situation in Europe hampering economical development in the EU countries.

9. Please describe whether and, if so, how emerging issues relevant to water and health (e.g., climate change) were taken into account in the process of target setting.

It is planned to address the issues of climate change in the near future through the elaboration of national strategy and action program on adaptation to climate change (it is expected to be elaborated in 2016-2017). The provisions set shall be integrated in all other political planning documents.

Part Two

Common indicators¹

I. Quality of the drinking water supplied

A. Context of the data

Please provide general information related to the context of the data provided under sections B and C below:

1. What is the population coverage (in millions or per cent of total national population) of the water supplies reported under this indicator?

The rationale of this question is to understand the population coverage of the water quality data reported under sections B and C 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 ~ 61 % of total national population- share of population that has access to the centralized supply of drinking water from medium and large water supply systems (>100 m³/d). Reporting on this indicator is based on audit monitoring including the baseline year.

2. Do the water supply systems reported here supply the urban population only or both the urban and rural populations?

Water supply systems reported here supply both the urban and rural population.

3. Specify where the samples/measurements are taken (e.g., treatment plant outlet, distribution system or point of consumption).

The rationale behind this question is to understand where the samples were primarily taken from for the water quality data reported in sections B and C below.

The samples/measurements are taken at the point of consumption.

4. In the reports, the standards for compliance assessment signify the national standards. If national standards for reported parameters deviate from the WHO guideline values, provide information on the values (standards) used for calculation.

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

B. Bacteriological quality

Indicator to be used: WatSan_S2: The percentage of samples that fail to meet the national standard for E. coli and the percentage of samples that fail to meet the national standard for Enterococci.

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

¹In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible 2005— the year of entry into force of the Protocol — as the baseline year.

<i>WatSan_S2</i>	<i>Baseline value (2005)</i>	<i>Value reported in the previous reporting cycle (2012)</i>	<i>Current value (2015)</i>
E. coli	1.8	0.9	0
Enterococci	1.8	1.8	2.4

Microbiological quality expressed as percentage of samples that fail to meet the national standard for E. coli or Enterococci is fluctuating slightly over 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 taken the following week usually meet the required standards.

C. Chemical quality

Indicator to be used: WatSan_S3. All countries shall monitor and report on the percentage of samples that fail to meet the national standard for chemical water quality with regard to the following:

- (a) Fluoride;
- (b) Nitrate and nitrite;²
- (c) Arsenic;
- (d) Lead;
- (e) Iron.

Parties shall also identify up to five additional physico-chemical parameters that are of special concern in their national or local situation (e.g., pesticides).

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

<i>Substance</i>	<i>Baseline value (2005)</i>	<i>Value reported in the previous reporting cycle (2012)</i>	<i>Current value (2015)</i>
Fluoride	0	0	0
Nitrate	+	+	+
Nitrite	0.2	0	0
Arsenic	0	0	0
Lead	0	0	0
Iron	62.8	21.3	8.2
Additional physico-chemical parameter 1: Sulphate	7.0	10.4	3.4
Additional physico-chemical parameter 2: Ammonium	9.2	0.9	0.5
Additional physico-chemical parameter 3: Manganese	1.3	0.5	1.4

²As defined in the WHO Guidelines for drinking-water quality.

<i>Substance</i>	<i>Baseline value</i>		<i>Value reported in the</i>	
	<i>(2005)</i>	<i>(2012)</i>	<i>previous reporting cycle</i>	<i>Current value</i>
Additional physico-chemical parameter 4: Aluminium	0	0	0	0
Additional physico-chemical parameter 5: Chloride	0.2	0.5	0	0

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 the years due to improvement of drinking water purification systems – especially in relation to removal of iron and sulphates. Drinking water in Latvia is free of dangerous chemical elements like arsenic, lead, etc.

II. Reduction of the scale of outbreaks and incidence of infectious diseases potentially related to water

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

- (a) For reporting outbreaks, please indicate if the numbers reported are related to all exposure routes or only related to water (i.e., for which there is epidemiological or microbiological evidence for water to have facilitated infection);
- (b) For reporting incidents:
 - (i) Please report cases per 10,000 persons;
 - (ii) Please differentiate between zero incidents (0) and no data available (-);
 - (iii) If possible, please distinguish between autochthonous and imported cases.

Please consider extending the list of water-related diseases to cover other relevant pathogens (e.g., enteric viruses, Cryptosporidium, Giardia, Legionella).

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

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

	<i>Incidence</i>			<i>Number of outbreaks</i>		
	<i>Baseline</i>	<i>Value reported in the previous reporting cycle</i>	<i>Current value</i>	<i>Baseline</i>	<i>Value reported in the previous reporting cycle</i>	<i>Current value</i>
	<i>(2005)</i>	<i>(2012)</i>	<i>(2015)</i>	<i>(2005)</i>	<i>(2012)</i>	<i>(specify the year)</i>
Cholera	0	0	0	0	0	0
Bacillary dysentery (shigellosis)	0.81	0.02	0.06 (0.05 Imported cases)	0	0	0
Enterohaemorrhagic E. coli.	0	0	0.02	0	0	0
Viral hepatitis A	0.64	0.05	0.03 (0.02 Imported cases)	0	0	0
Typhoid fever	0.004	0	0	0	0	0
Legionellosis	0	0.23	0.11	0	0	0

Incidence data are based on food borne diseases. Legionellosis cases were water borne and sporadic , no outbreaks identified.

III. Access to drinking water

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

Percentage of population with access to drinking water	Baseline value (2006) *	Value reported in the previous reporting cycle (2012)**	Current value (2014)
Total	82.1%	62%	90.9%
Urban	93.1%	Large cities, p.e.***>100 000 - 92%	96.4% including Large cities, p.e. >100 000 - 98,9%
		Towns, 100 000> p.e.>10 000 - 81%	Towns, 100 000 > p.e.>10 000 - 96,0%
		Small towns, 10 000> p.e.>2 000 - 48%	Small towns, 10 000> p.e.>2 000- 85,3%
Rural	58.8%		77.0%

Please specify if the above data is based on national estimates or estimates provided by the *WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation.

** The baseline value and value for year 2012 is not comparable, as each of them is based on different data. The value for year 2012 refers to the share of population that has access to the centralized supply of drinking water. It should be taken into account 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 yard.

*** p.e. – population equivalent 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).

If national estimates are provided, please specify how access is defined and estimated in your country.

JMP definitions and categories are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.

IV. Access to sanitation

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

Percentage of population with access to sanitation	Baseline value 2004	Value reported in the previous reporting cycle 2012****	Current value (2014)
Total*	52%	57%	63.1%
Urban**		82,6%	80.4%
	>100 000 p.e. 80.5%	81,0%	97.8%

Percentage of population with access to sanitation	Baseline value 2004	Value reported in the previous reporting cycle 2012****	Current value (2014)
10 000 - 100 000 p.e.	74%	78%	95.8%
2000 – 10 000 p.e.	55.7%	53%	80.3%

Rural***

* According to the latest population census (2011) there are ~ 2.07 million inhabitants in Latvia. Approximately 68% of Latvians live in the cities and towns and the rest 32% live in the rural areas.

** During negotiations about the accession to the European Union, Latvia got a transitional period for implementation of the Directive 91/271/EEC on urban wastewater collection and treatment until 31 December 2015. The Directive applies only to the agglomerations of more than 2000 population equivalents (p.e.)³. Therefore the figures in the table only refer to the population of the agglomerations above 2000 p.e.

*** There is a very low population density in Latvia: 34.3 inhabitants per square kilometer 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.

**** These figures differ from those reported in 2010 as the boundaries of agglomerations and numbers of their population were updated since that.

The numbers in the table refer to the share of the population, which is provided with centralized wastewater collection and treatment system. Most of remaining wastewater generated in the settlements is either collected and transported to municipal wastewater treatment plants or treated in situ.

Please specify if the above data is based on national estimates or estimates provided by JMP for Water Supply and Sanitation.

If national estimates are provided, please specify how access is defined and estimated in your country. JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.

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

Water quality

On the basis of national systems of water classification, the percentage of the number of water bodies or the percentage of the volume (preferably) of water⁴ falling under each defined class (e.g., in classes I, II, III, etc. for non-EU countries; for EU countries, 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).

³ 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.

⁴Please specify.

For non-European Union Countries

Status of surface waters

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

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

Status of groundwaters

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

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

For European Union countries

Ecological status of surface water bodies

<i>Percentage of surface water classified as:</i>	<i>Baseline value (2009)</i>	<i>Value reported in the previous</i>	
		<i>reporting cycle (2013)</i>	<i>Current value (2015*)</i>
High status	3%		1.5 %
Good status	47%		20.0 %
Moderate status	28%		62.5 %
Poor status	9%		12.5 %
Bad status	13%		3.5 %
Total number/volume of water bodies classified	463		462
Total number/volume of water bodies in the country	463		462

** The status of all water bodies is reassessed once in six years. The new value became known in 2015, when revision of the river basin management plans was completed. The new value (2015) is not directly comparable with this reported in 2013 (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.*

Chemical status of surface water bodies

<i>Percentage of surface water bodies classified as</i>	<i>Baseline value (2009)</i>	<i>Value reported in the previous</i>	
		<i>reporting cycle* (2013)</i>	<i>Current value** (2015)</i>
Good status	100%	*	67%
Poor status	0%	*	33%
Total number/volume of water bodies classified	21	*	39
Total number/volume of water bodies in the country	463	*	462

** The status of all water bodies is reassessed once in six years. The new value became known in 2015, when revision of the river basin management was completed.*

*** 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 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. These maximum levels regarding the mercury content in fish were not exceeded.*

Status of groundwaters

Percentage of groundwaters classified as	Baseline value (2009)	Value reported in the	
		previous reporting cycle (2013)*	Current value (2015)
Good quantitative status	100%		100%
Good chemical status	100%		100%
Poor quantitative status	0%		0%
Poor chemical status	0%		0%
Total number/volume of groundwater bodies classified	16		
Total number/volume of groundwater bodies in the country	16		

* Remark The status of all water bodies is reassessed once in six years. The new value became known in 2015, when revision of the river basin management plans was completed.

Please provide any needed 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).

Water use

Please provide information on the water exploitation index at the national and river basin levels for each sector (agriculture, industry, domestic), i.e., the mean annual abstraction of freshwater by sector divided by the mean annual total renewable freshwater resource at the country level, expressed in percentage terms.

Water exploitation index	Baseline value 2010*	Value reported in the	
		previous reporting cycle 2011**	Current value 2014
<i>Total</i>	0.006	1.11 %	0.81 %
Agriculture			0.16 %
Industry ^a			0.35 %
Domestic use ^b			0.25 %

^a the figure includes both water abstraction for manufacturing industry and for energy cooling.

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

*According to the European Environmental Agency report „Towards efficient use of water resources in Europe” (2012), Latvia has a lowest water exploitation index (the ratio of annual freshwater abstraction to long-term water availability) among the EU Member States. According to the abovementioned report, the Latvian WEI was 0,006 in 2010. The report is publicly available in the Internet: <http://www.eea.europa.eu/publications/towards-efficient-use-of-water>

**According to the Latvian water use statistics, a national water exploitation index for 2011 was recalculated and expressed as percentage taking into account total annual freshwater abstraction and availability of both freshwater resources - groundwater and surface water resources. It should be taken into account that only

explored and appraised groundwater resources are taken into account for calculation of the water exploitation index. If also potential groundwater resources were counted, the water exploitation index would be even lower.

Part Three

Targets and target dates set and assessment of progress

For countries that have set 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 the relevant target areas (e.g., baseline conditions, provisional targets, etc.). 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. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

Latvia is obliged to reach completely the requirements set by EU directive on drinking water by the 2015.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The Strategy envisages to implement measures for provision of high-quality drinking water in order to ensure a such water quality that does not compromise human health.

The Public Health Strategy 2011-2017 sets the requirement to inform the public on the quality of drinking water regularly giving advice how to improve it individually in the cases when local domestic networks are affecting it adversely.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

With adoption of the Regulations of the Cabinet of Ministers Nr. 235 on the obligatory requirements for drinking water safety and quality (2003) Latvia has transposed and implemented the requirements resulting from the Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption. Therefore all management measures regarding drinking water surveillance and control, monitoring, informing and reporting correspond to EU requirements. Health Inspectorate of Latvia is the responsible state authority for surveillance and control of drinking water. The system of allocation of special normatives for selected parameters naturally elevated in Latvian groundwater provides effective way how to address the issue of inappropriate drinking water quality in the line with WHO guidelines. It gives reasonable mechanism for water suppliers and stimulates them to raise funds and elaborate programs of measures to arrange their water treatment technologies and networks` infrastructure. The national regulations foresee washing, cleaning and disinfection of water pipes and related facilities before starting exploitation or after repair works of water supplying system as well as prophylactic disinfection not rarely than two times per year in order to improve the microbiological quality of drinking water. By the end of 2015, the Health Inspectorate has assigned special normatives for 86 drinking water supplying systems out of approx. 1132 registered public water networks, mainly for small ones. The mentioned special normatives cover iron, sulphate, ammonium, chlorides and manganese.

Owing to the implementation of environmental policy plans the enhancement of drinking water quality has been achieved, especially through reduction of iron concentration due to establishing or modernization of iron removal facilities and/or improvement of obsolete pipeline infrastructure.

Health Inspectorate of Latvia performs regular inspection of all 1132 public water networks.

3. Assess the progress achieved towards the target.

Certain 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 and 14 % in 2015. 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, correspondingly). The proportion of inhabitants receiving water with good quality has increased from ~63 % in 2005 to ~75 % in 2009 and ~79 % in 2012 and ~81 % in 2015. 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.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

As Latvia is obliged to reach completely the requirements set by EU directive on drinking water by the 2015 (or issue temporary special requirements for drinking water), there is no need to revise the target for the moment. The possible revision is probable in the light of joint actions within EU.

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

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. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background 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. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Not relevant.

3. Assess the progress achieved towards the target.

Not relevant.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

Not relevant.

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

There were no significant outbreaks and incidence of infectious diseases related to water is low for many years. Routine infectious diseases surveillance and control functions are implemented in the country according to the Epidemiological Safety Law and other regulatory acts.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

Joining the European Union, Latvia committed 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 98/83/EC 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 not yet ended.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The Strategy sets targets for the improvement of access to drinking water supply services. According to the Strategy, the percentage of the population receiving drinking water that complies with the requirements of the legislation should be 59% in 2012 and 66% in 2015.

It should be taken into account 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 yard.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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. Another pieces of legislation state that water supply and sanitation solutions should be provided during the building or renovation process and, if possible, a centralized water supply and waste water collection must be used.

To ensure resources necessary for the achievement of the abovementioned targets, Directive specific implementation and financing plan for the Council Directive 98/83/EEC was elaborated in 2001. Later 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, 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 facilitate development and implementation of water services infrastructure projects information on legislative requirements and best practises was aggregated in 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 infrastructure development. For the next planning period (2014 -2020) similar activities for relevant priorities are foreseen.

3. Assess the progress achieved towards the target.

In 2014, 67.7% of the population was provided with drinking water supply services that corresponded to the requirements of the legislation. So the target for 2015 determined by the Environmental Policy Strategy 2009-2015 was achieved. At the same time not all inhabitants of the agglomerations subject to the requirements of the Directive 98/83/EC have access to the centralized water supply; therefore they use individual wells or other individual solutions. Additional work and resources will be needed in the following years to ensure full achievement of the targets.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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. 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.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

Joining the European Union, Latvia made a commitment to fulfil requirements of the EU legislation, inter alia Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment. Since Latvian infrastructure of sanitation and wastewater treatment was not in line with the requirements of Directive 91/271/EEC and was outdated, enormous investments were needed to ensure compliance with this directive. Therefore a transitional period was agreed during the accession negotiations for the implementation of Directive 91/271/EEC: Latvia promised to ensure 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.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The Environmental Policy Strategy 2009-2015 sets targets for the improvement of sanitation services. According to the Strategy, the percentage of the population (all population, not only of agglomerations) receiving waste water management (i.e. sanitation) should be 56% in 2012 it and 62% in 2015.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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 centralised collecting system. Another pieces of 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. To ensure resources necessary for the achievement of the abovementioned targets, Directive specific implementation and financing plan for Council Directive 91/271/EEC was elaborated in 2001. Later relevant targets, priorities, activities and financing plans to ensure the EU funding for the sanitation and wastewater treatment targets 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 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 organised to help local authorities and companies of water services to gain investments and to find the most appropriate solution for infrastructure development. For the next planning period (2014 -2020) similar activities are foreseen for relevant priorities.

3. Assess the progress achieved towards the target.

In 2014, 63.1 % of the population (or 80.4% of the population in agglomerations of more than 2000 p.e.) was provided with waste water management services that corresponded to the requirements of the legislation. So the target for 2014, determined by the Environmental Policy Strategy 2009-2015, was achieved.

At the same time not all inhabitants of these agglomerations have access to centralised water supply and sewerage services, therefore either individual solutions are in place or inhabitants are provided with only one of the above-mentioned services – centralised water supply or centralised sanitation. Additional work and resources will be needed in the following years to ensure full achievement of the target.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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. 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.

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. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water from networks.

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.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

A number of legal actions have been taken. 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.

Governmental 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. To ensure resources necessary to achieve the abovementioned targets, Directive specific implementation and financing plan for the Council Directive 98/83/EC was elaborated in 2001. Later 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 organised to help local authorities and companies of water services to gain investments and find the most appropriate solution for infrastructure development. For the next planning period (2014 -2020) similar activities are foreseen for relevant priorities.

3. Assess the progress achieved towards the target.

During 2012-2014 water supply networks were extended by building of 457 km of new pipelines and reconstruction of 451 km of the existing ones. Additional work and resources will be needed in the following years to ensure full achievement of the target.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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. 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.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water from networks.

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 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 not yet ended.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

A number of legal actions have been taken. 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.

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

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

Governmental 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 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.

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). To ensure resources necessary to achieve the abovementioned targets, Directive specific implementation and financing plan for the Council Directive 91/271/EEC was elaborated in 2001. Later 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. For the next planning period (2014 -2020) similar activities are foreseen for relevant priorities.

3. Assess the progress achieved towards the target.

During 2012-2014 additional 479 km of wastewater collection networks were built and 355 km of the existing networks were reconstructed.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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. This target is 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.

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. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water from networks.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Governmental 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.

Governmental Regulations No 235 “Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control thereof” (2003) 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 organised by the owner or the operator of the business. Drinking water suppliers and food producers shall develop a monitoring programme each year and co-ordinate it with the Health Inspectorate. 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. Assess the progress achieved towards the target.

Local authorities actively implement projects aimed at improvement and development of water supply infrastructure. In the period from 1995 to 2014 ~ 1 178,44 million Euro were invested in the development of water services (including both water supply and sanitation). However, additional investments are needed in 2014-2020 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 the supply system have gradually decreased from 16.8% of used water in 2004 to 6.5% of used water in 2013.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water and wastewater from networks.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Governmental 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, Governmental 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 Governmental 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.

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. Assess the progress achieved towards the target.

Local authorities actively implement projects aimed at improvement of water supply and sewerage services. In the period from 1995 to 2014 ~ 1 178, 44 million euro were invested in the development of water services (including both water supply and sanitation). However, additional investments are needed in 2014-2020 to ensure achievement of all targets.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

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.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. One of the policy results envisaged in the Strategy is to ensure water quality that does not compromise human health.

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 of this report, the transitional period has ended. The full achievement of the target is expected not earlier than by the end of 2015.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Governmental 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.

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, Directive specific implementation and financing plan for the Council Directive 91/271/EEC was elaborated in 2001. Later 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. Assess the progress achieved towards the target.

The amount of insufficiently treated wastewater discharged to the environment gradually decreases owing to water infrastructure development projects. However, additional investments are needed in 2014-2020 to ensure achievement of all targets.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

X. Occurrence of discharges of untreated storm water overflows from wastewater collection systems to waters within the scope of the Protocol (art. 6, para. 2 (g) (ii))

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. One of the policy results envisaged in the Strategy is to ensure water quality that does not compromise human health.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Governmental 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 2010-2015 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. This measure is also envisaged in the reviewed river basin management plans for the period from 2016 to 2021.

3. Assess the progress achieved towards the target.

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, it is planned to attract the EU funding for improvements of storm sewers in several Latvian cities and towns in 2014-2020.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

XI. Quality of discharges of wastewater from wastewater treatment installations to waters within the scope of the Protocol (art. 6, para. 2 (h))

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water from networks. Besides, one of the policy results of the Strategy is to ensure water quality that does not compromise human health.

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 when this questionnaire is filled in, the transitional period has ended.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Governmental 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, Directive specific implementation and financing plan for the Council Directive 91/271/EEC was elaborated in 2001. Later 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. From 1995 until 2014 ~ 1 178,44 million Euro were invested in the water services development, mainly in wastewater collection & treatment and water preparation and supply infrastructure, 65.7% of the investments came from the foreign sources, including the EU funds. In 2012-2014, 201,48 milj euro were invested in the water services infrastructure development.

3. Assess the progress achieved towards the target.

During 2012-2014, 130 existing wastewater treatment plans were reconstructed and 84 new wastewater treatment plants were built. The total amount of discharged wastewater has decreased two times, comparing with the beginning of 1990ties. During the last years the total amount of counted up wastewater discharges slightly fluctuates as 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. Due to reconstructed and new wastewater treatment plants the total amount of pollution discharged by these treatment plants to environment has decreased: in 2008 -2013 the total discharge of nitrogen with waste water has decreased by 48.5%, the total discharge of phosphorous- by 54% and the total discharge of BOD5 - by 42.4%.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. One of the policy results of the Strategy is to ensure water quality that does not compromise human health. The Strategy also declares that it is necessary to evaluate possible economic instruments, which could facilitate the management of sewage sludge.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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. Assess the progress achieved towards the target.

In each year during period from 2012 to 2014 roughly 20 000 t of the sewage sludge were produced in Latvia. In 2012, almost 76% of this sludge was reused (in agriculture, for greening or recultivation and for composting and other needs); 1% of the produced sludge was disposed of in waste landfills and 23% placed for temporary storage. In 2013, the respective figures are the following: reuse: 65%, landfilling: 1%, temporary storage: 34%. In 2014, the figures are the following: reuse: 48%, landfilling: 5%, temporary storage: 47%. It is necessary to further reduce amounts of sewage sludge placed for a temporary storage.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

The new Environmental Policy Strategy 2014 -2020 aims also to ensure sustainable use and protection of soil. The following action - to develop the national planning document for the management of sewage sludge up to 2017 is envisaged in the soil&subterranean depths chapter of the Strategy.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.
2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.
3. Assess the progress achieved towards the target.
4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.
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), first part)

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that water quality complies with the legislative requirements, to diminish eutrophication of inland waters and to ensure quality of water supply and sanitation services. The following action is envisaged in the water chapter of the Strategy: to implement measures for

provision of high-quality drinking water and to continue improvement of the out-of-date water management infrastructure for reducing the loss of water from 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 38% in 2008 up to 88% in 2015.

Besides, Law on Water Management (2002) and river basin management plans aim at good status of all surface waters and groundwater. However, it was clear from the river basin management plans that ~ 27% of surface water bodies will not achieve a good status by 2015; therefore the realistic deadlines and reasons for extensions were provided in the river basin management plans.

Only the capital Riga uses surface water for the drinking water production. Groundwater is used both for centralized and individual drinking water supply in the rest of Latvia. Surface waters for the supply of the capital are extracted from 2 water bodies – the Daugava River (a reservoir of Riga hydropower plant) and Lake Mazais Baltezers. Waters of Lake Mazais Baltezers are not used directly, but for artificial recharge of groundwater resources, from which later drinking water is produced. It is not planned to use any other surface waters for drinking water production.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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. Governmental 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 be 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.

The first River basin management plans (from 2010 to 2015) were adopted in 2009. They include the assessment of current water quality, evaluation of the causes of the problems and the measures aimed at improvement of water status.

3. Assess the progress achieved towards the target.

In the current river basin management plans for period from 2016 to 2020 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. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

Latvia was obliged to reach completely the requirements set by EU Directive 2006/7/EC on management of quality of bathing waters by the 2015 – all bathing waters shall qualify at least as sufficient quality waters. Latvia started to implement the EU Directive 2006/7/EC in 2008 and in 2011 was able to assess the quality of bathing waters based on all observations` data from the last 4 bathing seasons, as required by the Directive. In 2011 three official bathing sites (~7 %) were classified as being of poor quality. Since then the bathing water quality is steadily improving – in 2012 and afterwards all sites have been classified as having at least sufficient water quality. In 2014 and 2015 Latvia has only excellent and good quality bathing waters. In 2015 the number of excellent bathing sites reached 36 (80 %) compared to 34 (~74 %) in the previous year. No bathing site was characterized as showing mass development of blue green algae in the last years.

As the requirements and methodology for assessment of bathing waters in EU was changed since the approval of Directive 2006/7/EC, it is impossible and not necessary to follow-up the previously adopted target set for bathing waters with respect to amount of not acceptable water samples (as stated in the Environmental Policy Strategy 2009-2015 and reported under the Protocol in 2013). The main goal set in the Directive 2006/7/EC is to ensure safe water quality with regard to human health expressed as acceptable long-term bathing water quality (excellent, good or at least sufficient). The goal based on the Directive 2006/7/EC is re-confirmed in the Environmental Policy Strategy 2014-2020.

One of the measures still foreseen in order to reach acceptable bathing water quality is to promote awarding of international “blue flag” certificate to bathing sites. The number of “blue flag” bathing sites is gradually increasing and reached 16 sites in 2015 compared to 10 in 2013.

The main factor influencing bathing water quality is discharge of wastewaters into natural waters, however diffuse pollution originated from fertilizers applied on agricultural lands and transboundary pollution can be mentioned, as well. So, the general goal is to reduce pollution of natural waters in general as it was stated in the Action program for pollution reduction and quality assurance of priority fish-waters and bathing waters (2004) as well as in the river basin management plans elaborated according to Water framework directive and approved in 2009 for the time period 2009-2015. Hence, the measures dedicated to improve bathing water quality indirectly relates to measures for improvement of wastewater treatment, promotion of good agricultural practice and transboundary cooperation.

The Public Health Strategy 2014-2020 has mentioned the elaboration of water profiles regarding all bathing sites as a tool for informing of the public with respect to safe and healthy bathing. Besides, it stresses the necessity to inform the public on the quality of bathing waters regularly.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Since 2005 bathing water monitoring was performed at 276 sites including both marine coastal and inland waters significantly increasing the number of places monitored compared to 2004 when 32 marine bathing places were surveyed only. Unfortunately, due to changes in population density in many rural regions (enhanced rates of internal and external population migration) and due to financial reasons amount of bathing sites monitored has reduced since 2010. 46-47 officially approved bathing sites with national or regional significance were monitored afterwards gradually increasing in number and reaching 55 sites in 2015. These 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. Regulations of the Cabinet of Ministers Nr. 608 on the monitoring of bathing waters, quality assurance and requirements for public information have been adopted in 2010 transposing requirements of the Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC into national legislation. Besides, one additional legal act - Regulations of the Cabinet of Ministers Nr. 38 on the establishment and maintenance of bathing sites adopted in 2012 regulates the requirements for standards of hygiene and safety at bathing sites dedicated to improve local bathing water quality. Information on bathing water quality is regularly provided to local municipalities and to the public through mass media and internet. The river basin management plans according to Water framework directive were adopted in the late 2009, covering aspects of bathing water management, as well. Water profiles of bathing sites according to Directive 2006/7/EC have been elaborated in 2011, being regularly updated and supplemented by water profiles for newly established official bathing sites. They are characterizing the quality trends of bathing waters and influencing factors with the aim to maintain or improve the water quality according to requirements laid down in the Directive 2006/7/EC. All water profiles are publicly available at the Internet homepage of Health Inspectorate and the public is invited to comment them and provide additional related information.

Since 1998 Latvia participates in the program of international eco-certificates "Blue Flags" awarded to voluntary bathing places ensuring compliance with a 29 criteria associated with water quality, safety, information and environmental education. Since 2004 a national eco-certificate for bathing places is awarded helping interested owners of bathing places to prepare to gain the international "Blue Flags" certificate. A special national jury has been established for consideration of applications for awarding of mentioned certificates and comprising participants from different governmental institutions and non-governmental organizations.

The national system of operational warning about cases when bathing is limited or prohibited is established.

3. Assess the progress achieved towards the target.

Since 2008 Latvia started to implement the requirements of the new bathing water directive 2006/7/EC stating that the bathing water quality must be assessed according to all data from the last 4 bathing seasons. Hence, it was possible for the first time in 2011. 22 bathing sites were characterized as being of excellent water quality, 17 – good quality, 3- sufficient and 3 – poor quality. In 2012 the quality of bathing sites was improved as 17 bathing places we characterized being of excellent quality, 18 – good and 5 of sufficient quality. Since 2014 Latvia has only excellent and good quality bathing waters. In 2015 the number of excellent quality bathing sites reached 36 (80 %) compared to 34 (~74 %) in the previous year.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.
2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.
3. Assess the progress achieved towards the target.
4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.
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. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

Latvia was obliged to reach completely the requirements set by the EU Directive 2006/7/EC on management of quality of bathing waters by the 2015 – all bathing waters shall qualify at least as sufficient quality waters. All the requirements applicable for waters used for bathing are pertinent for enclosed waters generally available for bathing, as well.

The Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC sets completely new criteria for bathing water quality in the light of advanced scientific knowledge. Only two microbiological parameters – E.coli and intestinal Enterococci must be monitored.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

Latvia started to implement the Directive 2006/7/EC in 2008. Regulations of the Cabinet of Ministers Nr. 608 on the monitoring of bathing waters, quality assurance and requirements for public information have been adopted in 2010 transposing requirements of the Directive 2006/7/EC.

Information on bathing water quality is regularly provided to local municipalities and to the public through mass media and internet. The river basin management plans according to Water framework directive were adopted in the late 2009, covering aspects of bathing water management, as well.

Since 1998 Latvia participates in the program of international eco-certificates “Blue Flags” awarded to voluntary bathing sites ensuring compliance with 29 criteria associated with water quality, safety, information and environmental education.

3. Assess the progress achieved towards the target.

In 2011 22 bathing sites were characterized as being of excellent water quality, 17 – good quality, 3- sufficient and 3 – poor quality. In 2012 the quality of bathing sites improved as 17 bathing places were characterized being of excellent quality, 18 – good and 5 of sufficient quality. Since 2014 Latvia has only excellent and good quality bathing waters. In 2015 the number of excellent quality bathing sites reached 36 (80 %) compared to 34 (~74 %) in the previous year.

Information on bathing water quality is regularly provided to local municipalities and to the public through mass media and internet. Public is involved in the management of bathing water quality having possibility to suggest bathing sites to be monitored and to submit its own observations to the state competent authority.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims to ensure that transmission of pollutants from polluted sites is limited, and remediation of the sites is carried out. It defines specific targets for the remediation of contaminated sites. So, the area of contaminated (polluted) sites that has undergone remediation shall be 5 ha in 2013 and 45 ha in 2015.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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.

Relevant targets, priorities, activities and financing plans to ensure EU funding for the remediation of contaminated sites 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.

3. Assess the progress achieved towards the target.

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. In 2012 remediation was completed in waste dump "Kosmoss"- historically polluted site with area of 5.16 ha. In 2015 remediation was completed in waste dump in Olaine. The restoration works have been carried out in area of nearly 3 ha. 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. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

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:

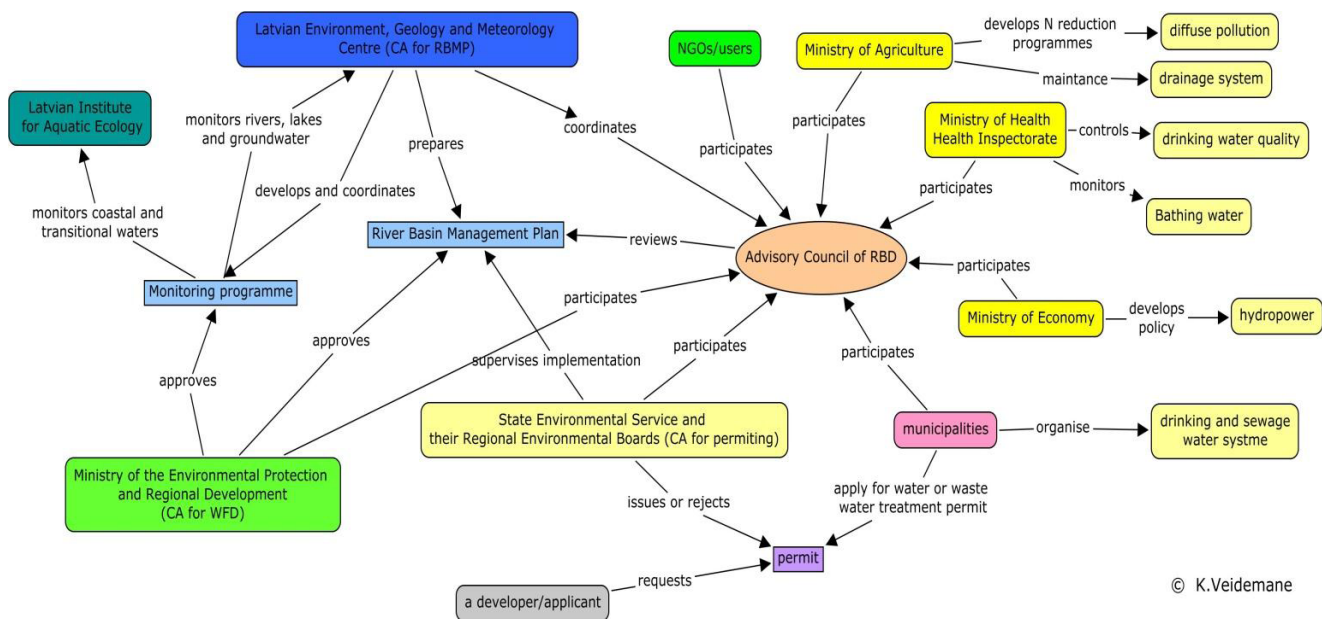
1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.

The Environmental Policy Strategy 2009-2015 aims at ensuring water quality in line with the laws and regulations, diminishing eutrophication of inland waters and ensuring quality of water supply and sanitation services. 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.

2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.

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



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Figure 1: WFD implementation structure in Latvia

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

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

Daugava, Gauja, Lielupe and Venta river basin management plans were developed and published in December 2009 to facilitate water management and improve water status. River basin management plans determine water quality objectives and indicate measures for improvement and protection of water status. Programmes of measures of the river basin management plans contains basic measures, which originates from the national and the EU regulations, and supplementary measures for improvement of water quality.

During the last few years several cross-border projects were implemented to enhance cooperation in the river basin management with the neighbouring countries Lithuania and Estonia.

3. Assess the progress achieved towards the target.

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 latest data of surface water quality reassessment 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.

4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

There is no need to revise the target or the target date for the moment.

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

XX. Additional national or local specific targets

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

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.
2. Describe the actions taken (e.g., legal/regulatory, financial/economic and informational/educational, including management measures) to reach the target, having regard to article 6, paragraph 5, and, if applicable, the difficulties and challenges encountered.
3. Assess the progress achieved towards the target.
4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.
5. If you have not set a target in this area, please explain why.

Additional targets are not needed for the moment as all topical issues in water management are already covered.

Part Four

Overall evaluation of progress achieved in implementing the Protocol

In this part of the summary report, Parties shall provide an analysis and synthesis of the status of implementation of the Protocol. Such an overall evaluation should not only be based on the issues touched upon in the previous parts, but should also include, as far as possible, a succinct overview of implementation of activities related to, for example:

- (a) Response systems (article 8);
- (b) Public awareness, education, training, research and development and information (article 9);
- (c) Public information (article 10);
- (d) International cooperation (article 11);
- (e) Joint and coordinated international action (article 12);
- (f) Cooperation in relation to transboundary waters (article 13);
- (g) International support for national action (article 14).

This analysis or synthesis should provide a succinct overview of the status of and the trends and threats with regard to waters within the scope of the Protocol sufficient to inform decision makers, rather than an exhaustive assessment of these issues. It should provide an important basis for planning and decision-making as well as for the revision of the targets set, as needed.

Suggested length: up to 3 pages

Many provisions of the Protocol on Water and Health have been implemented in Latvia. Progress has been made regarding the access to drinking water and sanitation - most part of the population was provided with drinking water supply services and waste water management services that corresponded to the requirements of the legislation. Provisions regarding drinking water quality, quality of surface waters and groundwater, wastewater management and sustainable uses of water resources exist.

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-governmental 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.

Generally, the EU targets set for drinking water for previous period with respect to medium-sized and large water supplying systems and for bathing water quality are met. At the same time not all inhabitants have access to centralised water supply and sewerage services, therefore either individual solutions are in place or inhabitants are provided with only one of the above-mentioned services – centralised water supply or centralised sanitation. State monitoring in relation to small drinking water systems is reduced however several local municipalities carry out water quality analysis of decentralized systems like private wells. Additional work and resources will be needed in the following years to ensure full achievement of the targets – especially in small settlements taking into account that there is a very low population density in Latvia.

Much has been done to improve wastewater treatment and prevent leakages from outdated sanitation infrastructure and thereby reduce the total load of pollution from point sources to the environment. Due to reconstructed and newly built wastewater treatment plants as well as reconstructed and extended networks of

centralized sewerage the total amount of pollution discharged into the environment has decreased substantially. The compliance with standards for wastewater treatment (particularly for the parameters N and P) was achieved in the almost all big agglomerations with p.e.>10 000. The assessment regarding the achievement of the compliance with standards for wastewater treatment in agglomerations with p.e. between 2000 and 10 000 will be made shortly.

Groundwater is the main source for centralized and individual drinking water supply in Latvia. Only the capital Riga uses surface water for the drinking water production. At the same time the quality of drinking water produced from surface water is high and ensure compliance with the requirements laid down in the national and the EU legislation. In the current river basin management plans for the 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.

According to the Latvian water use statistics less than 1% of the available freshwater resources in Latvia are used currently, therefore draught and water scarcity is not the typical issue. Short-time cases regarding water quantity have been observed in some regions, but only under specific weather conditions. Water pollution from point and diffuse sources are prevailing issues. Nevertheless in the frame of the EU as well as national legislation Latvia tries to reach compliance with the established provisions and requirements. The ecological quality of surface water, mainly regarding its biological elements –flora and fauna, is the topical problem in the context of the EU Water Framework Directive provisions. Much has already been done, however the latest data of surface water quality reassessment shows that for ~78% of all water bodies it is still a need to implement measures for the improvement of water quality; for 12% of surface water bodies an extension of the deadline to reach good water status is applied, 35.5% of all water bodies are identified as being at risk of failing to meet their environmental objectives. To improve overall water status by motivating people to establish connections from their households to centralized sewerage and thus provide better wastewater collection and treatment, the Law on Water Services and related regulations with regard to individual waste water systems has been developed in 2015.

The additions efforts should be made to reduce amounts of sewage sludge placed for a temporary storage. To tackle with this problem it is envisaged to develop the national planning document for the management of sewage sludge.

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 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:

With Lithuania:

- Agreement between the Ministry of Environmental Protection and Regional Development of the Republic of Latvia and the Ministry of Environment of the Republic of Lithuania on Management of Nature Conservation in Transboundary Context (signed on 24 May 2001);
- Technical Protocol between the Ministry of Environmental Protection and Regional Development of the Republic of Latvia and the Ministry of Environment of the Republic of Lithuania on Exchange of Information on Emergency Ecological Situations (signed on 24 May 2001);
- Agreement between the Government of the Republic of Latvia and the Government of the Republic of Lithuania on early notification of nuclear accidents, Exchange of information and cooperation in the field of nuclear safety and radiation protection (signed on 3 October 2003);
- Technical protocol between the Ministry of the Environment of the Republic of Latvia and the Ministry of Environment of the Republic of Lithuania on Cooperation in Managing the International River Basin Districts (signed on 24 October 2003).

With Belarus:

- Agreement between the Government of the Republic of Latvia and the Government of the Republic of Belarus on Cooperation in the field of environmental protection (signed on 21 February 1994);
- Agreement between the Government of the Republic of Latvia and the Government of the Republic of Belarus on basic principles for transboundary cooperation (signed on 16 May 1998).

With Estonia:

- *Agreement among the Government of the Republic of Latvia, the Government of the Republic of Estonia and the Government of the Republic of Lithuania on Cooperation in the field of environmental protection (signed on 21 July 1995);*
- *Agreement between the Government of the Republic of Latvia and the Government of the Republic of Estonia on Environmental Impact Assessment in a Transboundary Context (signed on 14 March 1997);*
- *Agreement between the Ministry of Environmental Protection and Regional Development of the Republic of Latvia and the Ministry of the Environment of the Republic of Estonia on Management of Nature Conservation in Transboundary Context (signed on 27 January 2000);*
- *Agreement between the Ministry of Environment of the Republic of Latvia and the Ministry of the Environment of the Republic of Estonia on co-operation in protection and sustainable use of transboundary water courses (signed on 24 October 2003).*

Part Five

Information on the person submitting the report

The following report is submitted on behalf of:

State Secretary of Ministry of Health Republic of Latvia in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report:

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Signature:

Date: 13.04.2016.

Submission

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, by **18 April 2016**. 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 third session of the Meeting of the Parties.

Parties are requested to submit, to the two addresses below, an original signed copy by post and an electronic copy either on a CD-ROM or by e-mail. Electronic copies should be available in word-processing software, and any graphic elements should be provided in separate files.

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