

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

Executive summary

Overall situation in water supply and sanitation, environmental water quality as well as relating health risks is satisfactory in the Czech Republic. The national targets have been completed or are fulfilled continuously, only in few targets its deadlines have been postponed due to other more emergent tasks. In one case the fulfilment was found more difficult than expected – this is the issue of reaching overall good ecological status of surface and groundwaters according to the EU Water Framework Directive (WFD). The quality of these waters is continuously improving in most of the parameters followed, but because some parameters are difficult to change, the general assessment according to the WFD shows very little progress, which is in contrast with real situation.

One of the major achievements during the reporting period was introduction of water safety planning concept in Czech public health regulation. All public water supply operators are obliged to develop water safety plans (risk assessment) by 2023 and include relevant remedial and operational measures in operational rules, which have to be approved by Regional Public Health Authorities. Clear structure of risk assessment was included in legislation and detail guidelines have been developed for operators as well as website with other supporting information (<http://www.szu.cz/tema/zivotni-prostredi/wsp>). The first plans were developed in 2018.

Due to other working load of the members of national Task Group for the implementation of the Protocol no recent update of the national targets has been managed. The last update of the targets was done in 2012 and most of them seems not to be actual, but completed.

Part one General aspects

1. Were targets and target dates established in your country in accordance with article 6 of the Protocol?

YES

2. Were targets and target dates published and, if so, how?

The original wording of the targets and other supplementary information is given in the document “National Targets of the Czech Republic to the Protocol on Water and Health (Part I: Required Subjects for Setting National Targets and the Current State of their Resolution in the Czech Republic; Part II: Existing Tools for Improving the Current State; Part III: Proposal of Targets)” of January 2008, which was approved by the government of the CR on 9.4.2008.

The revised targets are given in the document “National Targets of the Czech Republic to the Protocol on Water and Health (update 2012)” and are prepared for presentation to the government of the CR for approval in the first half of 2013. Additional information regarding the update is also available in the document “Assessment of the Fulfilment of the National Targets of the CR Regarding the Protocol on Water and Health and a Proposal for their Updating – as of 1.1.2012”, May 2012.

All these documents are available at specialised web pages dedicated to the Protocol: <http://www.szu.cz/tema/zivotni-prostredi/protokol-o-vode-a-zdravi>. The targets were communicated to the Secretariat.

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.

The Protocol on Water and Health was ratified by the Czech Republic in 2001. In 2002, the Main Hygiene Officer of the Czech Republic from the Ministry of Health established the Task Group for preparation of proposals for the national targets according to the Protocol (or The Task Group for implementation of the Protocol). The Task Group incorporates representatives of all three sectors responsible for water (the Ministry of Health, the Ministry of Environment and the Ministry of Agriculture). This team submits every year an updated Report on implementation of targets according to the Protocol (Art. 6 to 11) and the progress in these issues to the Czech intersectoral Council for Health and the Environment. The main coordinating body (and the body responsible for implementation the Protocol in the Czech Republic) is the Ministry of Health. The team is chaired by the expert from the National Institute of Public Health.

4. Was a programme of measures or action plan developed to support implementation of the targets? If so, please briefly describe that programme or plan, including how financial implications were taken into account.

There was no programme of measures or action plan developed to support specifically implementation of the targets under the Protocol. However, at the time we were establishing the targets, there were already several programmes launched which supported the implementation of several targets. E.g. Development Plans of Water Supply and Sewage Systems for Individual Regions (PRVKÚK) and financial mechanism guaranteed by responsible ministries and regions. However, not all targets were supported by such action plans.

5. What has been done in your country to ensure public participation in the process of target setting in accordance with article 6, paragraph 2, and how was the outcome of public participation taken into account in the final targets set?

During the initial process of targets setting, several environmental NGOs were invited to join the working team and propose possible targets. Only one NGO took the opportunity and suggested one target, which were incorporated into another target in later stage. Proposal for targets was discussed within intersectoral commentary process (where also Regional authorities are included) before the final version was agreed in 2008. This process was not repeated in revision process, because no new targets were included in that stage.

6. Please provide information on the process by which this report has been prepared, including information on which public authorities had the main responsibilities and what other stakeholders were involved.

The report was prepared by members of intersectoral Task Group for implementation of the Protocol, i. e. the ministries of health, environment and agriculture were involved, some of them using data and advice from respective inferior agencies. Other stakeholders were not involved.

7. Please report any particular circumstances that are relevant for understanding the report, including whether there is a federal and/or decentralized decision-making structure.

The report was prepared on central level, same is the decision-making structure regarding the targets.

Part two

Targets and target dates set and assessment of progress

I. Quality of the drinking water supplied (art. 6, para. 2 (a))

For each target set in this area:

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

Target 1: To reduce cases of non-compliance with limit values for drinking water quality (non-compliance with limit values expressed in %). For water supply systems with population over 5000 up to 0.1% for indicators with NMH (NMH = maximum limit value (parametric value)) and up to 1.0 % for indicators with MH (MH = limit value (limit values of indicators)). For water supply systems with population below 5000 up to 1.0% for indicators with NMH and up to 3.0 % for indicators with MH.

Fulfilment deadline: 31. 12. 2012

Baseline and progress:

Size of water supply system (population)	Type of limit	Target	Non-compliance rate		
			2005	2008	2017
≤ 5,000	> NMH	≤ 1 %	0.43 %	0.32 %	0.48 %
	> MH	≤ 3 %	2.15 %	1.71 %	1.81 %
> 5,000	> NMH	≤ 0.1 %	0.05 %	0.03 %	0.045 %
	> MH	≤ 1.0 %	0.92 %	0.63 %	0.36 %

NMH = maximum limit value (parametric value)

MH = limit value (limit values of indicators)

Target 2: To publish a reissue or an update of awareness materials on wells.

Deadline: 31.12.2010. Change to the deadline: 31.12.2014.

Target 3: To continue the implementation of a support program for the replacement of lead pipes in residential buildings (Ministry for Regional Development).

Deadline: every year, up to 2013.

Due to the subsidies of the Ministry for Regional Development, the program was run from 2004 to 2017. The lead pipes (plumbings) were replaced for safe pipes at least in hundreds of premises. Although the support program was extended by 4 years than originally planned, finally it was closed due to low interest of applicants. It does not mean that all lead plumbings in residential buildings were replaced (there is not statistics how many left), but it rather mirrors aversion to discomfort relating to pipe replacement or high cost needed to cover (subsidy did not cover 100 %).

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Target 1: The actions had been adopted before setting the target: regulatory framework requiring certain water quality from all producers and distributors, enforcement mechanisms, educational (technical) support of producers (water supply operators).

Target 2: None so far due to changes of approach to secure water safety – introduction of water safety planning concept. Older version of guidelines (of 2003) providing basic information on well management and protection is still available on website of the NIPH.

Target 3: Ministerial subsidy program running for 13 years. Lead pipe replacement based on voluntary basis.

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

Target 1: See the table above, the target was fulfilled. The quality is generally considered as good and safe. Little higher non-compliance was observed over the last 5 years for pesticides and especially for their non-relevant metabolites. However, it was not due to higher pollution, but better monitoring.

Target 2: The update of guidelines for safe management of household wells was postpone. The reason was that new concept of safety (risk-based approach) has been introduced in Czech legislation and water supply sector since 2016. Special guidelines on water safety planning for public supply was considered as clear priority.

Target 3: See above.

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

The targets contribute to the Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.1.1).

II. Reduction of the scale of outbreaks and incidents of water-related disease (art. 6, para. 2 (b))

For each target set in this area:

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

Target 4: To improve the method of examination and evaluation of water-related disease outbreaks (by, among others, introducing a system for classification of disease outbreaks by weighting of evidence).

Deadline: 31.12.2009

Target 5: To publish, on regular basis (1 / every five years), a summary of identified water-related disease outbreaks, including the identified causes, etc. The first report for the period of 2006 to 2010.

Deadline: 31.12.2011

In evaluating disease outbreaks, we have no reason to assume that widespread and serious disease outbreaks elude identification. However, it is true that a large number of smaller and less serious disease outbreaks may evade examination. In future therefore, it is necessary to improve the method of diagnosis, examination and evaluation of water-related disease outbreaks, by, among others, introducing a system for classification of disease outbreaks by weighing of evidence, and to publish, on regular basis, summaries of outbreaks, including their causes, in order to better prevent failures of water resources which serve as drinking water resources.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Target 4: The two day workshop took place on 30-31 May 2016 at the premises of the National Institute of Public Health in Prague. The workshop with tutors from the WHO, Norway and England took place under the umbrella of the 2014-2016 programme of work of the Protocol on Water and Health and supported by WHO Regional Office for Europe and Norwegian Institute of Public Health. The workshop was attended by 27 epidemiologists and environmental health professionals from 13 regions and NIPH. The workshop addressed the situation of water related diseases and existing surveillance systems in the Czech Republic, Norway and in the WHO European Region. It introduced main principles and steps of an outbreak investigation with special consideration to risk communication. It further addressed epidemiological investigation of waterborne outbreaks, including practical table top exercises using computer-based tools for outbreak investigation. The meeting participants identified gaps and shortcomings of the current Czech surveillance and outbreak management systems and developed set of key recommendations towards their short-term and long-term improvement.

Target 5: System of data collection of water-related outbreak was established and verified.

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

Target 4: The workshop mentioned above was organized and experts from regions were trained in outbreak investigation. However, development of national guidelines for outbreak investigation is still ongoing.

Target 5: The first report for the period 1995 to 2005 was published in form of paper in scientific journal, the second report covering the period from 2006 to 2010 was published as internal report for Public Health Service, the data for the period from 2011 to 2015 was collected and the report is currently under development.

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

The targets contribute to the Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and also to the Goal 6 (by publishing experiences – lessons from previous outbreaks and identification of technical failures in water supplies).

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

For each target set in this area:

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

Target 6: To ensure that also the population living in the peripheral parts of cities, villages, and small villages is able to connect to the water supply system for public use. This measure, due to a small number of population in these areas, does not contribute, to a considerable extent, to the total number of population supplied.

Deadline: continuously.

Because of the small number of inhabitants at these locations, this measure no longer contributes significantly to the total number of people supplied. In accordance with the Development Plan for Water Supply and Sewerage Systems, the government financially supports municipalities that extend the water supply network to the peripheral parts of municipalities. Financial support must meet the criteria of the relevant programme.

The Development Plan for Water Supply and Sewerage Systems in the Czech Republic (PRVKÚ ČR, PRVKÚK), including updates, represents a medium-term and continuously updated concept for water supply and the sewerage sector, and are the basis for the use of European Community funds and national financial resources for the construction and renewal of water and sewerage infrastructure. They are used by the Ministry of Agriculture, Ministry of the Environment, regions (regional authorities), municipalities with extended powers (water authorities), municipalities, owners and operators of water supply and sewerage systems and the professional and general public.

Situation: In 2017, 10 027.4 thousand inhabitants of the total population of 10 584 thousand were supplied by the public water supply system, i.e. 94.7%. This is an increase of 0.5% of the supplied population compared to 2014. This upward trend in inhabitants supplied by the public water system is also expected in the coming years. Among other things, the subsidy programmes of the Ministry of Agriculture serve this purpose, their aim being to build public water supply systems, including related waterworks. The construction and reconstruction of existing facilities to improve water treatment technology, accumulation and pumping will contribute to improving the quality of drinking water.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Legislative conditions for fulfilment of the target have been created: the Act No. 274/2001 Coll., on water supply and sewerage systems for public use and the Decree No. 428/2001 Sb. Similarly, financial conditions (grant programmes of respective ministries, regions, cities, and villages) have been created.

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

Continuously, the target has successfully been met and situation is still little improving.

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

The targets contribute to the Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.1).

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

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

a) Target 7: To complete the construction and modernisation of water management infrastructure (wastewater treatment plants and sewerage for public use) and thereby ensure compliance with the requirements of Council Directive 91/271/EEC.

Deadline: 31. 12. 2015.

Targets 8 and 10 were combined into a single target 7 with an elaboration of the wording and a deadline of 31.12.2015. This is because target 8 already includes the majority part of target 10, the operation of wastewater treatment plants is conditional on their existence and the technology used. In both cases the target is compliance with Council Directive 91/271/EEC concerning urban waste-water treatment.

b) Target 8: To ensure quality and adequate waste water treatment in small settlements with less than 2,000 PE where sanitation for public use is provided in accordance with Directive 91/271/EEC.

Deadline: continuously.

Council Directive No. 91/271/EEC on urban waste water treatment has already been fully implemented in national legislation by Act No. 20/2004 Coll., amending Act No. 254/2000 Coll., on Water and the Amendments to Some Acts (Water Act), as amended, and Act No. 239/2000 Coll., on the Integrated Rescue System and Amendments to Certain Acts, as amended. Another important regulation is Government Order No. 401/2015 Coll., on the Indicators and Values of Permissible Pollution of Surface Water and Waste Water, Requirements for Permits for Discharging Waste Water into Surface Water and Sewerage Systems, and on Sensitive Areas that Set Waste Water Discharge Limits required by the Directive, and in some indicators even more strictly, and follows the previous Government Order No. 61/2003. Subsequently, the mandatory EC reports are submitted by the deadlines set by the Directive.

The aforementioned legislation obliges municipalities to treat sewage and wastewater at the required level. At the same time, the statutory obligation to transmit data on the quality and quantity of waste water discharged is also ensured (Section 5 of Act No. 274/2001 Coll., on Water Supply and Sewerage Systems). The implementing regulation of this obligation is Decree No. 428/2011 Coll.

Some parts of individual agglomerations remain yet to be resolved in 2018, which means taking appropriate measures in these agglomerations. The most problematic agglomeration was Prague and the Prague Central Wastewater Treatment Plant (ÚCOV Praha), where the appropriate measure was implemented: the construction of a new water line, which was put into trial operation in 2018.

Situation: In 2017, 9052 thousand inhabitants of the total population of 10 584 thousand, i.e. 85.5%, were connected to the public sewer. In the same year, 97.5% of waste water was treated without rainwater.

In 2014, 2401 mechanical-biological wastewater treatment plants existed, while in 2017 this number was 2579. This represents an increase of 178 wastewater treatment plants.

2. *Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5 of the Protocol).*

The legislative conditions for achieving the objectives have already been created, as have the conditions in the area of finance (Operational Programme Environment, relevant ministry, regional and municipal subsidy programmes). Responsibility for the implementation and accomplishment of the objective lies with the owners of respective sewers.

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

Significant progress has been made in recent years, with individual agglomerations yet to be resolved.

The objective is being continuously fulfilled.

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

This objective directly supports Sustainable Development Goal 6.3, i.e. to improve water quality by reducing pollution, avoiding waste disposal in water, minimizing the discharge of hazardous chemicals into water, halving the proportion of polluted wastewater and substantially increasing the recycling and safe reuse of water worldwide by 2030.

V. Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e))

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

The proportion of water loss in the pipeline network in 2017 was 16.4% of the water produced, and the loss value per capita reached 26.7 litres per person per day. Over the past 6 years, losses have fallen by 2.9%, and this trend continues.

In the medium term, a fundamental trend of reducing drinking water losses in the pipeline network can be seen. However, it is essential that water supply owners consistently focus on restoring these parts of the water network over the coming years; they are outdated, and the highest losses are recorded here. Restoring these sections will be very effective in terms of reducing loss and long-term sustainable water management as well as economic efficiency.

Since the current status is considered satisfactory, no target has been set.

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

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

The proportion of treated wastewater without rainwater released into the sewerage system was 97.5 % in 2017. With regard to the fact that the current status has been considered satisfactory, no target has been set.

VII. Application of recognized good practices to the management of water supply (art. 6, para. 2 (f))

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

The positive situation is partly due to the legislatively stipulated obligation that each operator must have a permit to operate a specific water or sewerage mains, with a responsible representative fulfilling the qualifications corresponding to the requirements for operation. These qualifications are achieved through education and also experience in the field. With regard to the fact that the current status has been considered satisfactory, no target has been set.

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

For each target set in this area:

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

Target 9: Eliminate or reduce hazardous substances in the aquatic environment in order to meet the requirements of the EC Directives on the discharge of hazardous substances and especially hazardous substances into the aquatic environment.

In accordance with Directive 91/271/EEC, the Commission is informed about the situation at regular intervals through reporting. The situation in 2018 is described in Section IV.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Legislative conditions for achieving the goal have already been created. Emission standards for indicators of permissible waste water pollution is currently stipulated by Government Order No. 401/2015 Coll., as amended, which is an implementing regulation to Act No. 254/2001 Coll., on Water.

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

The target is being continuously fulfilled (Section IV).

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

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

The targets contribute to the Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.1).

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

For each target set in this area:

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

a) Target 7: To complete the construction and modernisation of water management infrastructure (wastewater treatment plants and sewerage for public use) and thereby ensure compliance with the requirements of Council Directive 91/271/EEC.

Original targets 8 and 10 were combined into a single target with an elaboration of the wording and a new deadline of 31.12.2015. This is because target 8 already includes the majority part of target 10, the operation of wastewater treatment plants is conditional on their existence and the technology used. In both cases the target is compliance with Council Directive 91/271/EEC concerning urban waste-water treatment.

Deadline: 31. 12. 2015. The target is continually being filled.

The target is nationwide, and relates to the implementation of an EU Directive.

b) Target 9: Eliminate or restrict the presence of dangerous substances in the aquatic environment, i.e. meet the requirements of Community directives on the discharge of dangerous substances and especially dangerous substances into the aquatic environment.

Deadline: 31.12.2015. The target is continually being fulfilled.

The target is nationwide, and relates to the implementation of an EU Directive.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Legislative conditions for fulfilment of the target have already been created. Similarly, financial conditions (Operational Programme 'Environment 2014-2020', grant programmes of respective ministries, regions, cities, and villages) have been created.

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

a) Continuously, the target has successfully been met, link to point IV.

b) Continuously, as described under point VIII.

The quality of surface and groundwater in the Czech republic is continuously improving.

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

The targets are consistent with the Target No. 6 Clean water and sanitation in the 2030 Sustainable Development Agenda. The targets are continually being filled and we are approaching to its fulfilment.

X. Occurrence of discharges of untreated storm water overflows from wastewater collection systems (art. 6, para. 2 (g) (ii))

For each target set in this area:

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

Target 13: To support elimination of rainwater by direct elimination using unarmful infiltration or discharge through rainwater settling tanks.

Deadline: long-term, continuously.

Situation: As a result of the built-in area augmentation in urban areas, frequently, an extension of the area occurs, from which rainwater and sewerage waters are channelled to sanitation for public use. This, during heavy rainfall, results in congestion of rain separators

from which water is discharged into watercourses with a higher content of pollutants than the one originally approved. Deadline: long-term

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Order No. 268/2009, on technical requirements on structures, which is the Implementing Order to Act No. 183/2006 (Construction Act), determines that in structures from which rainwater is channelled, a discharge must be provided where rainwater is not withheld for subsequent use.

The amendment of the Water Act No 254/2001 adopted in 2010 stipulates an obligation that during the construction of structures, changes to them, or changes to their mode of use, constructors must ensure the absorption or retention and draining of surface water from rainwater falling onto these structures pursuant to the Building Act, and must also address water from storm overflows. The legislative conditions for the fulfilment of the target are fulfilled in this way.

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

ČSN 75 9010 Design, construction and operation of storm water drainage facilities was approved in February 2012, and in March 2012 technical standard TNV 75 9011 Storm water management was issued. These standards serve as technical assistance for designers, investors and the operators of drainage facilities as well as sewerage networks. The technical conditions for the fulfilment of the required target are fulfilled in this way.

Projects focused on the management of rainwater in urban areas and their further use instead of their accelerated drainage of sewerage systems into flows will be supported from The Operational Programme 'Environment 2014-2020'. Similar activities are supported by national resources in the field of environment protection.

Implementation of projects to promote further use of rainwater may also work as preventive measures during a rainfall deficiency (drought).

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

The target is consistent with the Target No. 6 Clean water and sanitation in the 2030 Sustainable Development Agenda. The target is continually being filled and we are approaching to its fulfilment.

The quality of surface and groundwater in the Czech Republic is continuously improving.

XI. Quality of discharges of wastewater from wastewater treatment installations (art. 6, para. 2 (h))

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

In this area, no target has been set. In the CR, this issue is considered to be solved. In accordance with Water Act No. 254/2001, as amended, those who discharge waste water into surface or groundwater shall dispose such water in accordance with conditions laid down in discharge authorization. The respective authorization is issued by the relevant Water Authority. A direct discharge into groundwater may not be authorized. Waste water discharge authorization is issued by the Water Authority for a maximum period of

10 years, and, in the case of dangerous or particularly dangerous substances, for 4 years only. The Water Act determines the conditions under which authorization may be modified or repealed. When issuing the authorization for waste water discharge into surface water, the Water Authority determines the maximum permissible limits for the quantity of waste water and its pollution.

Technical criteria and the method of preparation of the expert documentation on which decision-making of the Water Authority will be based, are laid down in case of groundwater in Government Order No. 57/2016 and in case of surface water in Government Order No. 401/2015 which, among others, lays down:

- Emission standards which are the highest permissible values of waste water pollution indicators;
- Emission limits which are the highest permissible values of waste water pollution indicators which are determined by the Water Authority in the authorization for waste water discharge into surface water;
- Emission standards which are the highest permissible values of indicators of permissible pollution of surface water in units of mass, radioactivity, or bacterial contamination per unit of volume;
- The target status of water quality in a watercourse which is the status that meets the water protection targets laid down in this Government Order.

The Water Authority determines the target emission limits up to the value of emission standards laid down by the Government Order 401/2015, according to the type of discharged waste water and the amount of pollution they contain, by means of a 'combined approach' while observing emission standards and achieving the target status of surface water at latest by 2027, with regard to the application of the best available techniques of production and the best available waste water purification technologies. The Water Authority shall also establish the deadline for achieving the emission limits, as well as the conditions under which waste water may be discharged until these limits are achieved.

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

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

In this area, no target for the CR has been set. The issue of the disposal of sewage sludge from the waste water treatment plant and the conditions of its reuse on agricultural land are considered to be resolved. In accordance with the Waste Law No. 185/2001 Coll, as amended, the originator of the sludge is obliged to establish a programme of sludge reuse and demonstrate, in this programme, its compliance with the conditions of sludge reuse laid down in Waste Law and in the Order of the Ministry of the Environment No. 382/2001, on the reuse of adapted sludge on agricultural land, as amended by Order No. 504/2004. The originator shall forward the programme of sludge reuse to those who reuse the sludge on agricultural land. The legal or natural person shall reuse only adapted sludge with respect to nutritional needs of plants, under the conditions laid down by Waste Law and Order No. 382/2001.

Adapted sludge is the sludge which was biologically, chemically, or thermally treated, went through long term storage or any other adequate process so as to significantly decrease the content of pathogenic organisms in sludge, and thus the health risk related to its application.

Order No. 382/2001 establishes the technical conditions for reuse of adapted sludge on agricultural land, limit concentrations of selected hazardous substances in soil, limit concentrations of heavy metals which may be added to agricultural land in a 10-year period, limit concentration of selected hazardous substances in sludge to be reused on agricultural land, microbiological criteria for sludge reuse, procedures of sludge and soil analysis, including methods of sample collection, and the contents of the sludge reuse programme.

Waste Law establishes circumstances under which the sludge from the waste water treatment plants may not be reused. This issue is also covered by Council Directive 86/278/EEC, on the protection of

environment, and in particular of the soil, when sewage sludge is used in agriculture, which has been fully implemented in the CR.

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

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

No target has been proposed. Conditions for implementation of this task have already been created. The issue of sewer sludge is covered by Act No. 185/2001, on waste, notably Part 4 'Sludge from Waste Water Treatment Plants', laying down conditions for waste categorization and treatment and on conditions for reuse of adapted sludge on agriculture land, as amended by Decree No. 437/2016. This issue is also covered by Council Directive 86/278/EEC, on environmental protection, notably soil protection when using waste water treatment plant sludge in agriculture, which has been fully implemented in the CR.

Waste water for irrigation is practically not used in the Czech Republic. The few cases are always treated individually, a separate authorization is required, and the water must be hygienically secured.

For requirements on the quality of irrigation water, there is an earlier technical standard ČSN 75 7143 'Water Quality'. The quality of irrigation water which, based on quality indicators (physical, chemical, biological, and radioactivity indicators), classifies water into classes as follows: suitable (class I) conditionally suitable (class II) and unsuitable (class III) for irrigation. The standard also includes protection deadlines for irrigation with conditionally suitable water.

Technological waters from agriculture for using on agricultural land is legislatively enshrined Decree No 377/2013, on the storage and manner of use of fertilisers and are stored and used in the same way as liquid manure.

In view of the fact that as yet the use of technological waters from agriculture on agricultural land is not legislatively enshrined, a resolution has been proposed through an amendment to Decree No 274/1998, on the storage and manner of use of fertilisers, through the definition of technological waters from agriculture, while this water will be stored and used in the same way as liquid manure. The validity of this amendment has been proposed from 1.7.2013 and inspections will be performed by the Central Institute for Supervising and Testing in Agriculture.

XIV. Quality of waters which are used as sources for drinking water (art. 6, para. 2 (j))

For each target set in this area:

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

a) Target 10 – part: To achieve the requirements of the directives regulating the quality of water intended for the abstraction of drinking water and their emissions standards.

Implementation deadline: 31.12.2015

The target is nationwide, and relates to the implementation of an EU Directive.

b) Target 11: Meet the requirements for achieving “good status” for all waters as set out in the Directive 2000/60/EC establishing a framework for the Community action in the field of water policy.

Deadline: 22.12.2015.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

In accordance with the Water Act No. 254/2001, the Water Authority shall establish protection zones for ground and surface water resources used for the supply of drinking water with average exploitation >10,000 m³/year. If necessary, the Water Authority may also establish protection zones for resources with lower capacity. There are protection zones of degree I and II. Protection zones of degree I are in close vicinity of the captation device; the extent of protection zones of degree II shall be established by the Water Authority so that the quality, quantity and health soundness of a water resource is not threatened. The indicators of permissible pollution for surface water resources used or to be used as sources of drinking water are laid down by Government Order No. 401/2015 which, among others, lays down:

- Emission standards which are the highest permissible values of waste water pollution indicators;
- Emission limits which are the highest permissible values of waste water pollution indicators which are determined by the Water Authority in the authorization for waste water discharge into surface water;
- Emission standards which are the highest permissible values of indicators of permissible pollution of surface water in units of mass, radioactivity, or bacterial contamination per unit of volume;
- The target status of water quality in a watercourse which is the status that meets the water protection targets laid down in this Government Order. The Water Authority shall respect these indicators which may influence the quality of such a resource when issuing the authorization to discharge waste water.

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

There are ongoing works on target 11, target 10 has been partially met, as described under point IV, VIII and XIX. Discussions commenced on the revision of targets and deadlines for implementation / the date of fulfilment, will be reviewed.

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

The targets contribute to the Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.1).

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

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.

a) Target 10 – part: To meet the requirements of directives governing the quality of bathing water and the quality of water to be treated, and their emission standards.

Fulfilment deadline: 31.12. 2015

Bathing water:

The amendment to Act No 258/2000, on public health protection, and the amendment to Act No 254/2001 is the transposition of the new Directive 2006/7/EC of the European Parliament and of the Council, on bathing water quality, and was approved as Act No 151/2011 with effect from 7.6.2011.

b) Target 16: To prepare bathing water profiles for the established bathing zones (in line with Article 6 of Directive 2006/7/EC) which characterize the given location, and identify the risks of pollution, including corrective measures.

Fulfilment deadline: 31.12. 2011

In accordance with the above amendment to the Acts, in accordance with the newly issued statutory instrument on the amendment to Act No 254/2001, Decree No 155/2011, on profiles of surface waters used for bathing, profiles of water for bathing were prepared and published on the website of the Ministry of Agriculture for all surface waters used for bathing. If the Regional Public Health Authorities decide about new bathing water site, it is reported to the Ministry of Agriculture, which manages development of relevant bathing water profile. Currently, for all bathing water sites the profiles are available.

2. Please, describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protokol).

a) The above amendment to the Act on the Protection of Public Health and its statutory Instrument, Decree No 238/2011, on the stipulation of hygiene requirements for bathing sites, saunas and the hygiene limits for sand in sand pits in outdoor playgrounds, stipulated limit values for the quality of water used for bathing that fully transpose the new Directive 2006/7/EC of the European Parliament and the Council, on bathing water quality.

The Water Act addresses the security and protection of surface water intended for bathing of persons. The current applicable version of the Water Act - Section 34 imposes the obligation to meet the stipulated targets on protection of bathing water at latest by 2015.

The extension of the deadline for adoption of the new legislation in the area of bathing water was brought about by the length of the legislation process, and the coherence of the Amendment Act with other areas.

The most important management measures taken were:

- Sediment removal.
- Intensification/reconstruction/construction of wastewater treatment plant and sewer construction in the immediate vicinity or in the basin of bathing waters clearly affecting the water quality.
- Preparation of the study concerning the assessment of current situation, identification of causes of pollution and proposal of measures.
- Additional programmes of monitoring.
- Action on reservoirs or ponds – aeration, manipulation with fish stock, coagulant dosage to the inflow into the reservoir.
- Reconstruction of the reservoir or pond – dam repair, bank alteration.
- Reduction of intensity of aquaculture production.

Application of chemicals to reduce the nutrients needed for the development of cyanobacteria and undesirable aquatic flora.

One outbreak of cercarial dermatitis occurred in bathing waters under the directive 2006/7/EC in the bathing season 2018. Larvae of bird schistosomes (they can cause cercarial dermatitis) in snails were found in four bathing waters. As this type of “pollution” and health problems are more common in last years (other outbreaks occurred on other than official bathing sites), amendment of the Public Health Act to cover this health risks is currently under development.

b) The Amendment Act to Act No 254/2001, on water, quoted in 1, Section 34, imposes the obligation of water basin administrators, in cooperation with Water Authorities, and the respective Regional Public Health Authorities, to prepare the bathing water profiles at latest by 2011. The method of stipulating the

profiles, the performance of their regular revision and updating are set out in the new Decree of the Ministry of Agriculture, in an agreement with the Ministry of the Environment and the Ministry of Health, No 155/2011, on profiles of surface waters used for bathing, which is an implementing regulation for the Water Act.

3. Please, assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
 - a) The objective was met for the overwhelming majority of bathing areas. In 2018, 153 bathing areas were registered in the CZ, of which only in exceptional cases the bathing water was classified as unsatisfactory (in 2018 there were 2 locations) or a ban on bathing was issued (in 2018 there were 3 locations). In these areas (and elsewhere), corrective measures are being implemented (see above).
 - b) An amendment to the Water Act was performed in 2011, which enabled the issue of implementing regulation No 155/2011, on profiles of surface waters used for bathing. Water basin administrators also completed the preparation of the profiles of existing bathing sites.
4. Please describe how the target set under this area contributes to fulfilling global and regional commitments, in particular the 2030 Sustainable Development Agenda.

The targets contribute to the Goal 3 (Ensure healthy lives and promote well-being for all at all ages).

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

For each target set in this area:

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

Target 12: Comply with requirements of Water Framework Directive 2000/60/ES regarding conditions of life of fish.

Fulfilment deadline: 31. 12. 2015

Situation: In line with Directive 78/659/EEC, the quality of surface water which is or is likely to become suitable for fish life if pollution is decreased or eliminated, shall be protected or improved. In accordance with the Directive, segments of salmonid or cyprinid water have been identified in the CR. Following the adoption of the Water Policy Framework Directive 2000/60/EC, the fulfilment of the target was integrated into River Basin District Plans.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The requirements on water quality which are or are likely to become sustainably suitable for life and reproduction of original species of fish and other aquatic animals are embedded in Section 35 of Act No 254/2001, and the subsequent Ministerial Order No 71/2003, amended by GD no. 169/2006 Coll and Act No 99/2004. In 2006, the Reduction of Pollution of Surface Water Plan for water which is or is likely to become sustainably suitable for life and reproduction of original species of fish and other aquatic animals was introduced by an amendment of said Ministerial Order. In the framework of the existing subsidy titles, the reconstruction and construction of WWTPs and sanitation systems is carried out, and the conditions of fish and other aquatic animals' life in watercourses are improved. Similarly, other proposed measures

contributing to the improvement of the living conditions in water form part of the River Basin Management Plans developed in line with the Water Policy Framework Directive 2000/60/EC. Particularly, it involves measures to improve the hydromorphology of watercourses such as unblocking barriers to migration.

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

The programme to decrease the pollution of surface water, implemented to achieve the permissible pollution values in salmonid and cyprinid waters was completed on the 1st May 2009. After subsequent assessment the results were published in the Report on the state of water management in the Czech Republic in 2009. The fulfilment of the measures proposed in the Water Basin Plans are evaluated every 3 years, and these measures are, if required, updated in accordance with the Water Policy Framework Directive.

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

XVII. Application of recognized good practice in the management of enclosed waters generally available for bathing (art. 6, para. 2 (k))

For each target set in this area:

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

Target 14: To develop and publish a manual on good operating practices of artificial swimming pools.
Fulfilment deadline: 31.12. 2012. Change to the deadline: 31.12.2014.

There are regulations ensuring safe bathing water environment in enclosed waters in the Czech Republic since 1950s, updating several times. However, good operating practices for artificial swimming pools, as a complete document, did not exist in time of target setting. That is why we thought the guidelines of such kind could be helpful.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

With regard to the key requirements on water quality, its exchange, security, technological treatment, and inspection, the operators of the artificial swimming pools are obliged towards such practice through the Decree of the Ministry of Health No 238/2011 as was further improved and amended in 2014. In addition to that, two European standards have been published in Czech: a) EN 15288-1 Swimming pools – Part 1: Safety requirements for design; b) EN 15288-2 Swimming pools – Part 2: Safety requirements for operation. Working group of the Czech Association of Swimming Pools and Saunas also prepared excerpt from the German standard DIN 1963, which is considered as good technical standard for operation of swimming pools. The 2nd edition of the Czech national technical standard TNV 940220-1 (Safety of swimming pools and bathing facilities – Part 1: Measures for safety of users/visitors) was published in 2015.

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

It was realized few years ago that currently there was not enough expert capacity and funding to prepare the full, complete document as originally planned. Nevertheless, several partial documents mentioned above have been prepared and published in Czech, which may be – in a whole – seen as planned manual,

which would be now mostly duplicate with those regulatory or norm documents with higher level of obligatory force. That is why we can conclude, that the target was completed.

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

The targets contribute to the Goal 3 (Ensure healthy lives and promote well-being for all at all ages).

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

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
 - a) Target 18: Update the Contaminated Sites Records System database, adding data on persistent organic pollutants (POPs)

Deadline: 31.12.2008.

- b) Target 15: Make a thorough inventory of contaminated sites, with preliminary assessments of possible health and environmental risks; use this assessment for future risks analyses and assessment of the ensuing need for decontamination, along with an economic evaluation of such an intervention.

Deadline: 31.12.2015

A subtask was to update the Contaminated Sites Evidence System (SEKM) with data on persistent organic pollutants (resulting from the National Implementation Plan of the Treaty of Stockholm). Deadline: 31.12.2009 was met and the database will continuously be kept updated. The reason for adoption of this target is that the removal of the old environmental burdens is not governed by a uniform legislation in the CR. The legislative framework used was described in detail in our previous report in 2016.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

In order to ensure the performance of this process, the Ministry of the Environment has a number of additional methodology instructions available such as: The Ministry of the Environment instruction for the risk analysis of the contaminated area (Instruction No 12/2005) and surveying of the contaminated area (Instruction No 12/2005). This methodology was also updated, see Methodological Instruction of the Ministry of the Environment Analysis of the risks from contaminated territory (Ministry of the Environment Bulletin No 3, March 2011).

In 2009, the project of the stage 1 of the National Inventory of Contaminated Sites was assigned, based on the EU funding.

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

In 2008, a binding Instruction was published to evaluate the priority category. In 2009, the update of the aforementioned Order No 369/2004 was made, and stage 1 of the National Inventory of Contaminated Sites was launched and adopted. In 2009, stage 1 of the inventory of the old environmental burdens contaminated by persistent organic pollutants (POPs) was completed.

- a) The completion of the update was postponed because it was still essential to map out the localities contaminated with substances that are newly (since 9 May 2009) included in the annexes of the Stockholm Convention. These are specifically waste - tetrabromodiphenyl ether, pentabromodiphenyl ether, hexabromodiphenyl ether, heptabromodiphenyl ether, pentachlorobenzene, perfluorooctanesulfonic acid and its salts (PFOS), and perfluorooctanesulfonyl fluoride (PFOSF). The task was completed on 31.1.2011 and hence was cancelled as part of the revision of targets in January 2012.
- b) The 1st stage of the National Inventory of Contaminated Locations was completed at the end of 2013. The 2nd stage started on 1 January 2019 and should be completed in 2022.

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

The targets contribute to the Goals 3, 6 and 15.

XIX. Effectiveness of systems for the management, development, protection and use of water resources (art. 6, para. 2 (m))

For each target set in this area:

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

a) Target 16: To implement the 3rd Action Plan to Protect Water from Pollution of Nitrates from Agricultural Resources for the Period 2012-2015. Deadline: 31. 12. 2015

In accordance with the Council Directive 91/676/EEC of 12 December 1991, on water protection from pollution caused by nitrates from agricultural resources (Nitrates Directive), the objectives were delivered. Ex post evaluation of the 3rd Action Plan suggested further actions which are implemented and delivered by 4th stage of the Action Plan (2016 - 2020). The process of the 4th Action Plan for the period 2016 – 2020 is in accordance with the requirements. Action Plan entered into force on August 1, 2016. The following revision should be delivered for the period 2021 – 2024. Deadline: 1.8.2021.

b) Target 17: To ensure availability of relevant information on the application of pesticides in specific locations, and, possibly, also on their content in soil or stocks. To ensure effective and consistent system of prevention of water resources contamination by pesticides – through consistent determination of conditions of use of individual types of pesticides with respect to their potential to contaminate resources, identification of decomposition metabolites which require monitoring in drinking water, development of the principles for selection of pesticide substances in comprehensive analysis of drinking water, and to develop the principles for mutual cooperation of surveillance authorities supervising the use of pesticides from the point of view of water resources protection.

Deadline 31. 12. 2014

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

The usage and storage of fertilizers and farm fertilizers, crop rotation and anti-erosion actions implementation in those areas.

a) On the basis of the requirements of the Government Regulation No 262/2012, as amended (so called Action Programme), mandatory measures to reduce the access of nutrients from surface agricultural resources have been implemented in vulnerable areas (in line with Council Directive 91/676/EEC).

The implementation of both the mandatory and the recommended measures in line with national, as well as European legislation, also contributes to the fulfilment of the stipulated objectives. This particularly involves the specifically stipulated periods of prohibition of the use of nitrate fertilizing substances on agricultural land, or the restriction of their use with regard to the climate conditions of a site, as well as prohibition of application of nitrate fertilizers on steep slopes, waterlogged, flooded, frozen or snow-covered lands or the restriction of their application in the vicinity of watercourses. Similarly, the legislation ensures that a storage vessel capacity for slurries and farmyard manure is sufficient and construction of storage vessels is adequate for their use. It also ensures adequate application and distribution of fertilisers on agricultural land. It further recommends suitable land management practices, procedures for maintaining minimum vegetation cover, and implementation of fertiliser and water pollution prevention plans.

The 4th Action Plan implemented various measures that are binding for farmers. The measures of the Action Plan are applied only to agricultural land in vulnerable areas. Obligatory management requirements are part of cross compliance. Due to previous changes, the 4th Action plan does not concern the introduction of new measures, but rather the clarification of individual conditions and the enhancement of the functionality of the existing settings. The main changes were reflected in the area of fertilization prohibition, field fertilizer storage and the newly introduced multi-level system of yield levels for differentiation of maximum levels of fertilizer doses for individual crops.

b) The legislation which governs the good conditions for marketing of plant protection products (PPP) and their use, is Act No 326/2004, as amended, and Order No 32/2012, as amended. The Act also established the obligations which shall be met by the professional users of PPP with the aim to protect ground and surface water, mandatory exchange of information about side effects of PPP and sanctions for non-observation. In 2012, an amendment of the Act No 326/2004 was adopted, prohibiting use and storage of PPP in a 10-meter range around surface and underground water sources.

It is expected, in line with adoption of the National Action Plan to Reduce the Use of Pesticides (NAP), the reduction in the area of groundwater formations with a non-compliant chemical state due to exceeding the environmental quality standards based on the presence of residues of pesticides.

The National Action Plan to Reduce the Use of Pesticides was adopted in 2012 according to Art.4 of the directive 2009/128/EC, establishing a framework for Community action to achieve the sustainable use of pesticides, as a programme to reduce the adverse impact of plant protection products (PPP) also on water resources. The fulfilment of the plan was assessed annually.

The NAP was updated in 2018 and subsequently adopted by the government on 6 June 2018. One of the important objectives of the revised NAP is the protection of groundwater and surface water especially that intended for water use. In 2018, the amendment to the Phytosanitary Act No. 326/2004 Coll., focused on tightening the distribution of plant protection products (PPPs) to reduce the market share of illegal pesticides. Other objectives of using PPPs safely are as follows:

- Encourage research to evaluate the relationship between farming, soil quality, climatic conditions, the application of PPPs and subsequent occurrence of residues in water.
- Ensure systematic support for maintaining, improving and protecting soil properties from the point of view of sorption properties with the aim of preventing PPP residues from being washed away (hardening, humus content, erosion control, etc.).
- Improve education and communication between professional users of products operating in protected water resource and protective action distance zones, water authorities and water managers by completing the finished electronic update of land in the protected water resources zones in

government administration. Prepare documents for introducing a system of keeping records on the use of plant protection products available for the protection of drinking water sources and drinking water bodies.

- Integrate EU water policy objectives into the CAP.

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

a) Based on the above, the continuous targets have been met and term of another continuous target has been set for 2021.

b) The observation of the stipulated conditions of use of PPP by farmers was, within the scope laid down by the yearly plan, checked by the inspectors. The identified infringements in plant protection by users were sanctioned and, at the same time, the subsidies for agricultural businesses have been reduced when improper use of products has occurred, as of 2009.

The annually develops statistical summaries on the amount of the used effective substances in PPP according to individual crops or groups of crops and, upon request, forwards them to workplaces which assess the pesticide load on resources. The data on the use of effective substances are utilized by e.g. the Czech Hydrometeorological Institute when dealing with the project 'Occurrence and Movement of Pesticides in Hydrosphere in the CR'.

With the aim to meet the targets, an intersectional Task Group was established, which will carry out the inventory of the condition of the legislation in this area.

Since 2015, the Central Institute for Supervising and Testing in Agriculture publishes and updates information on its website about the properties (half-life in soil, mobility) of active substances of plant protection products and information on whether metabolites in the environment are relevant or irrelevant (in terms of their toxicity). The assessment is made on the basis of evaluation results in the Czech Republic or the EU in connection with leaching into groundwater above the concentration limit of 0.1 µg/l and should be monitored. Customers use this information for the analysis of PPP in raw and drinking water. The database is gradually being expanded and supplemented, preferentially at the specific request of individual operators of water supply.

Information about the application of plant protection products (PPP) at specific locations is available (upon request) only to a supervisory authority responsible for monitoring compliance with the use of PPPs (CISTA), but not to operators of water supply and public health authorities. Selected agricultural entities must annually report to CISTA the spectrum and amount of applied PPPs in the past year, but this information is not related to specific sites. The procedure for the transmission of such information to water management authorities is also governed by Article 67 of the European Parliament and Council Regulation no. 1107/2009. For example, in 2014, CISTA received 62 applications from water resources managers and other stakeholders for the communication of the consumption of active substances of PPPs for a particular territory, for the purpose of targeted monitoring of PPP residues in waters. In response to an increased demand for information on the consumption of PPP active substances, CISTA published data from 2013 by district and group of crops on its website: <http://eagri.cz/public/web/ukzuz/portal/pripravky-na-or/spotreba-pripravku-na-or/spotreba-v-jednotlivych-letech/spotreba-por-kraje-okresy/>.

However, the task of ensuring the availability of current information to manufacturers of drinking water regarding applied PPPs at the source of their drinking water remains unfulfilled and is still being discussed.

In addition, the Czech Hydrometeorological Institute (CHI) has developed a methodology based on the knowledge of crops grown in specific plots and their corresponding PPP, in which satellite imagery is used for the identification of crops. The applicability of this methodology was successfully tested for the first time in 2015, however, its practical use is still low.

In 2014 an agreement was made on the methods of data transfer within the monitoring of water status. For the purpose of the PPP permitting process, CISTA predominantly uses monitoring results provided by the Czech Hydrometeorological Institute. In the case of the presence of active substances or relevant PPP metabolites in waters, water authorities or the Czech Hydrometeorological Institute pass on the information

to CISTA, which, based on evaluations, may decide to restrict or prohibit the authorization of the specific PPP. Such monitoring results restricted, for example, the use of PPPs containing the active substance terbuthylazine in 2014.

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

The targets contribute to the Goals 6, 12 and 15.

XX. Additional national or local specific targets

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

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

All listed additional targets are national.

No	Protocol reference	Subject	Defined target	Deadline
11.	6.2.f (also 6.2.j)	Application of recognised good practices to the management of water supply and sanitation, including protection of waters used as drinking water sources	Meet the requirements for achieving “good status” for all waters as set out in the Directive 2000/60/EC establishing a framework for the Community action in the field of water policy	22.12.2015 22.12.2027
18.	6.2.n	Frequency of publication of information on the quality of supplied drinking water and the quality of other waters relevant to the targets in this ...	Create an information system regarding the ecological and chemical status of waters according to the EU’s Water Framework Directive and ensure public access to the results.	31.12.2008 31.12.2015 An information system regarding the status of waters already partially exists. Work has already begun on the construction of a unified information system that will bring together all the water-related knowledge.
19.	6.5.a, 6.5.b	National or local measures to coordinate the competent authorities Targets No25, 26 replaced by a new target (No 19) – with a new deadline.	Prepare plans for the Elbe, Morava and Odra consisting of 3 levels (sub-basin Plans, Plans of the national parts of international river basins and River Basin Management Plan).	22.12.2009 22.12.2015 River basin management plans have been prepared.
20	9.1.a	Improving public awareness regarding the importance of water management and public health and their interaction	Improving the population’s awareness through printed materials and web sites.	On an ongoing basis

21.	9.2.a	Promoting a better understanding among those responsible for water management, water supply and waste water treatment of the public health aspects of their work	Continue to develop training programmes for water management and public health organisations.	On an ongoing basis
22.	9.4.a	Encouraging research and development of cost-effective methods and techniques for preventing, controlling and restricting the incidence of water-related diseases.	Support research and development in water quality.	On an ongoing basis
23.	9.4.a	ditto	Support specialised research into the economic ramifications of cost-effectiveness in water supply and waste water treatment.	On an ongoing basis

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Detailed description of the activities regarding each of the targets would mean exceeding the allowed size of the report. Therefore, the targets listed here are to illustrate the areas in which the Czech Republic has decided to take action. Nevertheless, there is a description of activities for each target in the Czech language and, if necessary, we can have it translated and we can provide it to the Protocol Secretariat.

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

Targets No 11 have not yet been met, deadline is shifted to year 2027. Target No 18 has been met and continues to be fulfilled, the status of water bodies is assessed and the report is published. Target No 19 have been met and targets No 20, 21, 22, 23 are on ongoing basis.

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

The targets contribute to the Goal 6. Ensure availability and sustainable management of water and sanitation for all.

Part three

Common indicators¹

I. Quality of the drinking water supplied

1. Context of the data

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

¹ In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible

The population coverage is 94.74 % (2017, Czech statistical office).

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

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

Types of water: ground water 40.28 %, surface water 38.89 % and mixed (ground + surface water) 20.83 %.

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

Data from water quality database of Ministry of Health. Data collected to this database come from water suppliers and regulatory authorities.

2. Please specify from where the water quality samples reported in sections 2 and 3 below are primarily taken (e.g., treatment plant outlet, distribution system or point of consumption).

The samples are taken on the tap (point of consumption).

The rationale of this question is to understand where the samples were primarily taken from for the water quality data reported in sections 2 and 3 below.

3. In sections 2 and 3 below, the standards for compliance assessment signify the national standards. If national standards for reported parameters deviate from the World Health Organization (WHO) guideline values, please provide information on the standard values.

Compliance assessment signifies the national standard which is fully complies with the DWD/98/83 directive.

The rationale of this question is to understand any possible differences between the national standards for microbiological and chemical water quality parameters and the respective WHO guideline values.²

2. Bacteriological quality

4. Please indicate the percentage of samples that fail to meet the national standard for *Escherichia coli* (*E. coli*). Parties may also report on up to three other priority microbial indicators and/or pathogens that are subject to routine water quality monitoring.

We are not able to differentiate data for urban and rural areas as many supply systems run across both urban and rural areas. All these supplies are centralized supplies. **It could be clearly seen that the percentage of non-compliances decreases from the baseline value to values of year 2018.**

<i>Parameter</i>	<i>Area/category</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
<i>E. coli</i>	Total	1.85	0.69	0.59
Additional parameter 1:	Total	2.47	1.0	0.96

2005 — the year of entry into force of the Protocol — as the baseline year.

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

<i>Parameter</i>	<i>Area/category</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
enterococci				
Additional parameter 2:	Total			
Additional parameter 3:	Total			

3. Chemical quality

5. Please report on the percentage of samples that fail to meet the national standard for chemical water quality with regard to the following parameters:

- (a) Arsenic;
- (b) Fluoride;
- (c) Lead
- (d) Nitrate.

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

We are not able to differentiate data for urban and rural areas as many supply systems run across both urban and rural areas. All these supplies are centralized supplies. There are no special trends in water quality in selected indicators, situation is quite stable or is little improving. Only exception is for the pesticides, where non-compliance is increasing due to better monitoring managed during the last 5-years (almost 200 individual pesticides and its metabolites are monitored each year, in total number of analysis of these substances is about 198,000).

<i>Parameter</i>	<i>Area/category</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
Arsenic	Total	1.04	0.49	0.391
Fluoride	Total	0.07	0.05	0.015
Lead	Total	0.31	0.07	0.182
Nitrate	Total	3.63*	1.66	1.535
Additional parameter 1: Iron	Total	8.49	3.707*	3.313
Additional parameter 2: Manganese	Total	4.54	2.24	2.067
Additional parameter 3:	Total		21.62**	5.613

<i>Parameter</i>	<i>Area/category</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
acetochlor ESA				

*Corrected data from database of water quality.

** Non-compliance of acetochlor ESA seems very high (21.62%), but it is a matter of low number of total samples. This parameter has been monitored in drinking water for the first time in 2015. The database shows that 88 of the 407 samples were non-compliant. This difference can be observed by comparing 2 886 samples in 2018 to 407 samples in 2015.

II. Outbreaks and incidence of infectious diseases related to water

The information was collected through incidence-based surveillance. The incidence of these diseases is quite low for many years and so no trend could be observed.

<i>Disease</i>	<i>Incidence rate per 100,000 population (all exposure routes)</i>			<i>Number of outbreaks (confirmed water-borne outbreaks)</i>		
	<i>Baseline (2005)</i>	<i>Value reported in the previous reporting cycle (2015)</i>	<i>Current value (2018)</i>	<i>Baseline (2005)</i>	<i>Value reported in the previous reporting cycle (2015)</i>	<i>Current value (2018)</i>
Shigellosis	2,716 / 278	0,835 / 88	1,367 / 145	1	0	0
Enterohaemorrhagic <i>E. coli</i> infection	ND	0,190 / 20	0,273 / 29	ND	0	0
Typhoid fever	0,029 / 3	0,009 / 1	0,000 / 0	0	0	0
Viral hepatitis A	3,146 / 322	6,870 / 724	1,989 / 211	1	0	0
Legionellosis	0,088 / 9	1,138 / 120	2,008 / 213	0	0	0
Cryptosporiosis	0,010 / 1	0,019 / 2	0,057 / 6	0	0	0
Additional disease 1:						
Additional disease 2:						
Additional disease 3:						

III. Access to drinking water

Differentiated data (urban x rural) are not available. However, there are clearly differences between urban and rural regions as urban coverage is approaching 100 %.

<i>Percentage of population with access to drinking water</i>	<i>Baseline value (2005)</i>	<i>Value reported in the previous reporting cycle (2014)</i>	<i>Current value (2017)</i>
Total	91.6	94.2	94.7

- Estimates provided by the WHO/United Nations Children’s Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation. *JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.*
- National estimates. *Please specify how “access” is defined and what types of drinking-water supplies are considered in the estimates in your country.*

Definition: connection to the water supply system for public use.

Water sources: groundwater (boreholes, wells, bank filtration, galleries etc.), surface water (water reservoirs, streams)

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

- Improved drinking water sources (as per JMP definition)
- Supplies located on premises
- Supplies available when needed
- Supplies that provide drinking water free from faecal contamination

IV. Access to sanitation

Differentiated data (urban x rural) are not available. However, there are clearly differences between urban and rural regions as urban coverage is approaching 100 %.

<i>Percentage of population with access to sanitation</i>	<i>Baseline value (2005)</i>	<i>Value reported in the previous reporting cycle (2014)</i>	<i>Current value (2017)</i>
Total	79,1	83,9	85,5
Urban			
Rural			

- Estimates provided by JMP. *JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.*
- National estimates. *Please specify how “access” is defined and what types of sanitation facilities are considered in the estimates in your country.*

Definition: connection to sanitation (sewerage system) for public use.

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

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

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

1. Water quality

1. On the basis of national systems of water classification, please indicate the percentage of water bodies or the percentage of the volume (preferably) of water³ falling under each defined class (e.g., for European Union countries and other countries following the European Union Water Framework Directive⁴ classification, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status; for other countries, in classes I, II, III, etc.).

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

(i) Ecological status of surface water bodies

<i>Percentage of surface water classified as:</i>	<i>Baseline value (2006/2007)</i>	<i>Value reported in the previous reporting cycle (2010/2012)</i>	<i>Current value (2013/2015)</i>
High status	0	2,8	0,2
Good status	17	24,85	12,9
Moderate status	13,5	36,22	58,8
Poor status	68,5	21,33	23,3
Bad status	0	5,73	4,4
Total number/volume of water bodies classified	1	91	77
Total number/volume of water bodies in the country	100%	100%	100%

(ii) Chemical status of surface water bodies

<i>Percentage of surface water bodies classified as</i>	<i>Baseline value (2006/2007)</i>	<i>Value reported in the previous reporting cycle (2010/2012)</i>	<i>Current value (2013/2015)</i>
Good status	70,5	61,9	63,6
Poor status	28,9	38,1	36,4

3

Please specify.

4

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.

<i>Percentage of surface water bodies classified as</i>	<i>Baseline value (2006/2007)</i>	<i>Value reported in the previous reporting cycle (2010/2012)</i>	<i>Current value (2013/2015)</i>
Total number/volume of water bodies classified	99,4%	1 141/100%	1 121/100%
Total number/volume of water bodies in the country	100%	1 141/100%	1 121/100%

(iii) *Status of groundwaters*

<i>Percentage of groundwaters classified as</i>	<i>Baseline value (2006/2007)</i>	<i>Value reported in the previous reporting cycle (2010/2012)</i>	<i>Current value (2013/2015)</i>
Good quantitative status	65 (number of GWBs) 81 (area of GWBs)	68,9	68,9
Good chemical status	21 (number of GWBs) 33 (area of GWBs)	39,7	39,7
Poor quantitative status	35 (number of GWBs) 19 (area of GWBs)	9,8	9,8
Poor chemical status	79 (number of GWBs) 67 (area of GWBs)	60,3	60,3
Total number/volume of groundwater bodies classified	100%	137/78,7%	137/78,7%
Total number/volume of groundwater bodies in the country	100%	174/100%	174/100%

(b) **For other countries**

(i) *Status of surface waters*

<i>Percentage of surface water falling under class^a</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify 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.

(ii) *Status of groundwaters*

<i>Percentage of groundwaters falling under class^a</i>	<i>Baseline value (specify year)</i>	<i>Value reported in the previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
I			
II			

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

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

2. Please provide any other information that will help put into context and aid understanding of the information provided above (e.g., coverage of information provided if not related to all water resources, how the quality of waters affects human health).

2. Water use

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

<i>Water exploitation index</i>	<i>Value reported in the</i>		
	<i>Baseline value (specify year)</i>	<i>previous reporting cycle (specify year)</i>	<i>Current value (specify year)</i>
Agriculture	See note	See note	See note
Industry ^a	See note	See note	See note
Domestic use ^b	See note	See note	See note

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

^b Please specify whether the figure only refers to public water supply systems or also to individual supply systems (e.g., wells).

NOTE: Water exploitation index is not used in our country, therefore we provide data according to national statistics available.

INVOICED DRINKING WATER FROM WATER SUPPLY system FOR PUBLIC USE (in thousands of m³)

	2005	2017
Agriculture	9,289	See note
Industry	64,645	See note
Households	338,564	324, 477
Other	119,123	157,496
Total	531,620	481, 973

Note: According to the amendment on Water Supply and Sewerage no. 274/2001 Coll. the Ministry of Agriculture has not been following data so closely. Agriculture and industry are included in "other".

SURFACE WATER EXPLOITATION (in mil. of m³)

	2005	2017
Water supply systems	377.7	320,6
Agriculture	11.0	31,9
Energy	804.9	677,8
Industry	357.9	220,0
Other	1.9	10,8
Total	1 553.4	1 261,0

GROUNDWATER EXPLOITATION (in mil. of m³)

	2005	2017	
Water supply systems	330.5	296,1	
Agriculture	8.6	14,7	
Energy	1.2	2,0	
Industry	34.4	37,3	
Other	11.5	19,3	
Total	386.1	369,4	

Part four

Water-related disease surveillance and response systems

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

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

YES

Has your country prepared comprehensive national or local contingency plans for responses to outbreaks and incidents of water-related disease according to paragraph 1 (b)?

YES

Do relevant public authorities have the necessary capacity to respond to such outbreaks, incidents or risks in accordance with the relevant contingency plan according to paragraph 1 (c)?

YES

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

The Czech legislation addressing water-related disease surveillance and outbreak response are derived from the EU umbrella legislation;

- Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on serious cross-border threats to health and repealing Decision No 2119/98/EC
- Commission Decision of 28/IV/2008 amending Decision 2002/253/EC laying down case definitions for reporting communicable diseases to the Community network under Decision No 2119/98/EC of the European Parliament and of the Council
- IHR (International Health Regulations)

and further directed by regulations of the Czech Republic:

- Act No. 258/2000 Coll., on Public Health Protection and Amendments to other Related Acts (as amended)
- Decree of the MoH of the Czech Republic No 275/2010 Coll. Amending the Decree No 473/2008 Coll. on Surveillance System for Selected Infectious Diseases
- Decree of the MoH of the Czech Republic No 306/2012 Coll., the Terms and Conditions for the Prevention of Development and Spreading of Infectious Diseases and Hygiene Requirements for Hospitals and other Health Services
- Decree of the MoH of the Czech Republic No 537/2006 Coll. on vaccination against infectious diseases
- Decree of the MoH of the Czech Republic No 238/2011 Coll. for bathing water
- Decree of the MoH of the Czech Republic No 252/2004 Coll. for drinking water.

The central authority of state administration for surveillance tasks (responsible for related legislation including harmonization of Czech legislation with the EU and related methodical guidelines) is the **Ministry of Health**, as it is also responsible national authority for public health threat detection, preparedness and response (in accordance with the EU / ECDC requirements). **National Institute of Public Health** is responsible for the monitoring and analysis of the epidemiological situation of communicable diseases at both the national and international levels, involvement in the preparation of infectious diseases surveillance programmes, cooperation in implementing surveillance programmes and ongoing assessment of outcomes of surveillance programmes, Data collection and exchange, ensuring the compatibility of the data from the national notification systems, participation in the preparation of national legislation and methodical guidelines, processing the reported cases of infectious diseases at a country-wide level and providing information on the epidemiological situation in the Czech Republic and for weekly, monthly and yearly analyses of epidemiological data. **Regional Public Health Authorities** are responsible for the basic surveillance, organization of communicable disease prevention and control, organization of emergency measures in case of epidemics, monitoring and analysis of the epidemiological situation of communicable diseases at regional level. Outbreaks are usually identified at the regional public health level, usually by epidemiologist doing regular data management, who get the data or call from first line doctors (GPs or in hospital) or from the laboratory. In case of outbreak suspicion, regional epidemiologists are responsible for the outbreak confirmation and control.

By legislation, the Czech Republic has **the mandatory infectious diseases surveillance system, which includes case-based data reporting into the** Czech national surveillance system for infectious diseases (EpiDat till Dec 2017 and ISIN since Jan 2018). Selected data of infectious diseases are shared on relevant web pages (e.g. pages of Regional Public Health Authorities, National Institute of Public Health or Ministry of Health) and through media.

Surveillance data sharing: Data from the Czech national surveillance system for infectious diseases, based on EU case definitions, are regularly reported to the TESSy (The European Surveillance System) maintained by ECDC.

Outbreak detection, threat detection: **Ministry of Health** (MoH) is responsible for the data sharing within the Early Warning and Response System (**EWRS**, maintained by European Commission - web-based platform linking the European Commission, ECDC and public health authorities in EU/EEA countries responsible for measures to control serious cross-border threats to health, including communicable diseases).

According to **International Health Regulations** MoH also reports certain disease outbreaks and public health events to World Health Organisation (WHO).

National focal points for specific diseases (in this concrete case National Focal point for Food- and Waterborne Diseases and Zoonoses, FWD) share data and exchange technical information to assess whether current and emerging public health threats have a potential impact in the European Union (EU) within the **EPIS** (The Epidemic Intelligence Information System - ECDC web-based communication platform). **EPIS-FWD** facilitates the early detection and assessment of multi-country/multinational molecular typing clusters and outbreaks of FWDs. The platform connects epidemiologists and

microbiologists from 52 countries: 28 EU Member States, three countries of the European Economic Area (EEA) - Iceland, Norway and Liechtenstein - and 21 other non-EU countries.

3. Please describe what actions have been taken in your country in the past three years to improve and/or sustain water-related disease surveillance, early warning systems and contingency plans, as well as to strengthen the capacity of public authorities to respond to water-related disease outbreaks and incidents, in accordance with the provisions of article 8 of the Protocol.

The new national surveillance system for infectious diseases (**ISIN**) is in place since 1.1.2018 - only reporting system and database has changed, not the manner of reporting. According to the European Commission implementing decision (EU) 208/945 of 22 June 2018, the Czech Republic is currently implementing the update of **Decree No 473/2008 Coll.** on Surveillance System for Selected Infectious Diseases.

Two days National training workshop on water- related disease surveillance (Prague 2016) was organized for Czech epidemiologists and environmental health specialists with tutors from the WHO, Norway and England. The training took place under the umbrella of the 2014-2016 programme of work of the Protocol on Water and Health and supported by WHO Regional Office for Europe and Norwegian Institute of Public Health. More information is provided above (see target 4).

Part five

Progress achieved in implementing other articles of the Protocol

Please provide a short description of the status of implementation of articles 9 to 14 of the Protocol, as relevant.

Suggested length: up to two pages

From the international point of view joint and coordinate systems of early –warning are established at all 3 international commissions pro the river protection where the Czech Republic is party. At the platform of these commissions the systems for data collection and sharing are developed. There are groups of experts working in the fields of water quality under each international commission (Commissions for the protection of the Elbe, Danube and Oder rivers). CZ develops international river basin management plans in cooperation with other riparian countries for all 3 international river basins. CZ does not cooperate in the field of water management only in the international commission but there are also agreements on transboundary cooperation with all 4 neighbouring countries, where there are also working groups established in order to cooperate in the field of water management. Another platform for exchanging the lessons learnt and good practice are the working groups under the Common Implementation Strategy of EU.

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.

For the purposes of the implementation of the Protocol, an intersectoral Task Group was established, incorporating representatives of all related ministries (Ministry of Health, Agriculture, and Environment). The cooperation within the group is very good, and contributes to the necessary intersectoral communication and cooperation in the fields addressed by the Protocol.

Due to the requirements of the Protocol, a detailed legal and factual inventory of the situation was performed in specific fields in which the Protocol requires improvement. As seen in part 3 (XX), the Czech Republic set targets in fields listed in Articles 9 and 10 of the Protocol while the situation in fields listed in

Articles 11 and 13 was considered satisfactory, and did not require the setting of any short- or medium term target.

The problem is that the Government of the CZ did not specifically set off any separate funding for the implementation of the Protocol on Water and Health, but on the other hand, it must be acknowledged that there is also a number of tasks among the targets of the Protocol which are required by the respective EU directives (e.g. purification of waste water treatment from smaller settlements) for whose implementation enormous amounts have been invested.

The Czech Republic set mostly realistic targets which have been partially met or the mechanisms have been in place to meet them in near future within the first 5 years period. Therefore in 2011-2012 an assessment was performed of the current status of the fulfilment of the national targets. Some of the targets were proposed for cancellation, as they had already been fulfilled or their fulfilment were at that time guaranteed by law, while the wording of others was elaborated or their deadline postponed (in view of the current austerity measures at the Ministry of Health, the Ministry of Agriculture, and the Ministry of the Environment, funds are limited and are distributed according to priorities stipulated in advance; for this reason the deadlines of some targets have also been extended). The proposed revision, which retained 23 targets (there were originally 35) was subsequently carried out and was approved by the government of the Czech Republic for approval in September 2013. Given that some goals were met and others need to be updated, discussions were commenced this year on the revision of targets and deadlines for their fulfilment.

Part six

Thematic part linked to priority areas of work under the Protocol

1. Water, sanitation and hygiene in institutional settings

1. In the table below, please provide information on the proportion of schools (primary and secondary) and health-care facilities that provide basic water, sanitation and hygiene (WASH) services.

Basic services refer to the following:

(a) *Basic sanitation service: Improved facilities (according to JMP definition), which are sex-separated and usable at the school or health-care facility;*

(b) *Basic drinking water service: Water from an improved source (according to JMP definition) is available at the school or health-care facility;*

(c) *Basic hygiene service: Handwashing facility with water and soap available to students (schools) or patients and health-care providers (health-care facilities).*

If the above definitions/categories do not apply in your country, please report for alternative categories for which data are available. In this case, please indicate the reported categories by renaming the rows in the table below accordingly.

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

<i>Institutional setting</i>	<i>Current value (specify year)</i>
<i>Schools</i>	
Basic sanitation service	100 % (2018)
Basic drinking-water service	100 % (2018)
Basic hygiene service	100 % (2018)

<i>Institutional setting</i>	<i>Current value (specify year)</i>
<i>Health-care facilities</i>	
Basic sanitation service	100 % (2018)
Basic drinking-water service	100 % (2018)
Basic hygiene service	100 % (2018)

2. Has the situation of WASH in schools been assessed in your country?

YES

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

YES

4. Do approved policies or programmes include actions (please tick all that apply):

- To improve WASH in schools
 To improve WASH in health-care facilities

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

2. Safe management of drinking-water supply

6. Is there a national policy or regulation in your country, which requires implementation of risk-based management, such as WHO water safety plans (WSPs), in drinking water supply?

YES

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

The obligation to develop water safety plans (risk assessment in terminology of the EU directive 98/83/EC and Czech legislation) by water suppliers has been embedded in the Public Health Act in 2017. More detail information on structure and content of the risk assessment has been included in the Decree of the Ministry of Health No. 252/2004, revised in 2018.

8. In the table below, please provide information on the percentage of the population serviced with drinking-water under a WSP.

The operators of public water supplies has period of 6 years (by 2023) to develop risk assessment (WSP) and change the operational rules accordingly. The first several WSPs were developed in 2018, mostly for small supplies, as learning process is starting. It means that currently percentage of such population is negligible.

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

<i>Percentage of population</i>	<i>Current value (2018)</i>
Total	-

3. Equitable access to water and sanitation

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

~~YES~~ ~~NO~~ **IN PROGRESS**

10. Do national policies or programmes include actions to improve equitable access to water and sanitation (please tick all that apply):

- To reduce geographical disparities
- To ensure access for vulnerable and marginalized groups
- To keep water and sanitation affordable for all

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

Part seven Information on the person submitting the report

The following report is submitted on behalf of the CZECH REPUBLIC [name of the Party, Signatory or other State] in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: Frantisek Mudronka

E-mail: frantisek.mudronka@mzcr.cz

Telephone number: +420 224 972 408

Name and address of national authority: Ministry of Health of the Czech Republic, Palackeho namesti 4, 128 01 Prague 2

Signature:

Date: 08. 04. 2019

Submission

1. Parties are required to submit their summary reports to the joint secretariat, using the present template and in accordance with the adopted guidelines on reporting, 210 days before the next session of the Meeting of the Parties. Submission of the reports ahead of this deadline is encouraged, as this will facilitate the preparation of analyses and syntheses to be made available to the Meeting of the Parties.

2. Parties are requested to submit, to the two addresses below, an original signed copy by post and an electronic copy by e-mail. Electronic copies should be available in word-processing software.

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