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

Executive summary

Please provide an overall evaluation of the progress achieved in implementing the Protocol in your country during the reporting period. Please provide a short description of the main steps taken and highlight important achievements, key challenges, success factors and concrete good practice examples.

Part one
General aspects

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

Please provide detailed information on the target areas in part two.

YES ☑ NO ☐ IN PROGRESS ☐

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

<table>
<thead>
<tr>
<th>THE QUALITY OF THE DRINKING WATER SUPPLIED ACCESS TO SANITATION</th>
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<tbody>
<tr>
<td>Number of target</td>
</tr>
<tr>
<td>Target 1</td>
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<td>Target 2</td>
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<td>Target 3</td>
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<td>Target 4</td>
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<td>Target 5</td>
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<td>Target 6</td>
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<td>Target 7</td>
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</table>
2. Were targets and target dates published and, if so, how?

The targets were defined through the framework of the Water Management Strategy published in the Official Gazette No. 91/08 adopted by the Croatian Parliament in July 2008, and long term investment program documents (L.T.I.P.), such as the Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030, and the National Recovery and Resilience Program 2021-2026.

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 targets were established by the Ministry of Economy and Sustainable Development in cooperation with the Ministry of Health and the Croatian National Institute of Public Health and Croatian Waters. Considering the passage of time since the establishment of the targets, and the fact that certain targets have been achieved and/or for some the deadline has expired, having in mind the current legislation and planning documents, the need to revise the goals was noticed. Also, having in mind the consequences of the COVID-19 pandemic, which affected all aspects of life and brought new challenges, there was a need to revise the targets in this context. We plan to start revising the targets soon.

Coordination has been established between the above bodies. The Ministry in charge of water management in cooperation with the Ministry in charge of health has a leading role in the implementation of the Protocol on Water and Health. The Croatian National Institute of Public Health and Croatian Waters provides professional and operational support to these Ministries.

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.

The legal basis for the implementation of the Protocol on Water and Health is the Water Act (Official Gazette No. 66/19, 84/21), the Water Services Act (Official Gazette No. 66/19), the Act on Water for Human Consumption (Official Gazette No. 56/2013, 64/2015, 104/2017, 115/2018, 16/2020) and other subordinate legislation. The Strategic bases for the implementation of the Protocol are: the Water Management Strategy (Official Gazette No. 91/08) adopted by the Croatian Parliament in July 2008, the River Basin Management Plan 2016-2021 published in the Official Gazette No. 66/16, adopted by the Croatian Government in July 2016.
The long-term investment programme for development of water and wastewater infrastructure is the Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030 adopted by the Croatian Government in December 2021. Besides this Multi-Annual Construction Program, the National Recovery and Resilience Program 2021-2026 was adopted by the Croatian Government in June 2021.

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?

Public participation is mandatory and ensured through a document adoption process and through a strategic environmental assessment process.

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 Ministry of Economy and Sustainable Development is the body competent for the implementation of the Protocol on Water and Health, in cooperation with the Ministry of Health. The following bodies are also involved in the implementation of the Protocol: the Croatian National Institute of Public Health and the County Public Health Institutes, which monitor the sanitary quality of drinking water, and Croatian Waters as a legal entity for water management.

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.

Decision-making is distributed between the national level (competence of ministries and national agencies) and the local/regional level (local and regional self-governments and water utilities). Similarly, financing is generally a combination (co-financing) of the State Budget and national funds contribution in addition to the resources collected on the local level (water price).

Part two
Targets and target dates set and assessment of progress

For countries that have set or revised targets and target dates, please provide information specifically related to the progress towards achieving them. If you have not set targets in a certain area, please explain why.

For countries in the process of setting targets, please provide information on baseline conditions and/or targets considered under the relevant target areas.

Suggested length: one page (330 words) per target area.

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

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target.
<table>
<thead>
<tr>
<th>Number of target</th>
<th>Target</th>
<th>Target date</th>
<th>Responsibility</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target 1</td>
<td>To reduce arsenic concentration in the drinking water below 10µg/L</td>
<td>31 December 2020</td>
<td>Ministry of Health</td>
<td>Significant progress has been made. Within the EU project &quot;Improvement of water utility infrastructure of the City of Osijek&quot;, a water treatment plant was built to reduce Arsenic below 10 µg/L and ensure the supply of healthy water for the population in Osijek and the surrounding area. The plant with two-stage filtration and ozonation of water was put into operation in 2020 and now supplies healthy water to approximately 130,000 residents.</td>
</tr>
<tr>
<td>Target 5</td>
<td>The growth of percentage of access to public water supply system from present average 75% to average 85% to 90%, including small local systems presently unsupervised</td>
<td>1 January 2023</td>
<td>Ministry of Economy and Sustainable Development</td>
<td>Significant progress has been made. The percentage of population connected to public water supply systems has increased and amounts to 86%. Small water supply systems (local water supply systems) are successively included in the public water supply system and it is necessary to achieve further efforts to include small water supply systems in public water supply systems.</td>
</tr>
<tr>
<td>Target 8</td>
<td>Increasing the percentage of population connected to public sewerage for agglomerations with more than 2000 PE</td>
<td>31 December 2023</td>
<td>Ministry of Economy and Sustainable Development</td>
<td>Significant progress has been made. The percentage of population connected to public sewerage systems has increased to 53% for agglomerations with more than 2000 PE.</td>
</tr>
<tr>
<td>Target 9</td>
<td>The growth of percentage of access to public sewerage system from present average 46% to average 65-70% including the waste water treatment in 281 agglomeration larger than 2000 PE, in accordance with Urban Waste Water Treatment Directive (91/271/EEC)</td>
<td>1 January 2024</td>
<td>Ministry of Economy and Sustainable Development</td>
<td>Significant progress has been made. The percentage of population connected to public sewerage systems has increased to 53% for agglomerations with more than 2000 PE. Percentage of wastewater that is treated is 44% (includes the treatment of a lower degree than required).</td>
</tr>
</tbody>
</table>

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 framework of implementation of this target are the Act on Water for Human Consumption (Official Gazette No. 56/13, 64/15, 104/17, 115/18, 16/20), the Water Act (Official Gazette No. 66/19, 84/21) and the Water Services Act (Official Gazette No. 66/19).

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

The competent authorities take the measures and actions to achieve these targets.

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

The targets set under this area contribute to fulfilling SDG 6. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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.

Our baseline conditions in respect to outbreaks and incidents of water related diseases are exceptionally favorable. The vital target is to maintain such a favorable situation for the future. This is and will be achieved by the continuation of all preventive, surveillance and response measures and activities in the country, set by the respective laws and the national Program on health measures at the national and local levels.

Water-related diseases are mostly connected with the small water supply system (local water supply systems).

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).

Since water-related diseases are mostly connected with the small water supply systems (local water supply systems) they are, for the first time, included in the national drinking water monitoring program by the Act on the Water Intended for Human Consumption (Official Gazette No. 56/2013, 64/2015, 104/2017, 115/2018, 16/2020).

The only problem is to assure financial support necessary for the monitoring. The majority of financial needs are expressed regularly through periodical (annual, etc.) financial plans and programs of all subjects involved all over the country.

The Program on health measures is created, coordinated and in a great part implemented by the health sector, particularly by the network of national and county institutes of public health with their epidemiology services as a backbone of the system. All legal prerequisites
are currently in place and aligned with all respective EU legislation related to communicable diseases.

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

Having one or none outbreak related to drinking water per year is a good indicator that the target is fulfilled. Monitoring of drinking water quality in the small community water supply systems (local water supply systems) is essential to maintain such good conditions and needs to be maintained and improved in the future. In the future, it is essential to continue to monitor water-related diseases situation, and the incidence trends will be the most suitable indicator to monitor, if our targets to maintain the present favorable situation regarding water-related diseases were 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.

The target set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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

For each target set in this area:

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

In the Republic of Croatia, out of 156 public water service providers, 128 companies perform the activity of public water supply. The total amount of abstracted water for the needs of public water supply in the period 2016-2019 ranges from 450 to 480 million m³/year. About 90% of groundwater and springs are mainly abstracted, and only a small part of surface water (local water supply systems). The rate of connection of the population to public water supply systems amounts to approximately 86%. The remaining part of the population that is not connected to public water supply systems is supplied through small water supply systems (which are not managed by public water service providers) and individual water supply (wells, etc.).

The Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030 plans to achieve the goals and standards of performing the activities of public water supply, as follows:

1. Increase the availability of water - increase access to water for the population. The target value that is planned to be achieved is access to water for 98% of the population by 2030

2. Risk reduction with regard to the health safety of water intended for human consumption (for existing and newly connected residents)
3. Reduction of water losses in public water supply systems - reduction of water load by capturing water intended for human consumption (from 50% to 25%).

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 Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030, adopted in December 2021 (Official Gazette, No. 147/2021) is a program document establishing a framework program for investment in the development of public water supply (and public sewerage systems), and individual projects, period implementation, sources of funding and more. This program operationalizes the implementation system in a way that will contribute to more efficient use of financial, human and technical resources available to water management in the field of water use and the water services sector. This Program is a strategic planning document related to the conditions that enable the implementation of European Union funds.

The mentioned program plans investments in the development of the public water supply system in the amount of EUR 3.4 billion by 2030. To implement the public water supply development program within this program, the Republic of Croatia uses the European Structural Funds (Operational Program Competitiveness and Cohesion 2014-2020 and the Multiannual Financial Framework 2021-2027), and EU funds of the Recovery and Resilience Facility as well as national funds. The national component refers to the funds of the state budget, the budget of local self-government units, funds of Croatian Waters (earmarked water fees), loans from commercial banks, etc.

The National Recovery and Resilience Plan 2021-2026 (NRRP 2021-2026) is a national plan to withdraw funds from the Recovery and Resilience Facility that includes reforms and investments planned to be achieved by the end of 2026. An integral part of the NRRP 2021-2026 is to implement a comprehensive reform of the water services sector to strengthen implementation capacity and investment capacity and financial and technical sustainability of public water service providers. The NRRP (2021-2026) is planned to invest EUR 136.7 million in the development of the public water supply system (Reform measure No. C1.3.R1.II Public water supply) of which EUR 1.3 million in the development of public water supply in remote or hard-to-reach areas. These funds are included in the total of EUR 3.4 billion that are planned to be invested in the development of public water supply systems in the period up to 2030, within Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030.

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

Continuous investment in the development of the public water supply system enables access to healthy water for the population and the economy. Within the Operational Program Competitiveness and Cohesion 2014 - 2020 (OPCC), the Republic of Croatia has at its disposal HRK 6.45 billion of non-refundable EU funds for water utility projects. Within the National Recovery and Resilience Program 2021-2026 (NPRR 2021-2026) HRK 4.06 billion is planned for the development of the public water supply and sewerage system. So far, a total of 60 projects for the development of public water supply and sewerage have been approved by the OPCC, with a total value of HRK 25.8 billion including VAT (of which eligible costs amount to HRK 20.5 billion and EU grants HRK 14.4 billion). Out of a total of 60 approved projects, 3 projects have been completed, 11 will be transferred for funding from the NRRP 2021-2026, 15 projects are planned to be phased out and completed from the new Multiannual Financial
Framework 2021-2027, and the remaining projects are planned to be completed under OPCC 2014 - 2020 or national funds. Completion of these projects will result in an increase in the number of residents who have access to improved water supply:

- 500,000 more inhabitants will have access to improved water supply,
- about 780 km of public water supply network will be built and about 910 km of public water supply network will be renovated / reconstructed.

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

Implementation of investments in the development of the public water supply system within the Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030 and especially the implementation of the NRRP 2021-2026 which envisages investments in the development of public water supply in remote areas in rural, mountainous and demographically endangered areas, which as a rule have a lower degree of access to water services compared to urban areas, directly contributes to meeting the frequent goal of Sustainable Development Goal 6.1.

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

Not applicable.

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

For each target set in this area:

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

In the Republic of Croatia, out of 156 public water service providers, 146 companies perform the activity of public water sewerage services. The rate of connection of the population to public sewerage systems is approximately 53%, but 57% of the population has the possibility to connect to public water sewerage services. The rest of the population that is not connected to public sewerage systems uses an individual method of wastewater disposal (small sanitary facilities, collection and septic tanks).

The Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030 is related to connection and the treatment expressed in PE (population equivalent). The implementation of the program plans to increase the connection of the population to public sewerage systems inform current 242,769 PE to 4,914,909 PE (population equivalents).

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 Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030, adopted in December 2021 (Official Gazette No. 147/2021) is a program document establishing a framework program for investment in the development of public sewerage (and water supply), and individual projects, period implementation, sources of funding and more. This program operationalizes the implementation system in a way that will contribute to more efficient use of financial, human and technical resources available to water management in the field of water use and the water services sector. This Program is a strategic planning document related to the conditions that enable the implementation of European Union funds.
The mentioned program plans investments in the development of the public sewerage systems in the amount of EUR 3.6 billion by 2030. To implement the public water sewerage system development program within this program, the Republic of Croatia uses the European Structural Funds (Operational Program Competitiveness and Cohesion 2014-2020 and the Multiannual Financial Framework 2021-2027), and EU funds of the Recovery and Resilience Facility as well as national funds. The national component refers to the funds of the state budget, the budget of local self-government units, funds of Croatian Waters (earmarked water fees), loans from commercial banks, etc.

The National Recovery and Resilience Plan 2021-2026 (NRRP 2021-2026) is a national plan to withdraw funds from the Recovery and Resilience Facility that includes reforms and investments planned to be achieved by the end of 2026. An integral part of the NRRP 2021-2026 is to implement a comprehensive reform of the water services sector to strengthen implementation capacity and investment capacity and financial and technical sustainability of public water service providers.

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

Continuous investment in the development of the public sewerage system enables access to sanitation and protection of water from pollution. Within the Operational Program Competitiveness and Cohesion 2014-2020 (OPCC), the Republic of Croatia has at its disposal HRK 6.45 billion of non-refundable EU funds for water utility projects. Within the National Recovery and Resilience Program 2021-2026 (NRRP 2021-2026), HRK EUR 403 million is planned for the development of the public water sewerage systems. So far, a total of 60 projects for the development of public water supply and sewerage have been approved by the OPCC, with a total value of HRK 25.8 billion including VAT (of which eligible costs amount to HRK 20.5 billion and EU grants HRK 14.4 billion).

Out of a total of 60 approved projects, 3 projects have been completed, 11 will be transferred for funding from the NRRP 2021-2026, 15 projects are planned to be phased out and completed from the new Multiannual Financial Framework 2021-2027, and the remaining projects are planned to be completed under OPCC 2014-2020 or national funds. Completion of these projects will result in an increase in the number of residents who have access to sanitation:

- 2,400,000 inhabitants of the Republic of Croatia will have an improved wastewater treatment system,
- about 3,800 km of new wastewater treatment network will be built and about 330 km of wastewater treatment network will be renovated/reconstructed,
- 27 wastewater treatment plants with tertiary treatment will be built, 17 secondary wastewater treatment plants, 12 wastewater treatment plants will be upgraded to tertiary treatment, and 12 plants will be upgraded to secondary treatment.

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

Implementation of investments in the development of the public water sewerage system within The Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030 and especially the implementation of the NRRP 2021-2026 contributes to meeting the frequent goal of Sustainable Development Goal 6.2. Ensure availability and sustainable management of water and sanitation for all.

5. If you have not set a target in this area, please explain why.
V. Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e))

For each target set in this area:

1. 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.

Reform of the water services sector is under way. The existing water services sector is fragmented and does not have the capacity to implement the cycle of investments in the development of public water supply and sewerage systems implemented to comply with the Drinking Water Directive and Urban Waste Water Treatment Directive, both in terms of staffing and affordability in existing service areas (156 public water service providers). Therefore, it is necessary to consolidate, reorganize, establish service areas, introduce only one public provider of water services in the service area, introduce a single price of water services in the service area and achieve cost-effective management of existing and newly built infrastructure. The adoption of the legislative framework fulfilled the preconditions for the operational implementation of reforms in the water services sector by establishing a single public supplier in a single service area (41 service areas). This will reduce the existing number of public suppliers from 156 to 41.

The goals that are planned to be achieved by implementing the reform of water services are:

- strengthen the implementation capacity and investment capacity of water service providers in order to meet the requirements of the Accession Treaty (implementation of EU investments) and to implement national investments in the water services sector;

- strengthen financial stability, as well as financial and technical self-sustainability of water service providers;

- ensure the implementation of the principle of cost recovery from water services ("water pays for water") in a way that the management, maintenance and operation of municipal water structures is financed exclusively from water prices, and investments in municipal water infrastructure from various available budget sources, budgets of local self-governance units, international financial institutions or other financial markets;

- it will be ensured that the price of water, even after the implementation of investments, is socially affordable to consumers, within the limits of economic efficiency of suppliers, and as a rule up to 3% of net disposable household income per year;

- the integration of over 200 small water supply systems (local water supply systems) without adequate water quality control into the public water supply system will be ensured.

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 framework for the implementation of the reform in the water sector consists of the Water Services Act (Official Gazette, No. 66/19) and the Regulation on
service areas (Official Gazette, No. 147/21). By the end of 2023, the operational implementation of the reform in the water services sector is planned by establishing a single public supplier in each service area (41 service areas).

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

The challenge in achieving this goal is the dynamics of the operational implementation of the reform within the set deadlines.

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

Implementation of the reform in the water services sector contributes directly to the fulfillment of SDG 6.1, and indirectly to the fulfillment of SDG4 and SDG13 (reducing water losses in public water supply systems will contribute to rational use of water resources and protection of aquifers from spillage).

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

Not applicable.

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

For each target set in this area:

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

The reform of the water services sector is under way. The existing water services sector is fragmented and does not have the capacity to implement the investment cycle of investments in the development of public water supply and sewerage systems to comply with the Drinking Water Directive and Urban Waste Water Treatment Directive, both in terms of staffing and affordability in existing service areas. (156 public water service providers). Therefore, it is necessary to consolidate, reorganize, establish service areas, introduce only one public water service provider per service area, introduce a uniform price of water services in the service area and achieve cost-effective management of existing and newly built infrastructure. The adoption of the legislative framework fulfilled the preconditions for the operational implementation of reforms in the water services sector by establishing a single public supplier per service area (41 service areas). This will reduce the existing number of public suppliers from 156 to 41.

The goals that are planned to be achieved by implementing the reform of water services are:

- strengthen the implementation capacity and investment capacity of water service providers in order to meet the requirements of the Accession Treaty (implementation of EU investments) and to implement national investments in the water services sector
- strengthen financial stability, as well as financial and technical self-sustainability of public water service providers,
- ensure the implementation of the principle of cost recovery from water services ("water pays for water") in a way that the management, maintenance and operation of municipal water structures is financed exclusively from water prices, and investments in municipal water infrastructure from various
available budget sources, budgets of local self-government units, international financial institutions or other financial markets;

- it will be ensured that the price of water, even after the implementation of investments, is socially affordable to consumers, within the limits of economic efficiency of suppliers, and as a rule up to 3% of net disposable household income per year;

- the integration of over 200 small water supply systems (local water supply systems) without adequate water quality control into the public water supply system will be ensured.

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 framework for the implementation of the reform in the water sector consists of the Water Services Act (Official Gazette, No. 66/19) and th Regulation on service areas (Official Gazette, No. 147/21). By the end of 2023, the operational implementation of the reform in the water services sector is planned by establishing a single public supplier in each service area (41 service areas).

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

The challenge in achieving this goal is the dynamics of the operational implementation of the reform within the set deadlines.

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

Implementation of the reform in the water services sector contributes directly to the fulfillment of SDG 6.2, and indirectly to the fulfillment of SDG4.

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

Not applicable.

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

For each target set in this area:

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

The target is to improve the management of water supply and to increase the level of use and safety of water supply, specifically, achieve access to water for 98% of the population by 2030, reduce risk with regard to the health safety of water intended for human consumption (for existing and newly connected residents) and reduce water losses in public water supply systems from current 50% to acceptable 25%.

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 legal basis for the implementation of the Protocol on Water and Health is the Water Act (Official Gazette No. 66/19, 84/21), the Water Services Act (Official Gazette No. 66/19), the Water Management Financing Act (Official Gazette No. 153/09, 90/11, 56/13, 154/14, 119/15, 120/16, 127/17, 66/19), the Act on Water for Human Consumption (Official Gazette No. 56/2013, 64/2015, 104/2017, 115/2018, 16/2020), and other subordinate legislation. The Strategic bases for the implementation of the Protocol are: the Water Management Strategy (Official Gazette No. 91/08) adopted by the Croatian Parliament in July 2008, the River Basin Management Plan 2016-2021 published in the Official Gazette No. 66/16, adopted by the Croatian Government in July 2016.

Long term investment programs for development of water and wastewater infrastructure are the Multi-Annual Programme for Construction of Water and Wastewater Structures for the period until 2030 and the National Recovery and Resilience Program 2021-2026.

According to the Water Management Strategy, RBMP, LTIP development priorities are the following to achieve the goals:

- increase the availability of water - increase access to water for the population. The target value that is planned to be achieved is access to water for 98% of the population by 2030
- risk reduction with regard to the health safety of water intended for human consumption (for existing and newly connected residents)
- reduction of water losses in public water supply systems - reduction of water load by capturing water intended for human consumption

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 ensuring access to water and the delivery of healthy water. Additional efforts are needed to implement the reform in the water services sector within the deadlines.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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.

According to the Water Management Strategy, RBMP, LTIP development priorities are the following:
systems according to their size in terms of current and planned loads (population and industries connected to public sewerage systems);

- systems which will enable a fully functional unit, from connection, collection and treatment to appropriate discharge of treated wastewater, respecting technical and sanitary conditions of providing the service (impermeability, load releases, temporary sludge disposal, etc.);

- systems in the areas where degradation in water status has been identified (surface water, groundwater, coastal waters);

- systems in the areas identified as hazardous due to undeveloped public sewerage systems;

- systems in the basins whose receiving capacities are subject to a combined pressure from several sources of pollution;

- systems whose construction enables balanced development of utility infrastructure and sanitary living conditions of the population on the entire national territory.

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).

Wastewater collection and treatment systems are continuously constructed on the basis of specified priorities.

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

It has been identified that the construction of wastewater collection systems has improved the quality of water in the watercourses where these measures were carried out. Organic and nutrient pollution has been reduced.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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.

In line with the Water Management Strategy, RBMP, LTIP the target set in this area is the development of public sewerage systems. It foresees mostly development of secondary wastewater treatment, with the exception of less sensitive coastal areas
where, for smaller agglomerations, appropriate treatment according to the recipient standard is planned.

In line with the Ordinance on wastewater emission limit values (Official Gazette No. 80/13, 43/14, 27/15 and 3/16), discharged effluents are temporarily tested for compliance with the parameters of the planned treatment level and are subject to continuous monitoring and recording of volumes discharged from public sewerage systems.

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).

Wastewater collection and treatment systems are continuously constructed on the basis of specified priorities.

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

Collected proceeds of the water protection fee are continually invested in the construction of major structures of public sewerage systems (main sewers, pumping stations, wastewater treatment plants, outlets into receiving waters, and sludge treatment facilities) and structures of secondary sewerage network.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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

For each target set in this area:

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

The target set in this area is the protection of receiving waters on the sites where a sewerage system is released from load through storm water overflows. This will be harmonized with the objectives of the Water Framework Directive, which requires the achievement and maintenance of good water status.

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).

Administrative procedures for issuing water rights terms for the construction of a public sewerage system require an assessment of wastewater volume and of frequency of release through storm water overflows.

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.
Regulated and applied through administrative procedures. For new sewerage systems, the recommendation is a separate sewer system approach.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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

For each target set in this area:

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

The quality of wastewater discharged from a WWTP has to comply with the established limit values.

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>LIMIT VALUE</th>
<th>MINIMUM PERCENTAGE OF LOAD REDUCTION (%)</th>
<th>REFERENCE METHOD OF MEASUREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended solids</td>
<td>35 mg/l (more than 10 000 PE)</td>
<td>90</td>
<td>Filtering of a representative sample through a 0.45 μm filter membrane, drying at 1050C and weighing, or centrifuging of a representative sample for at least 5 minutes with mean acceleration of 2800 to 3200 g, drying at 1050C</td>
</tr>
<tr>
<td></td>
<td>60 mg/l (2 000 - 10 000 PE)</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Biochemical oxygen demand BOD5 (200C)</td>
<td>25 mg O2/l</td>
<td>70–90</td>
<td>Homogenized, unfiltered, undecanted sample. Determination of dissolved oxygen before and after five-day incubation at 200C ± 10C in complete darkness. Addition of a nitrification inhibitor</td>
</tr>
<tr>
<td></td>
<td>40 mg O2/l (a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical oxygen demand – CODCr</td>
<td>125 mg O2/l</td>
<td>75</td>
<td>Homogenized, unfiltered, undecanted sample. Potassium dichromate</td>
</tr>
<tr>
<td>Total phosphorus</td>
<td>2 mg P/l (10 000 - 100 000 PE)1</td>
<td>80</td>
<td>Table 1, point 44</td>
</tr>
<tr>
<td></td>
<td>mg P/l (more than 100 000 PE)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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).

Urban wastewater is tested in accordance with the issued water rights permit. Analyses are conducted by authorized laboratories in accordance with good international laboratory practice. Testing results are submitted to Croatian Waters.

With regard to the size of an agglomeration and sensitivity of an area, the deadlines for achieving treatment effects are specified in the LTIP.

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

The progress towards the target can be measured through the compliance of wastewater monitoring results at a point of discharge with limit values laid down in water rights permits. The data are monitored.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the Water Management Plan, the goals and measures are continually updated and supplemented.

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

Not applicable.

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

For each target set in this area:

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

The national and local target is water protection, i.e. to reduce the quantities of dangerous substances at the source of pollution through the implementation of water protection measures; controlling the operation of constructed structures and wastewater treatment plants; and disposal of sludge and planning of disposal sites for the sludge from WWTPs

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 waste sludge generated from wastewater treatment can be used in agriculture if previously composted, digested or stabilized and if the content of heavy metals and other harmful substances complies with the requirements of the Ordinance on the protection of agricultural soil pollution (Official Gazette No. 9/14) and the Ordinance
on management of sludge from wastewater treatment plants when sludge is used in agriculture (Official Gazette 38/08).

The Waste Management Plan of the Republic of Croatia for the Period 2017-2022 (Official Gazette, No. 3/2017, 1/2022) set the goal 2.2 Establishment of a waste sludge management system from the municipal wastewater treatment plant. When setting up a waste sludge management system, the priority of waste should be taken into account as well as considering material recovery and application on surfaces suitable for sludge application before other. In order to determine the types of suitable surfaces, their location and capacities, it is necessary to adopt the Action Plan for the use of sludge from wastewater treatment plants on suitable surfaces.

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

In the period 2018-2026, a significant increase in sludge production is planned due to two factors: increasing the load of agglomerations and commissioning of certain new municipal wastewater treatment plants in accordance with the provisions of the Urban Wastewater Treatment Directive.

Regarding the management of sludge from municipal wastewater treatment plants, in March 2020 the Action plan for the use of sludge from wastewater treatment plants on suitable surfaces was adopted. This plan is the basis for selecting the most suitable technical solutions to be applied in EU agglomeration projects. The action plan envisages the application of any sludge treatment procedure on devices, which in the given circumstances and on specific devices represent long-term economically, technically and environmentally acceptable solutions. The principles of the new EU Circular Economy Action Plan, one of the main components of the European Green Plan, should be taken into account when choosing the sludge treatment process.

The choice of the appropriate solution and location of sludge disposal depends on several factors: the quality and quantity of waste sludge produced, local conditions (restrictions due to protected areas) as well as the amount of investment costs and operating and maintenance costs of the entire sludge treatment system.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan, the goals and measures are continually updated and supplemented.

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

Not applicable

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

For each target set in this area:

1. Please describe the current target and target date. Please provide information on the background (including the baseline/starting point and reference to existing national and international legislation) and justification for the adoption of the target. Not applicable.

2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).
Not applicable.

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

Not applicable.

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

Not applicable.

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

Due to the available quantities of water, so far there has been no need to use wastewater for irrigation, although this is possible due to bylaws. In accordance with the above, there was no need to set quality parameters for wastewater for irrigation. For irrigation in agriculture, the minimum requirements for water quality are defined by Regulation 2020/741 of the European Parliament and of the Council on minimum requirements for water reuse.

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.

<table>
<thead>
<tr>
<th>No</th>
<th>Target</th>
<th>Target date</th>
<th>Baseline conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To monitor quality of the raw water (waters which are used as a sources for drinking water)</td>
<td>continuously</td>
<td>Target is set on the national level. According to the Water Safety Plans approach it is necessary to control all steps in the water supply chain from the catchments to the consumer.</td>
</tr>
</tbody>
</table>

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 the current Croatian drinking water regulation Act on the Water for Human Consumption (Official Gazette No. 56/13, 64/15, 104/17, 115/18, 16/20) it is stated that raw waters need to be monitored in all the water supply chain. The main difficulty is financial support of the Monitoring Programs especially in the small water supply companies.

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

The Program of raw water monitoring started in 2009 and has been in implementation ever since.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable

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

For each target set in this area:

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

The Bathing Sea Quality monitoring programme in the Republic of Croatia is implemented on the basis of the Bathing Sea Quality Regulation (OG No. 73/08). Based on the results of bathing sea quality monitoring, individual, annual and final bathing sea quality assessments are determined.

The inland bathing water quality monitoring programme is implemented on the basis of the Regulation on the quality of bathing water (NN 51/14). Based on the results of inland bathing waters quality monitoring, individual, annual and final bathing quality assessments are determined.

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).

During the bathing season 2021, the bathing sea monitoring was performed at 1003 official bathing sites. The Croatian bathing sea quality programme is financed by seven coastal counties.

For the inland waters, during the bathing season 2021, monitoring was perfomed at 25 official bathing sites. Monitoring was conducted by public health institutes, and funded through local units of self-government.

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

The number of bathing sites in Croatia has grown constantly over the last decade in spite of COVID-19 circumstances when a slight decrease has occurred (in 2020). Regarding the Sea Bathing Quality, Croatia is very highly rated among the European countries. According to the number of bathing sites with excellent sea/water quality in 2021, Croatia was in the top 5th place (behind Cyprus, Austria, Greece and Malta).

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

In the season 2021, a total of 10149 individual samples were taken, of which 9849 (or 97.04%) were rated excellent (blue coloured), 173 samples (or 1.7%) were rated good (green col.), 107 samples (or 1.05%) with a satisfactory grade (yellow col.) and 20 samples (or 0.2%) with an unsatisfactory grade (red coloured).
The ranking is similar in results of annual and final bathing sea quality assessments, in the bathing season 2021.

In the observed period of 2018-2021, 59% of inland bathing water was of excellent and good quality, and none was of unsatisfactory quality.

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

Not applicable.

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.

Objectives for meeting the quality requirements of water used for aquaculture or for the production or harvesting of shellfish are based from the requirements of the Water Framework 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).

The Water Act (Official Gazette No. 66/19, 84/21) establishes the possibility of revising water legal acts which prescribe the implementation of measures to bring water into good water condition.

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

The waters used for aquaculture or for the production or harvesting of shellfish are areas of special water protection. For such areas, in addition to the basic measures (according to the Water Framework Directive), additional measures are to be implemented. However, if the basic and additional measures do not obtain the required results, further measures for the protection of such waters shall be prescribed.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.
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.

Protection of bathing water in Croatia is regulated by the Bathing Sea Quality Regulation (Official Gazette 73/08) (quality of sea bathing water at sea beaches) and Regulation on the quality of bathing water (Official Gazette 51/2014) (quality of bathing water on land surface waters).

The regulations set out additional microbiological standards for bathing water quality and mandatory measures for bathing water management.

Bathing water management measures are in charge of local units self-government (for bathing areas on the surface waters) or counties (for seaside beaches).

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).

Key type of measures are part of the River Basin Management Plans of Croatia for the period 2016 -2021. Administrative measures for the bathing water protection includes decisions on determining bathing water that are made before each bathing season. Bathing waters are listed in the Register of Protected Areas and are subject to regulated monitoring. Bathing water profiles for swimming are established for every beach as one of the measure of the managament of water quality at beaches.

By implementing measures, continual achievement of the goals of protection of bathing water and beaches and health protection of swimmers is ensured.

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

Targets are achieved through the continuous implementation of the bathing water protection measures.

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 set under this area is compatible with the 2030 Sustainable Development Agenda. Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

Not applicable.

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

For each target set in this area:

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

There are no specifically polluted locations according to the Protocol.
2. Please describe the actions taken (e.g., legal/regulatory, financial/economic, informational/educational and management measures) to reach the target (see also article 6, paragraph 5, of the Protocol).

Not applicable

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

Not applicable

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

Not applicable

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

Not applicable

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

For each target set in this area:

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

The basic objective of water management is the establishment of an integrated and coordinated water regime on the national territory. This implies having in mind the spatial distribution and level of development of the water system, as well as quantitative and qualitative status of water in the manner which best suits a particular area and a particular time. With that in mind, integrated water management is supposed to:

- provide sufficient quantities of drinking water of good quality for the population;
- provide the required quantities of water of adequate quality for various economic purposes;
- protect people and assets against adverse effects of water;
- achieve and preserve the good status of water in order to protect aquatic and water-dependent ecosystems;
- harmonizing in that process water management measures with other sectors – users of space, and ensuring the good status of surface water, groundwater, transitional and coastal waters (the sea).

Management of river basin districts in a sustainable manner implies integrated management of surface water and groundwater and the water estate which will ensure:

- good water status;
- sufficient quantities of water of adequate quality for various forms of water use;
- protection and improvement of aquatic ecosystems;
- mitigation of adverse environmental impacts caused by droughts and floods.

Within integrated water management it is necessary to improve sustainable water use in economic, environmental and social terms in line with the needs of the society, interests of stakeholders, and long-term development.
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 frameworks of legal and regulatory measures are defined by the Water Act (Official Gazette No. 66/19, 84/21) and the Water Management Financing Act (Official Gazette No. 153/09, 90/11, 56/13, 154/14, 119/15, 120/16, 127/17, 66/19).

The Water Management Strategy (Official Gazette No. 91/08) has been adopted. It sets the targets and guidelines in terms of improving access to drinking water.


Long term investment programs for development of water and wastewater infrastructure are Multi-Annual Program of Construction of Water and Wastewater Structures for the period until 2030, and the National Recovery and Resilience Program 2021-2026.

Sufficient quantities of water of adequate quality are provided from the existing or new sources (resources) with implementation of protection measures within sanitary protection zones used for public water supply.

Investigations of the availability of water resources for the provision of sufficient quantities of water of the required quality from the existing or new sources are continuously performed.

In addition to water supply, other forms of water use are also present (production of electricity, irrigation, fish farming, inland navigation, sport, bathing and recreation, abstraction of mineral and geothermal water).

Improved monitoring of all water uses in the basin through the Water Information System in line with the needs and requirements of the European Union by introducing the European parameters for the monitoring of water use is operational.

The public is regularly informed about the status and potentials of water use.

Participation of institutions from the water management sector in the preparation of regulations, standards and acts in the field of water use in industry in order to improve safe, efficient and sustainable water use is legally regulated.

On transboundary and boundary watercourses and aquifers with the neighbouring countries the water management sector participates in the identification and implementation of rules and measures for the purpose of joint regulation and use of watercourses under bilateral/multilateral agreements (use of water power, inland navigation, public water supply, sport and recreation, fish farming, etc.).

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

In general, within integrated water management steps have been made in further improvement of sustainable water use in economic, environmental and social terms in line with the needs of the society, interests of stakeholders, and long-term 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.

Through the updating of the River Basin Management Plan the goals and measures are continually updated and supplemented.

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

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.

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

Part three

Common indicators

I. Quality of the drinking water supplied

1. Context of the data

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

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

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

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

   Data reported under sections 2 and 3 refer to the national monitoring of drinking water quality done under DWD and national legislation. Population served from public water supply systems is: 86% of total national population and those from local water supply

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1 In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible 2005 — the year of entry into force of the Protocol — as the baseline year.
systems in rural areas: 1.45% of total national population. Population supplied by individual structures are not a part of the state monitoring.

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

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

Water quality samples reported in sections 2 and 3 below primarily taken at the point of consumption.

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

National standards are in line with the DWD.

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.

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by "non-centralized versus centralized" water supplies or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the column "area/category" in the table below accordingly.

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

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>E. coli</em></td>
<td>Total</td>
<td>4%</td>
<td>2.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>0.2%</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>29.5%</td>
<td>22.2%</td>
<td></td>
</tr>
</tbody>
</table>

Additional parameter 1:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Area/category</th>
<th>Value reported in the previous reporting cycle (2017)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional</td>
<td>Rural</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>parameter 2:</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parameter 3:</td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

   *If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” sanitation systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the column “area/category” in the table below accordingly.*

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

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>Total</td>
<td>5.5%</td>
<td>6.9%</td>
<td>0.4%</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>-</td>
<td>6.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-</td>
<td>11.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td>Total 0.2%</td>
<td>0</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>-</td>
<td>0</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nitrate</td>
<td></td>
<td>Total 0</td>
<td>0.1%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>-</td>
<td>1.6%</td>
<td>0</td>
</tr>
<tr>
<td>Additional parameter 1:</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional parameter 2:</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Additional parameter 3:</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Drinking water monitoring is done according to the DWD. Total number of samples in urban (public water supply systems) is 7080 (in 2017). Nitrat was not observed in any of those samples. Total number of samples in rural (small community water supply systems) is 617 (in 2017) where 10 uncompliant samples was found. In total at national level that gives 0.1% of uncompliant samples in 2017 for nitrates. In 2020, there were no uncompliant samples at both levels (rural/urban) for nitrates.

II. Outbreaks and incidence of infectious diseases related to water

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

(a) For reporting outbreaks, please report confirmed water-related outbreaks only (i.e., for which there is epidemiological or microbiological evidence for water to have facilitated infection);

(b) For reporting incidents, please report the numbers related to all exposure routes. In your response:

   (i) Please report cases per 100,000 population;
   (ii) Please differentiate between zero incidents (0) and no data available (-).

Please extend the list of water-related diseases, to the extent possible, to cover other relevant pathogens (e.g., enteric viruses, Giardia intestinalis, Vibrio cholerae).

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

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

<table>
<thead>
<tr>
<th>Disease</th>
<th>Incidence rate per 100,000 population (all exposure routes)</th>
<th>Number of outbreaks (confirmed water-borne outbreaks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shigellosis</td>
<td>53.4</td>
<td>1.52</td>
</tr>
<tr>
<td>Enterohaemorrhagic E. coli infection</td>
<td>-</td>
<td>0.23</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>0.5</td>
<td>0.02</td>
</tr>
</tbody>
</table>

*Note: The value reported in 2018 for Typhoid fever is marked with an asterisk (*) due to data limitations.
Viral hepatitis A  35.6  2.24  0.08  1  0  0
Legionellosis  0  1.84  0.85  -  0  0
Cryptosporiosis  -  0.16  0  -  0  0
Rotavirus gastroenteritis:  -  22.29  24.23  -  0  0
Unknown agent:  -  -  -  -  1  0

Additional disease 3:

III. Access to drinking water

If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” water supply systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the table below accordingly.

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

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

<table>
<thead>
<tr>
<th>Percentage of population with access to drinking water</th>
<th>Baseline value (specify year)</th>
<th>Value reported in the previous reporting cycle (2018)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>-</td>
<td>86% of population connected to the public water supply system</td>
<td>86% of population connected to the public water supply system</td>
</tr>
<tr>
<td>Urban</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rural</td>
<td>-</td>
<td>-</td>
<td>Population share served from the local water supply systems is 1.45%</td>
</tr>
</tbody>
</table>


☒ National estimates. Please specify how “access” is defined and what types of drinking-water supplies are considered in the estimates in your country.

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

*If possible, please provide segregated data for urban and rural areas in the table below. If this is not possible, please consider reporting by alternative categories available in your country, for example by “non-centralized versus centralized” sanitation systems or by population number-based categories. If you do so, please indicate the reported categories by renaming the rows in the table below accordingly.*

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

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

<table>
<thead>
<tr>
<th>Percentage of population with access to sanitation</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2018)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

- Improved sanitation facilities (as per JMP definition)
- Facilities not shared with other households
- Facilities from which excreta is safely disposed in situ 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 water falling under each

3 Please specify,
defined class (e.g., for European Union countries and other countries following the European Union Water Framework Directive\(^4\) classification, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status; for other countries, in classes I, II, III, etc.).

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

(i) Ecological status of surface water bodies

<table>
<thead>
<tr>
<th>Percentage of surface water classified as:</th>
<th>Baseline value (2018)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High status</td>
<td>19.4% / 29.7% / 0% / 0%</td>
<td>19.4% / 29.7% / 0% / 0%</td>
</tr>
<tr>
<td>Good status</td>
<td>22.2% / 16.2% / 44% / 65.4%</td>
<td>22.2% / 16.2% / 44% / 65.4%</td>
</tr>
<tr>
<td>Moderate status</td>
<td>19.5% / 13.5% / 48% / 30.8%</td>
<td>19.5% / 13.5% / 48% / 30.8%</td>
</tr>
<tr>
<td>Poor status</td>
<td>15.7% / 8.1% / 4% / 0%</td>
<td>15.7% / 8.1% / 4% / 0%</td>
</tr>
<tr>
<td>Bad status</td>
<td>23.1% / 32.4% / 4% / 3.8%</td>
<td>23.1% / 32.4% / 4% / 3.8%</td>
</tr>
<tr>
<td>Total number of water bodies classified</td>
<td>1484 / 37 / 25 / 26</td>
<td>1484 / 37 / 25 / 26</td>
</tr>
<tr>
<td>Total number of water bodies in the country</td>
<td>1484 / 37 / 25 / 26</td>
<td>1484 / 37 / 25 / 26</td>
</tr>
</tbody>
</table>

(ii) Chemical status of surface water bodies

<table>
<thead>
<tr>
<th>Percentage of surface water bodies classified as</th>
<th>Baseline value (2018)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good status</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td>Poor status</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Total number of water bodies classified</td>
<td>1484</td>
<td>1484</td>
</tr>
<tr>
<td>Total number of water bodies in the country</td>
<td>1484</td>
<td>1484</td>
</tr>
</tbody>
</table>

(iii) Status of groundwaters

<table>
<thead>
<tr>
<th>Percentage of groundwaters classified as</th>
<th>Baseline value (2018)</th>
<th>Current value (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good quantitative status</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Good chemical status</td>
<td>90.9%</td>
<td>90.9%</td>
</tr>
<tr>
<td>Poor quantitative status</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Poor chemical status</td>
<td>9.1%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Total number of groundwater bodies classified</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Total number of groundwater bodies in the country</td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

(b) For other countries

(i) Status of surface waters

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

Total number/volume of water bodies classified

Total number/volume of water bodies in the country

<sup>a</sup> Rename and modify the number of rows to reflect the national classification system.
(ii) **Status of groundwaters**

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

Total number/volume of groundwater bodies classified

| Total number/volume of groundwater bodies in the country |

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

2. **Water use**

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

<table>
<thead>
<tr>
<th>Water exploitation index</th>
<th>Baseline value (specify year)</th>
<th>Value reported in the previous reporting cycle (2016-2018)</th>
<th>Current value (2019-2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td></td>
<td>5.346.111 m³/year (organized-water allocated through concession)+10.000.000 – according River Basin Management Plan 2016-2021</td>
<td>water allocated through concession: 2019 - 4.485.872 m³/year 2020 - 5.815.768 m³/year</td>
</tr>
<tr>
<td>Industry*</td>
<td></td>
<td>35.567.186 (manufacturing – water allocated through concession)</td>
<td>water allocated through concession: 2019 - 35.170.942 m³/year 2020 - 32.291.234 m³/year</td>
</tr>
<tr>
<td>Domestic use*</td>
<td></td>
<td>461.601.473 (public abstracted) – 27.500.000 (estimation for individual supply wells according River Basin Management Plan</td>
<td>abstracted for public supply: 2019 - 477.270.695 m³/year (domestic use: 170.779.107) 2020 - 468.302.982 m³/year (domestic use: 174.100.818) 2021 - 477.698.133 m³/year (domestic use: 175.678.318)</td>
</tr>
</tbody>
</table>

* Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.
Part four
Water-related disease surveillance and response systems

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

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

YES ☐ NO ☐ IN PROGRESS ☐

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

YES ☐ NO ☐ IN PROGRESS ☐

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

YES ☐ NO ☐ IN PROGRESS ☐

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

Monitoring, study, control and prevention of communicable diseases are legally regulated by a number of acts and ordinances. Some of the most pivotal are: the Health Care Act with secondary legislation (OG 150/08, 155/09, 71/2010, 139/2010, 22/2011 and 100/2018), Act on the Protection of the Population against Communicable Diseases (OG 79/2007, 113/2008, 43/2009, 22/2014 and 130/2017), List of communicable diseases the control and prevention of which is of interest to Croatia (OG 60/2014) and Ordinance on the method of reporting communicable diseases (OG 23/94).

The surveillance of communicable (including water-related) diseases is under the authority of the Croatian Institute of Public Health (CIPH)’ Infectious Diseases Epidemiology Service (IDES), as well as competent County Public Health Institutes (21) and Field Epidemiology Units (112) that are part of the County Public Health Institutes. At the national level, submitted communicable disease notifications are daily analysed at the IDES, CIPH. The CIPH submits reports to the Ministry of Health (MoH), with copies of monthly reports sent to the County Public Health Institutes and state administration bodies competent for sanitary inspection and veterinary medicine. A report on the trends of communicable diseases in Croatia is included in the Croatian Health Service Yearbook. In addition to the national work on communicable diseases control, the IDES is also the focal point for the WHO International Health Regulations (IHRs) and a partner to the European Centre for Disease Prevention and Control (ECDC), which is one of the bodies of the Directorate General for Health and Consumer Protection (DG SANCO), the highest EU body in charge of health. The IDES coordinates the work of all epidemiology services in Croatia, at the same time being part of the EU IHR and EWRS systems.
The outbreaks are investigated by the field epidemiology team that has a microbiological support from the county public health laboratories (21). They also notify and cooperate with the sanitary inspectors and this approach enables also environmental analysis (inspection of food facilities), taking samples for laboratory investigation. In some instances also veterinary inspection is notified and that also enables taking food samples of animal origin.

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.

Not applicable.

Part five
Progress achieved in implementing other articles of the Protocol

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

Suggested length: up to two pages

The Republic of Croatia is aware that water is essential to sustain life and that the availability of water in quantities, and of a quality, sufficient to meet basic human needs is a prerequisite both for improved health and for sustainable development. As a Contracting Party to the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992), the Republic of Croatia is streamlining its efforts into the availability of drinking water and application of sanitary measures for the entire population within the integrated water management system aimed at protecting human health and aquatic ecosystems. In order to sustain the high level of efficient protection against water-related diseases in Croatia, drinking water monitoring is conducted on the basis of the Ordinance on sanitary quality of drinking water by County Public Health Institutes and the institutions authorized by the Ministry of Health. The Ordinance on sanitary quality of drinking water lays down minimum standards for the control of sanitary quality of drinking water identified in the WHO Drinking Water Quality Guidelines and the corresponding European legislation on drinking water.

Information and evaluation of the results of drinking water quality tests conducted by Public Health Institutes are published and available to the public once a year in the Croatian Health Service Yearbook.

The trends of diseases related to drinking water have been monitored in the Republic of Croatia for more than 70 years within the monitoring of contagious diseases aimed at reducing illnesses and preventing epidemics outbreaks. At the level of the Republic of Croatia the status of contagious diseases is supervised and assessed by the Epidemiological Service of the Croatian Institute for Public Health pursuant to the Act on the Protection of the Population against Contagious Diseases and the Ordinance on the mandatory reporting of contagious diseases.

In order to develop water supply systems, activities are carried out to ensure sufficient quantities of drinking water of proper quality for public water supply as well sufficient quantity of water of adequate quality for various economic purposes. It is also planned that the average percentage of the population supplied with water from public water
supply systems will increase from the current 86% to 98% by the year 2030, in line with the European standards.

In terms of developing public sewerage systems, it is planned to achieve a higher share of population and economy connections to public sewerage systems from the existing 57% than more expressed in population equivalent 4,914,909 (EP).

Public information and participation in water management activities is regulated and ensured through public participation in adoption of planning documents, seminars and workshops, the media, and web sites of the Ministry of Economy and Sustainable Development.

The Republic of Croatia is a party to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992), and it has participated in the Convention’s activities and meetings conducted so far. The Republic of Croatia also takes part in the activities of interstate commissions established under international agreements (the International Commission for the Protection of the Danube River (ICPDR), the International Sava River Basin Commission), and in the activities of the commissions established under bilateral agreements (Agreement between the Government of the Republic of Croatia and the Government of the Republic of Slovenia on the Regulation of Water Management Relations, Agreement between the Government of the Republic of Croatia and the Government of Bosnia and Herzegovina on the Regulation of Water Management Relations, Agreement between the Government of the Republic of Croatia and the Government of Hungary in the field of environmental and nature protection).

International support in infrastructural programs related to water supply and wastewater is achieved through cooperation with EU.

Part six
Thematic part linked to priority areas of work under the Protocol

1. Water, sanitation and hygiene in institutional settings

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

Basic services refer to the following:

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

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

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

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

Please indicate the source of data. If data is not available, please put (-).
<table>
<thead>
<tr>
<th>Institutional setting</th>
<th>Current value (2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schools</strong></td>
<td></td>
</tr>
<tr>
<td>Basic sanitation service</td>
<td>96.7%</td>
</tr>
<tr>
<td>Basic drinking-water service</td>
<td>99.8%</td>
</tr>
<tr>
<td>Basic hygiene service</td>
<td>99.5%</td>
</tr>
<tr>
<td><strong>Health-care facilities</strong></td>
<td></td>
</tr>
<tr>
<td>Basic sanitation service</td>
<td>91.5%</td>
</tr>
<tr>
<td>Basic drinking-water service</td>
<td>98%</td>
</tr>
<tr>
<td>Basic hygiene service</td>
<td>96%</td>
</tr>
</tbody>
</table>

Source of data: Study conducted in 2022 by Croatian Institute of Public Health, unpublished.

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

   YES ☐  NO ☐  IN PROGRESS ☐

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

   YES ☐  NO ☐  IN PROGRESS ☐

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

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

   The policies that ensure adequate WASH standards for schools and healthcare facilities are from various sectors regulations (education, health and environmental sector).


   **Regulations in healthcare sector:** Act on Protecting the Population from Infectious Diseases, Ordinance on Minimum Conditions Regarding Premises, Workers and Medical -Technical Equipment for Healthcare Facilities, Ordinance on conditions and manner of implementing measures for prevention and control of hospital infections; [https://zakon.hr/z/1067/Zakon-o-za%C5%A1titit- pu%C4%8Danstva-od-zaraznih-bolesti](https://zakon.hr/z/1067/Zakon-o-za%C5%A1titit- pu%C4%8Danstva-od-zaraznih-bolesti), [https://narodne-novine.nn.hr/clanci/sluzbeni/2011_06_61_1374.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2011_06_61_1374.html), [https://narodne-novine.nn.hr/clanci/sluzbeni/2012_07_85_1949.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2012_07_85_1949.html)

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

Croatia was aware of importance of risk-based approach in water supply even before its entrance to the EU and signing of the Protocol. Already in 2004 Croatia defined that public water supply systems needed to implement HACCP. However, there were no guidelines for water suppliers and all activities were based on the experience from the food processing, accordingly some difficulties were found out in such approach in the water supply.

Croatia decided to take opportunity to improve this important area through the transposition of Annex II of the Council Directive on the Quality of Water Intended for Human Consumption from 2015 into national legislation. The Act on Water for Human Consumption (OG 56/13, 64/15, 104/17, 115/18, 16/20) stipulates that large water supply systems serving ≥ 5000 inhabitants need to introduce WSP in a period of 5 years and small systems serving < 5000 inhabitants in a period of 10 years.

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

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

<table>
<thead>
<tr>
<th>Percentage of population</th>
<th>Current value (specify year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>86%</td>
</tr>
</tbody>
</table>

3. Equitable access to water and sanitation

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

YES ☑ NO ☐ IN PROGRESS ☐

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 MINISTRY OF ECONOMY AND SUSTAINABLE DEVELOPMENT in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: ELIZABETA KOS, Director of Water Management and Sea Protection Directorate

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Telephone number: +385 1 6307 411

Name and address of national authority: Ministry of Economy and Sustainable Development, Grada Vukovara 220, 10000 Zagreb, Croatia

Signature:  

Date: May 4, 2022

Submission

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

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

Joint Secretariat to the Protocol on Water and Health

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