

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

## Executive summary

Romania has ratified UNECE / WHO-EURO Protocol on Water and Health (London, 1999), to the UNECE Convention on the protection and use of transboundary watercourses and international lakes (Helsinki, 1992), by the Government Ordinance no. 95 / 29.08.2000, approved by Law no. 228 / 30.11.2000.

In Romania, the authorities responsible for the implementation of the Protocol are the Ministry of Environment, Waters and Forests and the Ministry of Health.

Romania participated at 4 cycles of Reporting (through 2010, 2013, 2016 and 2019) and now, fifth 2022 Reporting exercises according to article 6 and article 7 of the Protocol on Water and Health. In this regard, it was necessary to develop the baseline analysis for identification and prioritization of the proposed targets for setting short, medium and long – term target dates.

Romania establishes and publishes targets approved, including their deadlines, which refer to aspects of ensuring people's access to water and sanitation, quality of water resources and drinking water, reduction of water-related disease, control of pollution, water management, etc.

In Romania the targets and target dates were set by an intersectoral working team of experts in accordance with article 6 of the Protocol **and were officially adopted in 2016**. The targets are based on EU legislation including relevant reporting procedures, national legislation and appropriate national programs. Prior to the approval, the targets were reviewed in connection with reporting exercises under the Protocol. Exchange of experience during the workshop on collecting good practices on target setting and reporting (Geneva, 8-9 March 2016) played a key role in fostering the official approval procedure. Thus, through an explanatory document prepared by specialists it was reached signing both of government representative (respectively from the authorities responsible for the implementation of the Protocol) which led to approval of objectives.

“The Guidelines on the setting of targets, evaluation of progress and reporting” has been a support for the entire cycle of elaboration of the National Report.

Implementation of the provisions of the Protocol will contribute to the fulfillment of the Sustainable Development Objectives, in particular the SDG6 (people's access to safe water and adequate sanitation) the result of which is to reduce the risk of disease in the population associated with water-related diseases.

In this regard, Romania is fully committed to the implementation of the 2030 Agenda for Sustainable Development.

Thus, under the Inter-ministerial Committee which has responsibilities for coordinating sustainable development at national level (GD 741/2011), was coordinated the process of elaborating Romania's National Voluntary Review (NVR) 2018. This report analyses in detail the Sustainable Development Goals (SDGs) revised during the 2018 Session of the High-level Political Forum on Sustainable Development, focusing on SDG6, SDG7, SDG11, SDG12, SDG15 and SDG17

During of this process, Open Working Group held 4 working meetings on 2017, where National Focal Points on the Protocol on Water and Health and on SDGs, worked together regarding at not only to fill the Matrix of SDGs, but to fill it a descriptive report with accent on SDG6. Through Descriptive Report is underlined how the Protocol is the mechanism to advance and operationalize progress on the goals and targets related to water, sanitation, hygiene and health and has proven its effectiveness for sustainable development and for improvement of the drinking water quality, sanitation and public health.

([https://sustainabledevelopment.un.org/content/documents/19952Voluntary\\_National\\_Review\\_ROMANIA\\_with\\_Cover.pdf](https://sustainabledevelopment.un.org/content/documents/19952Voluntary_National_Review_ROMANIA_with_Cover.pdf)).

Policy makers recognized that: “Romania is a supporter of the “leave no one behind” promise of the 2030 Agenda for Sustainable Development, according to which the UN Member States recognized that the dignity of the individual is fundamental and that the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals and 169 targets should be met for all countries and especially for all segments of society.” (TRANSFORMATION TOWARDS A SUSTAINABLE AND RESILIENT ROMANIA Romania's Voluntary National Review)

Also, the Protocol on Water and Health is mentioned like a legislative support for drinking water, in 2018 updated Romania's SUSTAINABLE DEVELOPMENT Strategy 2030 and this was mentioned at SDG 6, 'Ensure availability and sustainable management of water and sanitation for all', at chapter ACCESS OF THE POPULATION TO WATER AND WATER QUALITY:

(<http://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2018/12/Romanias-Sustainable-Development-Strategy-2030.pdf>).

The Protocol objectives were set at the national level and they took into account the obligations assumed by Romania regarding the implementation of the European Directives. The assessment of the achievement of the objectives has been carried out at national level and the relevant data for stakeholders can be accessed on the websites of the Ministry of Environment, Waters and Forests (2016; 2019; 2022).

In Romania, it is currently taking place Large Infrastructure Operational Programme (LIOP). Through LIOP, the regionalization policy in the sector, initiated by previous and consolidated programs through Sectoral Operational Programme Environment (SOP ENV 2007-2013), will continue through the implementation of the projects started in the period 2007-2013 which will be completed after 2015 and by the development of new projects for compliance with the provisions of the directives regarding the collection and treatment of urban waste water in the agglomerations with more 2,000 p.e and with more 10,000 p.e being priority.

The main objective of the regionalization process was the creation of high-performing companies able to ensure both EU-funded projects and the operation of facilities in neighboring agglomerations at a supportability level accessible to the population based on the principle of solidarity. Following the regionalization and investments in the SOP ENV 2007-2013, 43 large regional operators are currently active.

The necessary investments to ensure compliance with the provisions of the EU directives and the objectives set have been estimated on the basis of updated County Master Plans, taking into account the River Basin Management Plans (RBMPs). In the process of the WFD implementation, the National Management Plan (NMP) for 2016-2021 was updated and approved through the Governmental Decision no. 859/2016. Currently, the National Management Plan is updated for the third cycle of WFD implementation, 2022-2027. The NMP is an important instrument which through the established program of measures also contributes to the implementation of the PWH.

In 2019, the project coordinated by the Department for Sustainable Development is in full swing in Romania: "Sustainable Romania" which aims to strengthen the institutional and strategic framework for coordinating the implementation of the National Strategy for Sustainable Development of Romania 2030. The project contributes new resources to accelerate transition to sustainable development.

Together with the National Institute for Statistics, national indicators for sustainable development have been included, which describe the statistical reality of the implementation stage of the Horizon 2020 targets, described in the National Sustainable Development Strategy. These are areas where progress has been made and areas where we need to focus. That is why the Action Plan for the implementation of the National Sustainable Development Strategy was established. Beyond institutional efforts, we need to do more at the individual level as well as at the community level. In Romania, the aim is to develop a critical mass that will embrace the objectives for sustainable development and promote them further. Resilience, solidarity, the need not to leave anyone behind are fundamental principles of sustainable development, especially in the difficult times we are going through. The aim is for the future to project a society in which the quality of life is at a higher level than before the outbreak of the COVID pandemic 19.

## Part one

### General aspects

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

YES ☒ NO ☐ IN PROGRESS ☐

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

See the Executive Summary

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.



A group of experts from the Ministry of Environment, Waters and Forests, Ministry of Health, National Administration "Apele Române", National Institute of Public Health Department of Sustainable Development, that are involved in Action Plan of implementation of sustainable development indicators Horizont 2030, with the participation of the Romanian Water Association, (a professional association with activities dedicated to urban water/waste water services) was established under leadership of the Ministry of Environment, Waters and Forests with the aim to elaborate and to submit for approval targets and targets dates of the 5th report under the Protocol.

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.

A programme of measures or a specific action plan to support implementation of the targets has not been performed but, in Romania carry on some Programmes and Strategies that support implementation of the targets:

Romania's National Recovery and Resilience Plan approved by the EU Council (October 28, 2021)

- Strategy for the contribution of the operational program to the EU Strategy for smart, sustainable and inclusive growth and the achievement of economic, social and territorial cohesion;- Large Infrastructure Operational Programme 2014-2020 (LIOP is financed from the national budget and EU and represent the leading program to support Romania meeting the requirements on drinking water and urban wastewater treatment) - Priority Axis 3 -"The development of environmental infrastructure based on an efficient management of resources" (LIOP is considered the leading program to support Romania meeting the requirements of the EU directives on drinking water and urban wastewater treatment,); The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023) and Sustainable Development Operational Programme 2021-2027 and the National Recovery and Resilience Plan (till 2026). - National Program for Rural Development (financed by European Agricultural Fund for Rural Development in order to develop the infrastructure in rural area; - National Program for Local Development—PNDL (financed from the national budget and dedicated to the development of local infrastructure in order to ensure in each locality a minimum set of public services, inter alia for the following domains: health, water and sewerage. The majority of PNDL funds allocated for WSS projects (94 percent) are targeted at rural area); - 2018 National Sustainable Development Strategy Romania 2030; - National Strategy on Waste Management 2014-2020; -National Waste Management Plan (PNGD) 2018-2025; National Climate Change Strategy 2014-2020, - updated National Management Plan-Synthesis of the 11 RBMP, including the Programmes of Measures, 2022-2027, according to the EU WFD; - Integrated Urban Development Strategy 2021-2027.

A new Climate Change Adaptation Strategy with a long-term vision for the EU to become a climate-resilient society and fully adapted to the inevitable effects of climate change by 2050 was approved at the EU level in 2021.- Romania's National Sustainable Development Strategy 2030, adopted by the Romanian Government on 9 November 2018 through Government Decision 877/2018. In this document, were recognized that Protocol on Water and Health is a support tool for the implementation of SDG 6 in Romania.

Regarding at the financial aspects: in the case of objectives related to the requirements of the EU Directives, the financial aspects are those mentioned above and also in the Implementation Plans and / or developed within the various projects financed by the European Cohesion Fund Investment Programme or LIOP 2014-2020 and LIOP 2021-2023. Some constrains during the implementation process are related to the financial aspects regarding the development of the infrastructure for drinking water and wastewater and sanitation. Therefore identifying and securing financial resources are very important for achieving the targets. Authorities at local and county level as well as water users and public are involved in the process and should pay a lot of attention to the development of the water infrastructure as well as to the measures to improve water resources quality with the aim to improve human living conditions as well as human health.

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?

River Basin Committees are the main consultative bodies established at the level of each river basin. The RBMPs updated 2021 including the programme of measures and Synthesis of waters quality 2018-2020 elaborated by NAAR are posted on NAAR and Water Basin Administrations websites with the aim to inform/consult the public.

The volume of information and the technical nature of the report are confronted with difficulties in receiving feedback from the general public. From this reason during the consultation process it is important to focus on specific target groups of stakeholders. In the last years public interest for participating in the decision-making process regarding water management in Romania show limited enough. Public involvement and dissemination of information is a process based on other consultation activities. At the same time, there is also a process subject to public consultation under the Protocol.

It is possibility of consultation on official sites of MMWF and NAAR and its branches, but experience showed a limited feedback. Possible reason is that public is involved in other consultation processes related to water/health/environment.

Due to global pandemic situation, the consultation process was limited to some instruments such as: documents posted on websites, online questionnaires, face to face meeting with limited persons etc.

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.

See the point 3. As regard the involvement of other stakeholders: Water Regional Authority, Timișoara County - "Aquatim", that is part of the framework of the Intercommunity Development Association through the Regional Water Operators attend at setting of regional target: "XX Additional local specific target".

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.

No applicable

## Part two

### Targets and target dates set and assessment of progress

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

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

**A new target was established:**

**Target:** compliance of drinking water quality at least to the parametric values set by the WHO for the parameters provides in the national legislation.

**Target date:** 31.12.2022

**Baseline conditions:** At 31 of December 2015 there weren't nonconformities for values of oxidability, ammonium, aluminium, iron, nitrate, lead, cadmium, pesticides and manganese in respect with full compliance to the european drinking water legislation, for 1892 communities with less than 10.000 inhabitants connected, in 111 communities with 10.000-100.000 inhabitants connected, in 13 communities with 100.00-200.00 inhabitants connected, representing all romanian communities with this connected population and the 8 communities with more than 200.000 connected inhabitants, representing all communities with this connected population.

In 2015 there were still 335 small water supplies zone where the quality of drinking water did not fully respect the standards established in the Drinking Water Directive for some parameters. These are parameters such as Iron, Manganese, whose overruns do not pose a health risk.

**Level of target:** nationwide.

**Background justification:** to ensure a safety drinking water for all population, in accordance with the EU Directives.

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).

**Legal/regulatory measures:** Measures in accordance with the legislation are in place regarding the quality of drinking water, authorization, restriction of the consumption, the adequate information of the public, including the measures for public health protection in case of non-compliance, granting the exemptions for some quality parameters (e.g. DWQ Law, Government Decision no. 974/2004 that established monitoring and inspection procedures, Ministerial Order no. 299/2010 that established derogation procedures).

**Financial/economic measures:** Total cost of infrastructure rehabilitation was estimated at 5.6 bill Euros. Informational/educational including management measures: The public health directorates which are responsible for monitoring of drinking water quality, informed the public authorities, the producers and the public through: addresses to the local authorities about drinking water quality and about the necessary remedial measures in the cases of non-compliances; periodic display of drinking water quality data at the town halls; briefings by Prefecture; press releases, when appropriate, that population is inform about non-compliance of the quality parameters, about potential risks and protection measures; health risk communication; the annual drinking water quality report at the county level, posted on the county public health directorate website; regular briefing to the other competent authorities; meeting of specialists from the public health directorates with the water operators.



Those drinking water production systems which registered significant nonconformities were not authorized.

Staff involved in quality water monitoring received training organized by National Public Health Institute.

**Difficulties and challenges encountered:** It was claimed difficulties in the relationship with local authorities who managing water supply systems in rural areas. This supply doesn't meet water quality monitoring programme and the owner doesn't invest in treatment process.

A cross sectorial cooperation is less efficient.

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

Romania has adopted the provisions laid down in the DWD and has developed detailed rules on: audit monitoring and check monitoring of drinking water; method for dealing with incidents of non-compliance and to implement remedial action; public information actions regarding the existing of nonconformity issues; guideline on nitrate contamination of well water and the methemoglobinemia; legal procedures for providing for derogations from the directive; procedures for informing the public as to the nature and timescale of any derogation; approval requirements to comply the norms regarding quality assurance of equipment and materials used in the preparation or distribution of water intended for human consumption; national legislative framework for transposition of the new Water Directive (EU) 2020/2184 is being prepared

**Challenges encountered:** Monitoring and sampling procedures need improvement and it's priority to facilitate cross-sectoral cooperation, mature surveillance system needed, improve institutional capacity, promotion proactive reaction to solve the issues.

Taking into account the water losses problems created during drinking water transportation in pipes and their impact on the quality of drinking water and also on public health, ARA have disseminated information regarding new specific equipment and practices in drinking water management. Since 2008, ARA organise annually an event dedicated to the practitioner - "Water Losses Detection" Competition which reach the 13th edition. The event promote best practices at the level of field operator who are daily working on identifying the hidden water losses from the distribution networks. The event it's an opportunity for the practitioners to find out the new development in the equipment area, news and updated being provide be the producers of specialised equipments. Another important action is the international conference organised by ARA and IWA in Romanian on the themes of Water Losses in 2007, 2015 and 2019. The aim of these conference is to create the awareness on the importance of reducing the water losses and to showcase the solution succcessfully implemented in other countries.

In the ongoing project PISSA run by Ministry of European Funds, with the support of EBRD, at the level of national regulator National Regulatory Authority for Community Services and ARA, have been initiated the process to revise the legal framework related to water loss, in order to clearly identify the technological consumption and the leakages from the main and distribution network. These concept will be implemented in the next period. (also related to target 1 from V - Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e)).

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, has contributed to fulfilling the Matrix of VNR 2018, Romania and how these have been built on setting national target for SDG 6, that is the main goal related to water and sanitation and aims achieving safe drinking water and adequate sanitation for everyone (column C, point 6.1- Achieve universal and equitable access to safe and affordable drinking water for all) and in column E were mentioned that the Protocol Water and Health is a strong tool for fulfilling SDGs, with accent on SDG6 - people's access to safe water and adequate sanitation wich result is to reduce the risk of disease of population, associated with water-related diseases.

The Protocol target Quality of drinking water (article 6.2 (a)) covers the following Sustainable Development Goals and targets:

- Goal 6: Water and sanitation for all - 6.1 Achieve universal and equitable access to safe and affordable drinking water for all and 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse

- Goal 3: Good health and well-being 3.3 End neglected tropical diseases and combat water-borne diseases; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination

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

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

Target: Maintaining a low incidence of water related disease that does not exceed 20 % 0000

Target date: continuously (see 2016 Report; the original target date 31.12.2015).

**Baseline conditions:** The risks of outbreaks and incidents of water-related disease exist especially in rural areas which are not yet in place centralized water supply and sanitation and is due to punctual source of contamination of wells water. There are also the risk of acute methemoglobinemia at the artificially fed new born infants in rural areas supplied by wells with nitrates exceed the parameters values.

Level of target: nationwide.

**Background justification:** Ensure the public health and eliminating the risk of water-related disease.

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).

**Legal/regulatory measures.** The Public Health Law no. 95/2006 and DWQ Law are established for potentially hazardous water constituents and provide a basis for assessing drinking-water quality. Different parameters may require different priorities for management to improve and protect public health. In general, the order of priority is to ensure an adequate supply of safe water and maintain acceptability to discourage consumers from using potentially microbial unsafe water, manage key chemical contaminants known to cause adverse health effects and address other chemical contaminants.

**Financial/economic measures:** Projects by Sectorial Operational Programme for water supply and sewerage system of localities.

**Informational/educational including management measures:** Activities of information, awareness and education (see also point 3).

**Difficulties and challenges encountered:** In order to minimize the likelihood of outbreaks of disease, care is required to account properly for drinking-water supply performance both in steady state and during maintenance and periods of short-term water quality deterioration. Another way to prevent water-related diseases is the proper treatment of waste water. Effective treatment reduces the amount of oxygen- depleting substances as well as the amount of human origin bacteria.

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

Following the actions of information, awareness and education, as well as the measures to extend the water supply to the rural communities with centralized systems, in 2014 the number of cases of methemoglobinemia hospitalized dropped to 73 from an average of 240 cases in 2002 – 2006 period. The number of cases of methaemoglobinemia in children has been decreasing in recent years:

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of cases	84	79	76	69	59	53	38	53	34	16

Minister of Health, through the National Institute of Public Health, has a national program for "Surveillance of drinking water quality distributed by small drinking water systems in Romania" with biannual objectives established according to the problems identified.

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

Assessment and reporting under the Protocol supports monitoring of water and health related targets of the 2030 Agenda. The added value of the Protocol is to go beyond the global indicators and allow tracking more in depth and in a tailored manner progress at national level. Using good practices developed under the Protocol for elaboration of an action plan with resource needs, highlighting Protocol tools that support SDGs implementation.

The Protocol target Reduction of scale of outbreaks and incidents of water-related disease (article 6.2 (b)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being; 3.2 End preventable deaths of newborns and children under 5 years of age; 3.3 End neglected tropical disease and combat water-borne diseases; 3.d Strengthen early warning, risk reduction and management of health risks
- Goal 6: Water and sanitation for all; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse
- Goal 11: Sustainable cities and communities; 11.5 Reduce number of deaths and number of people affected and direct economic losses caused by water-related disasters
- Goal 13: Climate action; 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

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

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

**Target:** Improvement quality of, and access to water infrastructure by providing water supply services in centralized system to the majority of urban and rural areas.

**Target date:** 31.12.2023 (see 2019 Report; the original target date: 31.12.2015)

**Level of target:** nationwide.

**Background justification:** to implement all necessary measures to ensure drinking water supply in accordance with DWD, establishing requirements for drinking water, inspection of water systems, drinking water quality surveillance and monitoring, disseminating information and reporting.

National Sustainable Development Strategy Romania 2013-2020-2030 (approved by the Government Decision no. 1460/2008) addresses the following strategic objectives for short, medium and long run: To narrow the current disparities in relation to other EU Member States in terms of coverage and quality of environmental infrastructure by providing efficient public services in this domain, following the concept of sustainable development and respecting the „polluter pays” principle; To attain the present average EU level for the main indicators describing the responsible management of natural resources; and to come significantly close to the environmental management performance of the other EU Member States.

<http://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2019/03/Romanias-Sustainable-Development-Strategy-2030.pdf>

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/regulatory measures:** Water Law no 107/1996 with further modifications and amendments (hereinafter Water Law), DWQ Law and G.D. no 974/2004 for approval of the Norms related to the surveillance, sanitary inspection and monitoring of the drinking water quality and for approval of the Sanitary Permitting Procedure of the drinking water supply and distribution, and Implementation Plan of the DWD.

According to the new Drinking Water Directive 2020/2184 (recast) Romania should improve access for all citizens to the good quality of water intended for human consumption. New elements are introduced in this Directive, such as: elements of a risk-based approach; risk assessment and risk management of the catchment areas for abstraction points, the new parameters; products in contact with water intended for human consumption etc. These are in line with the objectives of the European Green Deal and the Action Plan "Towards zero air, water and soil pollution". Art. 13, has in view the European citizens' initiative 'Right2Water' through the measures necessary to ensure access to drinking water for vulnerable and marginalized groups.

This should contribute to the commitment taken under UN Sustainable Development Goal 6 and the associated target to 'achieve universal and equitable access to safe and affordable drinking water for all'. In the same context of the revised DWD, the water safety plan (WSP) approach is a core pillar of the WHO Framework. It provides the most effective means of consistently ensuring the safety of a drinking-water supply through the use of a comprehensive risk



assessment and risk management approach that encompasses all steps in water supply from catchment to consumer. All of these form the basis for effective management, operation and monitoring of water supplies.

Currently, the draft order on the approval of the General Framework for Water Safety Plans as well as the establishment of the responsibilities of the competent authorities is in the final stage on consultation. Water safety plans will be mandatory for drinking water collective or individual supply systems, which provide an average amount of water more than 1,000 m<sup>3</sup> / day or serve more than 5,000 people. The measures provided in the Water Safety Plans mainly concern the protection of raw water sources, ensuring the quality of drinking water and the safety of distribution and ensuring the health of the population.

According with the Law no. 241 of 22 June 2006 on water supply and sewerage service, as amended in 2021, it is mentioned through Article 7, para (1): The water supply and sewerage service shall be established, organized and operated on the basis of the following principles: h) equal accessibility of users to the public service, on a contractual basis; Art. 11, para (2) The strategies of the local public administration authorities will prioritize the achievement of the following objectives: b) ensuring the non-discriminatory access of all members of the community to the water supply and sewerage service;

The National Strategy for drinking water supply, collection and waste water treatment (stage on drafting together with stakeholders) is expected to be approved in 2022.

#### **Financial/economic measures:**

See previous Reports and information from the Executive Summary and Part I, form the current Report, related to the financial measures.

Taking into account the social, economic and environmental needs in Romania so as to obtain a highest positive impact upon environment and to stimulate the economy, the Government supports the development of drinking water infrastructure from the national budget, especially for medium and small localities.

#### **The difficulties and challenges encountered:**

- Huge needs for water infrastructure area;
- Limited possibilities to support maintenance and operation of small water systems in rural area;
- Necessity to ensure a proper operator for these systems.

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

The activities for improvement access to drinking water were/are oriented to: planning and design of drinking water infrastructure projects in pre-accession and accession to EU in urban and rural areas with state budget and EU support; construction of new water supply systems; rehabilitation/extension of network distribution; rehabilitation and construction of water treatment plants; water services regionalization process is promoted, inter alia, in order to extend the water supply services at affordable costs for population.

Drinking water supply network	Baseline value 2005*	Value reported in the previous reporting cycle 2013	Value 2015*	Value 2017*	Value 2018*	Value 2019*	Current Value 2020*
Total number of localities (municipalities, towns and communes) supplied with drinking water installation	1620	2050	2474	2534	2565	2586	2605
of which: municipalities and towns	315	317	317	317	317	316	316
Simple length of network of the drinking water installation (km)	47778	71514	76945	82090	84504	86519	88065
of which: municipalities and towns	25171	27829	28779	30093	30416	30938	31242

\*Source: Statistical Yearbook, elaborated by National Institute of Statistics

The data presented on the table above indicate: at the national level the simple length of the drinking water distribution network was of 88,065 km (as 31.12.2020). Compared with the existing situation to the end of 2017, it was recorded



an increase with 5,975 km, especially due to expanding/enlargement of the centralized water supply system in rural areas. Compared with the baseline situation (2005), increasing value was by 40,287 km.

According to data from the National Institute of Statistics, the connection of the population to the centralized water supply systems in 2019 was 70.7% (13,728,144 inhabitants), increasing by 9.2% (1,459,701 inhabitants) compared to 2013, the reference year used for the evaluation of the second National Management Plan. This percent are increasing to 72.2% in 2020.

The main actions related to increase collection and treatment of urban wastewater and the degree of assurance of supply of drinking water to the population (financed by LIOP 2014-2020) are focus on:

- Implementation and effective management of sludge from waste water treatment.
- Rehabilitation and construction of water treatment plants for drinking water, together with measures to increase food safety and reduce risks of drinking water contamination.
- Rehabilitation and extension of existing distribution network for drinking water;
- Development and improvement of the infrastructure of centralized systems for water supply in urban and rural communities.

The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023) and Sustainable Development Operational Programme 2021-2027 and the National Recovery and Resilience Plan (till 2026). Most of the financial allocation was directed to investments to ensure compliance with the provisions of the acquis in the water quality domain, in particular for the financing of measures for agglomerations with more than 10,000 i.e.

**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 Protocol target Access to drinking water (article 6.2 (c)) overlaps the following Sustainable Development Goals and targets:

- Goal 1: No poverty; 1.4 Ensure access to basic services
- Goal 3: Good health and well-being; 3.2 End preventable deaths of newborns and children under 5 years of age; 3.3 End neglected tropical disease and combat water-borne diseases ; 3.8 Achieve access to quality essential health-care services
- Goal 4: Good quality education; 4.a Build and upgrade educational facilities and that provide safe and effective learning environments
- Goal 5: Gender equality 5.1 End discrimination against women and girls ;
- Goal 6: Water and sanitation for all; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all
- Goal 9: Industry, innovation and infrastructure; 9.1 Develop quality, reliable, sustainable and resilient infrastructure, with a focus on affordable and equitable access for all
- Goal 11: Sustainable cities and communities; 11.1 Ensure access for all to adequate, safe and affordable housing and basic services

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

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

**Target:** Improvement the quality of, and access to wastewater infrastructure (wastewater treatment plant and sewerage) by providing specific services.

**Target date:** 31.12.2023 (see 2019 Report; the original target date: 31.12.2018)

**Intermediate targets:**

- by 31 December 2013, for agglomerations with a population of more than 10 000 p.e. (for urban wastewater collecting)
- by 31 December 2015 for agglomerations with a population of more than 10 000 p.e. (for urban wastewater treatment and discharge)
- by 31 December 2018 for agglomerations with a population with 2000-10 000 p.e. (for urban wastewater treatment and discharge)

Romania shall ensure a gradual increase of provision of Article 3 collecting systems in accordance with the following minimum overall population equivalent rates:

- ☐ 61% by 31 December 2010,
- ☐ 69% by 31 December 2013
- ☐ 80% by 31 December 2015
- ☐ 100% by 31 December 2018

Romania shall ensure a gradual increase of provision of Articles 4 and 5(2) wastewater treatment in accordance with the following minimum overall population equivalent rates:

- ☐ 51% by 31 December 2010,
- ☐ 61% by 31 December 2013
- ☐ 77% by 31 December 2015
- ☐ 100 % by 31 December 2018

**Background justification:** to improve sanitation and public health and to comply with the requirements of the Directive 91/271/EEC.

Romania committed itself to apply the provisions of Article 5 (8) of the Council Directive 91/271/EEC concerning the urban wastewater treatment and declared its whole territory as a sensitive area. There were included the compliance deadlines in accordance with the Directive for urban waste water collecting systems and urban waste water treatment plants. The decision to declare the whole Romanian territory as a sensitive area requires a longer transition period, respectively 12 years (all agglomerations with more than 10 000 p.e. shall ensure the infrastructure necessary for urban wastewater treatment, which allows the advanced treatment of urban waste water treatment plant; other agglomerations, between 2000-10000 p.e. the secondary (i.e. biological) treatment is the general rule and for many agglomerations of less than 2,000 p., located in mountainous or hilly areas, where the geo-morphological or climatic conditions require specific and individual solutions: mini treatment plants, natural treatment in lagoons, other non- conventional modalities).

Also, see target III related to National Sustainable Development Strategy Romania 2013-2020-2030.

**Baseline conditions:** In 2002:- the total length of the wastewater network was 16,812 km, of which 15,736 km in towns. Only 51.8% of the total length of streets in the towns was equipped with sewage network. Beside the streets endowed with water supply network, only 73% had also sewage systems; - in the existing 206 wastewater treatment plants only 77% of the total flow discharge from the public sewerage system was treated; the wastewaters from 47 towns were discharged to the rivers without any previous treatment.

Level of target: nationwide.

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/regulatory measures** to fulfil the target are in place, namely: Water Law, G.D. 188/2002 for the approval of certain norms concerning the conditions of discharging the wastewater into the aquatic environment, as amended by GD no.352/2005.

Action plans for agglomerations have been prepared jointly with an assessment of the current wastewater infrastructure. The deadlines for the implementation of the Directive vary depending on the size of the agglomeration and the impact on the receiving waters.

**The financial/economic measures including management measures:** The main support came from the EU programmes, bilateral assistance from the EU Member States, Community programmes, loans from the EBRD and EIB, etc. Other financing sources were provided by state budget, the World Bank (i.e. SAMTID), UNDP and UNEP (i.e. Global Environmental Facility), other International Financial Institutions.

Other works will be financed using public funds and own funds of the economic units (operators of the communal services); the state guarantees the acquirement of the internal and external credits (from BEI, BERD, Word Bank etc.).

The purpose of the process of regionalization of water services, initiated by Romanian authorities and supported largely by SOP – ENVIRONMENT programme and in present by LIOP is to assist the local beneficiaries (Associations of Municipalities and Regional Operating Companies) in the creation of efficient water and wastewater service operators and in strengthening the capacity of local authority to monitor effectively their activities – see target V - Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e))



From the data of National Regulation Authority for the Public Utilities Community Services in 2019 there are 43 Regional Operators and 2 Big Operators (in Big Cities), with a market share by 90%, together with approx. 1000 local operators for drinking water distribution (in the direct subordination of rural city halls) and approx 280 local operators for collecting and treatment of waste water, which have a total market share of 10%. At national level it is noticed a process of increasing of the number of localities where water services are performed by Regional Operators. Also it is remarked a process of continuous consolidation (strengthening) of the activities of Regional Operators, together with the acceleration of the introduction of technological progress and technologies with positive effect upon the quality of water services.

At the end of the 2021, a number of 1095 operators (43 Regional Operators, 2 Big Operators in big cities and 1050 local operators) in the field of water services carries out their activities at the national level, according with the National Regulatory Authority for Community Services (<https://www.anrsc.ro/wp-content/uploads/2022/02/Raport-ANRSC-2021.pdf>). All these operators holding licenses. Since 2018, ANRSC is part of the The Organisation for Economic Cooperation and Development (OECD) Regulators Network, being present at thematic meetings on water domain and not only.

See also information from previous Reports and information from the Executive Summary and Part I, form the current Report, related to the financial measures.

**Informational/educational including management measures:** During 2017- 2018 a brochure for public on the updated River Basin Management Plan (developed according with the WFD requirements) has been elaborated and translated also in English language. The aim of this document is to inform general public and stakeholders on the activities and program of measures to be taken in order to achieve the good status of the water bodies. The brochure is posted at: [http://www.rowater.ro/TEST/Brochure\\_National%20Management%20Plan\\_EN.pdf](http://www.rowater.ro/TEST/Brochure_National%20Management%20Plan_EN.pdf)

See also information from previous Reports.

**Difficulties and challenges encountered:** The wastewater treatment efficiency is negatively influenced by the inefficiency and obsolete treatment equipment and by the technical sewage network problems. For this reason a lot of projects were focused on the rehabilitation and modernisation of wastewater treatment plants, mainly in agglomerations with more than 10,000 p.e.

There were noticed difficulties in delineation and establishment of agglomerations as a base of selections of prioritized investments due to the lack of experience and relevant data at local level (data from urbanism plan, old maps).

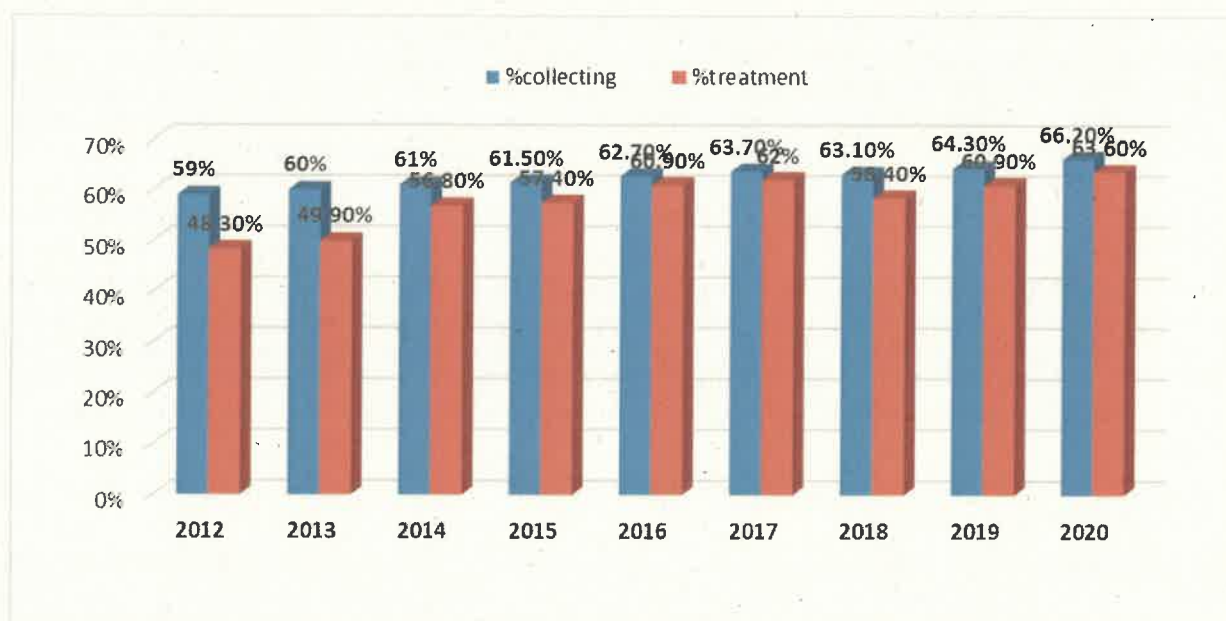
In addition, improvements will be made to the quality of the watercourses. Wastewater treatment plants will be built or functional improved and sludge management schemes will be envisaged. Individual projects may be developed for localities that cannot be included in regional projects.

The wastewater treatment plants for the agglomeration more than 10000 p.e. need the tertiary treatment. Taking into account the large number of agglomerations above 2000 p.e. which have to comply with the provisions of the UWWT Directive, all responsible authorities had applied to different financial sources for the integrated projects in water/waste water infrastructure.

During 2016-2020, there was a change in the number of agglomerations as a consequence of:

- the decrease of the resident population in the period 2007-2020,
- a new planning at the county level (according with the County Master Plans). These aspects lead to re-delineation of agglomeration boundaries

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



Evolution of waste waters collecting and treatment ratio for biodegradable load (%) at national level

Source: National Report on the implementation of the UWWTD, elaborated by National Administration "Apele Române"

In December 2020, there were 2057 sewer networks, out of which 1260 functional sewer networks, the remaining 797 being in different stages of construction or for which the population has not yet been connected to the wastewater infrastructure. In December 2020, there were 831 wastewater treatment plants in agglomerations above 2000 p.e, out of which 714 worked properly and the remaining 117 worked improperly.

A progress in endowment sewage network was remarked, mainly in extinction or construction of new ones. The execution and the performance of the sewage systems were designed according to the wastewater flows, the discharge in the collector system depending on the geographical areas.

Trend of the localities number with wastewater collecting network and the length of pipelines

Year	Number of localities			Length of pipelines (km)
	Total	Urban	Rural	
2005	694	306	388	18381
2007	735	309	426	19356
2010	798	309	489	21978
2011	861	309	552	23137
2013	982	310	672	26559
2015	1122	313	809	31703
2017	1251	314	937	36345
2018	1305	315	990	38449
2019	1354	314	1040	40270
2020	1403	314	1089	42168

Source: Statistical Yearbook elaborated by National Institute of Statistics

As regard intermediate target:

Romania shall ensure a gradual increase of provision of Article 3 collecting systems in accordance with the following minimum overall population equivalent rates:

- ☐ 69% by 31 December 2013 - achieved 60%
- ☐ 80% by 31 December 2015 – achieved 61.5%
- ☐ 100 by 31 December 2018 – achieved 63.7% in 2017

The level of the wastewater collecting is 66.2% in 2020, having in view the agglomerations with more than 2,000 p.e.

Romania shall ensure a gradual increase of provision of Articles 4 and 5(2) wastewater treatment in accordance with the following minimum overall population equivalent rates:

- ☐ 61% by 31 December 2013 - achieved 50%



- 77% by 31 December 2015 – achieved 57.4%
- 100 % by 31 December 2018 – achieved 62.0 % in 2017

In 2020, the level of the wastewater treatment is 63.6% for the agglomerations with more than 2,000 p.e.

The number and agglomeration types as well as the measures regarding the wastewater collecting and treatment were originally provided in Annex 3 of the implementation plan of Directive 91/271 / EEC (situation in 2004). In the period 2007-2015 the situation was reassessed taking into account the dynamics of appearance and development/progress of investment plans/programs for collecting and treatment measures. Sectoral Operational Programme “Environment” (SOP ENV) 2007-2013 support the implementation of measures under Priority Axis 1 “Extension and modernization of water/wastewater systems” based on the promotion and realization of feasibility studies at county and agglomerations level and taking into account the Counties Master Plans. Also through the Large Infrastructure Operational Programme 2014-2020 the actions of development of collecting and treatment systems will continue under Priority Axis 3 “Development of basic infrastructure in terms of efficient management of resources” (according to the prioritization from Counties Master Plans) in order to comply with provisions of UWWT Directive in terms of urban wastewater collecting and treatment services for agglomerations with more than 2000 p.e. The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023) and Sustainable Development Operational Programme 2021-2027 and the National Recovery and Resilience Plan (till 2026) .

The progress recorded at national level during 2007-2020 (for agglomerations with more than 2,000 p.e) represents 18 % (from 48% in 2007 to approx. 66% in 2020) for sewage collection systems, and the treatment level increased with 25% (from approx. 39% in 2007 to approx. 64% in 2020).

According with the Accession Treaty, the connection rate to sewage collection systems for agglomerations with more than 10 000 p.e. and for interim year 2013 it was supposed to be 100% and the connection rate to the treatment plants it was also supposed to be 100% for 2015. .

In December 2020 the following situation has been recorded for agglomerations with more than 10 000 p.e.:

- the connection rate to sewage collection systems was approx. 87% and the connection rate to the treatment plants was 84%.

The progress recorded at national level during 2007-2020 represents 16 % (from 71% in 2007 to approx. 87% in 2020) for sewage collection systems, and the treatment level increased by 34% (from approx. 50% in 2007 to approx. 84% in 2020).

(Source: The national report on the state of implementation of the Directive 91/271/EEC requirements in Romania).

Despite the fact the investments in water and wastewater infrastructure has continued with increasing wastewater collection and treatment population connection rate, the main reason for the slight increase in collection and treatment levels in 2020 is the dynamics of changes in number and size of agglomerations, in terms of population equivalents, especially for those agglomerations at the limit of 2,000 p.e. Within a EU project started in 2019, a new methodology is developed for delineation of agglomeration boundaries and calculation of their pollution load, options for IAS (Individual Appropriate Systems) and an adequate process to ensure that they provide the required “same level of environmental protection”.

Twenty-two new projects for rehabilitation and updating the water/wastewater networks, have already been signed under LIOP 2014-2020 (in 2021) with total costs of 4.44 billion euros.

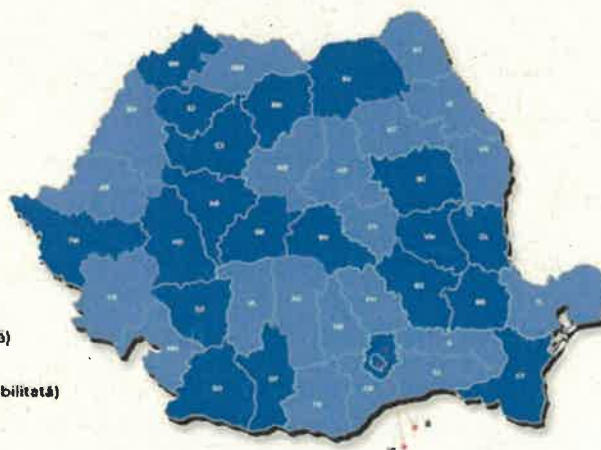
**Valoare: 4,44 miliarde euro**

**+ 2.84 mil. persoane beneficiază de o mai bună alimentare cu apă**

**+ 1.82 mil. locuitori echivalenți beneficiază de o mai bună tratare a apelor uzate**

**6.427,55 km rețea apă (extinsă/ reabilitată)**

**6.806,57 km rețea apă uzată (extinsă/ reabilitată)**



Romania - 22 new projects (blue deep) for rehabilitation and updating the water/wastewater networks  
Source: <https://cursdeguvernare.ro/harta-proiectelor-noi-de-apa-apa-uzata-finantate-de-ue-in-perioada-2014-2020.html>

More over, during 2021-2027 the actions for the development of the wastewater collection and treatment systems will be continued through the Sustainable Development Operational Program (SDOP) in the period 2021-2027 and the National Recovery and Resilience Plan in the period 2021-2026.

According to data from the National Institute of Statistics, the connection of the population to the centralized water supply systems, has increased from 2018 to 2020, as below:

year	2018	2019	2020
Number of inhabitants connected to the wastewater networks	10,293,041	10,514,924	11,079,427
% from total inhabitants	52.8%	54.3%	56%

Source: National Institute of Statistics

The Ministry of Environment, Waters and Forests, the National Administration "Romanian Waters" with the technical support of the World Bank experts are in process of reviewing and updating the Action Plans for agglomerations in compliance with the requirements of the Urban Wastewater Treatment Directive.

This activity is carried out within the project "Strengthening capacity of the personnel of MoWF and "Romanian Waters" National Administration (ANAR) in data collection, information validation and reporting to European Commission on UWWTD implementation", funded by European funds through the Operational Program Administrative Capacity 2014-2020, during 2019- 2022.

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

The Protocol target *Access to sanitation (article 6.2 (d))* covers the following *Sustainable Development Goals and targets*:

- Goal 1: No poverty; 1.4 Ensure access to basic services
- Goal 6: Water and sanitation for all ; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations ; 6.3. Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse
- Compliance with the EU Directives related to water quality

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

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

**Target 1:** reduction by 10% of the actual water leakage level within the drinking water centralized network through: improved performances of drinking water distribution network; replacement materials which do not meet European standards and regulations (in particular asbestos pipes).

**Target 2:** Improvement of the drinking water distribution services by establish of efficient regional structure for public water services (regionalization of water services).

**Target 3.1.** Connection of households from towns, communes and compact villages to the water supply network at least in a share of 90% until 2030 (SNDD 2030)<sup>1</sup> - Indicator 3.1. Population connected to water networks.

<sup>1</sup> Romania's Sustainable Development National Strategy (Strategia Națională pentru DEZVOLTAREA DURABILĂ (SNDD) a României 2030, ro), p. 49, available at : [https://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2020/10/Strategia-nationala-pentru-dezvoltarea-durabila-a-Romaniei-2030\\_002.pdf](https://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2020/10/Strategia-nationala-pentru-dezvoltarea-durabila-a-Romaniei-2030_002.pdf)



**Target 3.2.** Connection of households from towns, communes and compact villages to the water supply network at least in a share of 90% until 2030 (SNDD 2030) - Indicator 3.2 Length of water supply networks.

**Target 3.3.** Increasing access to drinking water for vulnerable and marginalized groups (SNDD 2030) - Indicator 5.2.1. Affordability.

**Target 1 date:** In progress (see 2019 Report; the original target date: 31.12.2020)

**Target 2 date:** Continuously (see 2019 Report; the original target date: 31.12.2010)

**Target 3.1 date:** 2030

**Target 3.2 date:** 2030

**Target 3.3:** 2030

**Baseline conditions:**

**Target 1:** A deficiency within the water supply systems is the water leakage. In 2009 the medium water leakage in the water distribution system within the urban centres was 43.9 %.

The main problems are caused by obsolete and deficient materials of the distribution networks such as azbociment and steel. The proportion in which these materials are present in the distribution networks ranges between 25% and 100%. The replacement within distribution networks will lead to a reduction of these materials to a maximum 20% until 2020.

The Development Strategy of efficient management of detection and reducing water loss it requires knowing the real performance of the systems, technical and economic, as well as implementing an action plan to reduce losses of water distribution networks. In the County Master Plans and applications for European funding are included mandatory requirements for application management strategy and an action plan for reducing water losses in transmission and distribution networks to a range of 10-25%.

**Target 2:** The real needs of the population, are to have equitable access at water and sanitation services.

This kind of services must to be affordable to everybody. In this light, all towns must to invest to maintain and upgrade their infrastructure in order to have good services, able to meet EU standards, must to achieve through adoption and implementation adequately designed development policies.

The regionalization process drive to improve the quality and cost efficiency of local water infrastructure and services. This process started in 2004 and consists of the concentration of the operation of the services provided to a group of municipalities within a geographical area defined with respect to a river basin and/or to administrative boundaries (region, county).

For the drinking water and wastewater operators, regionalization means merging two or more local operators (both municipal and rural localities) into one regionally working operator, usually at the county level. Still for achievement of this objective a key element is the implementation of an institutional model to allow the greater, stronger and experienced operators to provide water supply and sanitation services in many territorial administrative units based on a single contract for management delegation of these services. Within these management contracts there are established strategies for tariffs which lead to the application of an uniform tariff for all localities included in the strategy.

**Target 3.1:** 54,9% of the inhabitants connected in 2009, increase to 69,4% of the inhabitants in 2018;

**Target 3.2:** 60,456 km of water network available in 2009, increasing to 84.504 km of water network in 2018;

**Target 3.3:** average affordability level for the 43 RO decreased from 2.75% în 2013 to 2.03% în 2018.

**Level of targets:** nationwide.

**Background justifications:** to implement all necessary measures to ensure drinking water supply in accordance with DWD, as amended in 2020 (recast), establishing requirements for drinking water, inspection of water systems, drinking water quality surveillance and monitoring, disseminating information and reporting.

**Target 1:** Besides the loose of purified waters, the water leakages within the distribution networks represent one of the reasons for drinking water interruption as well as a possible reason for water contamination with corrosion products and impurities.

**Target 2:** The operating water and wastewater services at the regional level show several advantages that are mentioned below: the regional supply of utilities by integrated systems and more professional management is expected to have like result in time, in the reduction of water loss, in the promotion of resource preservation, in minimum investment and in the protection of water sources; the strengthening of the capacity to prepare and implement investment projects as well

as of the capacity to negotiate financing; improvement of service quality, of customer relations and their perception on utility operators; operation management by means of modern and efficient management instruments and the decreasing of political involvement in the course of business; the prices of water services are leveraged between urban and rural areas.

**Target 3.1:** As a result of the European citizens' initiative Right2Water, the European Commission is committed to promoting universal access to safe drinking water and sanitation as a priority area for sustainable development goals.

Although, at the time of writing the Sustainable Development National Strategy (2018), Romania's situation was comparable to other EU countries in terms of the connection rate of water supply infrastructure in urban areas, of 94.9% compared to 96-100% in other EU countries, in rural areas, the connection rate was only 30.8%, below the EU average (SNDD 2030).

*"Rehabilitation and construction of drinking water treatment plants, together with measures to increase food security and reduce the risk of contamination of drinking water"* and *"Rehabilitation and expansion of existing water transmission and distribution systems"* are sub-actions funded within the 3.2 axis of the Large Infrastructure Operational Program (LIOP).

**Target 3.2:** "Rehabilitation and extension of existing water transmission and distribution systems" is financed by POIM, axis 3.2.

**Target 3.3:** This kind of services must to be affordable to everybody but because regional operators must support a share of the sums invested in developing infrastructure from European funds and that operational costs increased lately, especially for energy and gas, operators have to keep these costs at an affordable level. In order to ensure the coverage of all costs and keep tariffs at an affordable level, the tariff strategy has to be endorsed by the National Regulatory Authority for Community Public Utilities Services (ANRSC) for all regional suppliers and the two public-private operators.

Investments in water supply services' extension are foreseen in the supplier's masterplan at county level and, according to the legal requirements, once the water services become physically available at the household level, the household has the legal obligation to connect to the network. This means that the bills for water supply and sewerage services have to be affordable for all the inhabitants in the supply area.

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

#### **The legal/regulatory measures:**

##### **Target 1:**

- Legislation in the field of public water supply services;
- Ministerial Order no. 2,901 for the approval of the technical regulation "Norm regarding the design, execution and operation of the water supply and sewerage systems of the localities. Indicative NP 133-2013";
- Draft order on the approval of the General Framework for Water Safety Plans as well as the establishment of the responsibilities of the competent authorities (actually in the final stage on consultation). The operators have to assess the current situation, to develop and implement the Water Safety Plan and the Plan for reducing water losses in the water distribution networks.

Water safety plans have become mandatory for drinking water supply systems that supply more than 1,000 cubic meters per day or serve more than 5,000 people.

- Strategy in the field of sustainable development for medium and long term
- SOP ENV - Priority Axis 1 "Extension and modernization of water and wastewater systems", which main objective is to improve quality and access to water and wastewater infrastructure, by providing supply in majority urban areas by 2015 and establish effective regional structures for water services management.

The "Detectivii apei pierdute" (Water Loss Detectives) magazine has been in place since 2011. It has been addressing to water professionals presenting information about events and opportunities for professional development, used equipment, applied strategies, and numerous case studies. (<http://detectiviiapeipierdute.ro/>).

##### **Target 2:**

- **Legislation in the fields as:** local public administrations, local public services, water supply and sewage services, etc
- **SOP ENV Financial/economic measures:** In the period 2007-2015 the situation was reassessed taking into account the dynamics of appearance and progress of investment programs for collection and treatment measures. Through Sectorial Operational Programme "Environment" (SOP ENV) 2007-2013 is provided support in implementation of measures under Priority Axis 1 "Extension and modernization of water / wastewater," based on the promotion and realization of feasibility

studies at agglomerations and counties level and taking into account the situation in the Master Plans County already elaborated. Also, through the Large Infrastructure Operational Programme 2014-2020, the actions will be continued development of collecting systems and wastewater treatment, under Priority Axis 3 "Development of basic infrastructure in terms of efficient management of resources " as prioritization of Master Plans County, to comply with the Directive in terms of collecting and treatment of waste water for urban agglomerations with more than 2,000 p.e. The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023) and Sustainable Development Operational Programme 2021-2027 and the National Recovery and Resilience Plan (till 2026).

- National Strategy for drinking water supply, collection and waste water treatment (stage on drafting together with stakeholders) as enabling conditions for accession to the EU funds.
- National plan for investments for drinking and waste water sector having in view national EU obligations and the objectives of the National Strategy for drinking water supply, collection and waste water treatment .
- each Master Plans County must include an Action Plan for reducing water losses in the water distribution networks, up to 25%.

Total investment costs required to implement the Drinking Water Directive (98/83/EC) as amended were evaluated in the first National Management Plan at a total amount of 5008 mill. Euros. According to a revaluation, the investment costs were estimated to 9,717.272 mill Euro but only 3,109.259 mill. Euro were invested in the period 2009-2015 . The investments costs of 2,307.958 mill. Euro will be addressed to small rural settlements for the period 2016-2021. For period 2016-2021 Annual Operating and maintenance costs were evaluated at a total amount of 350.910 mill euro while other costs (training, research studies, etc.) at 73.560 mill.Euro. For the third National Management Plan (2022-2027), the necessary investment costs to implement the DWD are estimated to 10,302 mill euro. To these investment costs are added annual operating and maintenance costs of approximately 567 million Euros in the period 2022-2027.

#### **Target 3.1:**

Law no. 204/2012 on the approval of the O.U.G. no. 13/2008, for the amendment and completion of the Law on community services of public utilities no. 51/2006 and the Law on water supply and sewerage service no. 241/2006, established a legislative framework for Community services, in general, and for water supply and sewerage services, in particular, regarding the establishment, organization and operation of regional operators, operators capable, both in terms of technically, as well as from a financial point of view, to implement investment programs, by accessing European funds. The implementation of the development strategy of the water and wastewater sector must be continued by promoting investments in the field of water and wastewater, in order to meet the requirements of the European Union's Environmental Acquis in terms of DWD and other directives in the field.

**Target 3.2:** There is legal obligation for population to connect to the water network where available

**Target 3.3:** Legislation related to the tariff strategy: Law no. 224 from July 24, 2015 for the amendment and completion of the Law on water supply and sewerage service no. 241/2006

Financial/economic measures:

#### **Target 3.1:**

A number of funding programs have been made available to operators (SOP Env 2007-2013, LIOP 2014-2020, Sustainable Development Operational Program (PODD) 2021-2017) and local authorities (National Program for Local Development (PNDL) I 2007-2013, PNDL II 2014-2020, Anghel Saligny, National Recovery and Resilience Program (PNRR)) in order to finance the implementation of investments in water and sewerage systems.

In these investment programs, the costs of 1000 euro / inhabitant in terms of expanding the water supply systems cannot be exceeded, in terms of economic viability. This issue is, however, addressed by PNRR, which also provides funding for zonal systems.

Another aspect that meets the connection of the population to water supply systems is the program "First connection", financed under PNRR.

**Target 3.2.** Financing available through SOP Env, LIOP, PODD, PNDL I, PNDL II, Anghel Saligny, PNRR

**Target 3.3:** The tariff should not exceed a level above which the share of the bill in the household's income is over 4%

- Taking special measures on vulnerable populations - some suppliers offer a discount for a specified quantity of water for vulnerable populations
- Reduction of VAT on water supply and sewerage services to 9%



**Informational/educational including management measures:** information campaigns organised by the water producers in the area where they provide services. Also, at the level of professional association of water operators (Romanian Water Association) there are developed benchmarking practices in order to improve the quality of water/waste water services.

The management measures are targeted to actions such as improvement of investments for extension and rehabilitation of water and wastewater infrastructure, efficiency of costs for these services, the benchmarking process, development of an active management of water leakages, replacement of water distribution networks, etc

**Target 3.1.** Information campaigns and publicity are being organized by the water producers in their supply area, especially on the following topics: publicity of investments, excuses for interruptions in water supply, excuses for traffic discomfort, awareness campaigns related to the legal obligation of households to connect to the public network, where available.

**Target 3.2:** Information campaigns conducted through mass-media articles, interviews, company's website and social media, for publicity of European funds, increased level of living and the inconvenience of rehabilitation/extension works.

**Target 3.3.** The tariffs' levels are part of the tariff strategy and are in public consultation before being endorsed by ANRSC. Any change in tariff is made public by the water company, mainly through press releases.

– Difficulties and challenges encountered.

**Target1:**

- The increased level of water leakages compared to the countries with performance management of unpaid water; the medium level of leakages recorded in 2010 was 53%. In 2011 the estimation of water leakages was almost 45%.
- Obsolete infrastructure for water pipes network.

**Target 2:**

- Administrative bottlenecks;
- Difficulties in establishing patrimony;
- Clarification of the ownership.

A challenge for regional operators is inclusion of more rural localities within in operation and maintenance area.

**Target 3.1:** Increase of costs with projects' implementation due to general increase in construction costs. Some regional operators asked for and obtained an increase of the project's financing under LIOP in order to cover the new, increased implementation costs.

**Target 3.2:** Some inhabitants connect illegally (without a contract with the company) to the water networks and the water companies have to implement controls to discover these cases.

Increase of costs with projects' implementation due to general increase in construction costs.

**Target 3.3.** Within the pandemic period, the number of consumers who did not pay their bills for water and sewerage services increased, mainly because the water companies did not have the right to cut water.

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

**Target 1:** At the national level the simple length of the drinking water distribution network was of 82, 090.4 km (as 31.12.2017). Compared with the existing situation to the end of 2016 (79,678 km), it was recorded an increase with 2,412,8 km. Drinking water losses due to drinking water distribution network were 37.3% on whole country, and in municipalities and cities 41.0%. These were caused by the advanced wear of pipelines for the supply and distribution of drinking water, as well as intake and pumping equipments.

Public utility activities of local interest have a social importance and an essential role in strengthening the sustainable development of quality and improving human living conditions. The National Institute of Statistics published the document entitled "Public utility activities of local interest" – 2017" (the statistical survey has as the main objective the collecting and providing statistics on water supply, sewerage and sanitation of localities, thermal energy/heat supply, natural gas supply and urban planning). The document is based on information included in statistical questionnaires by units with public utility activities of local interest, the departments of the public domain, the municipal, and cities/towns and communal mayoralities and commercial/trading societies that sell gas.

(Source: National Institute of Statistics - Activities regarding Public Utilities of Local interest 2017, link: <http://www.insse.ro/cms/ro/tags/activitatile-privind-utilitatea-publica-de-interes-local>).

**Target 2:** The establishment of the regional operators within the process of regionalization of drinking water and wastewater services has been finalized in 2010 (43 regional operators). Population provided by regional operators (for water supply services) in 2010 increased with 6.1% compared to 2009.

Type of locality	Localities supplied by operators*							
	Year							
	2009	2010	2013	2015	2017	2018	2019	2020
Municipalities and towns	245	246	317	317	317	317	316	316
Rural localities	710	761	2050	2157	2217	2248	2270	2289
Total	955	1007	2367	2474	2535	2565	2586	2605

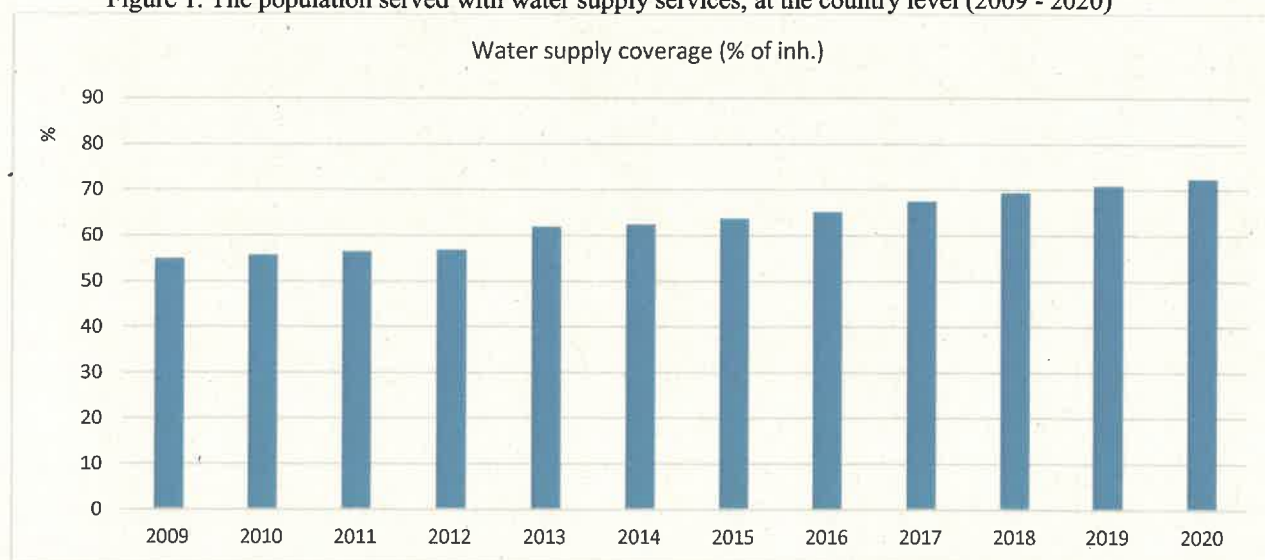
\* The number of localities with water distribution network, by area of residence, macro-regions, development regions and Counties by National Institute of Statistics

The activities for improvement of the access of drinking water were/are oriented to: planning and design of drinking water projects in pre-accession and accession to EU in urban and rural areas with EU support (PHARE, ISPA, SAPARD, SAMTID and Cohesion Funds); construction of new water supply systems; rehabilitation/extension of network distribution; rehabilitation of water treatment plants.

During 2013 Regional Operators, members of Romanian Water Association had collaborated with governmental authorities with proposals in order to improve the legislative framework necessary to simplify the procedures for implementation of the investment in water/waste water infrastructure. There were also organized a special workshop in September 2013, in collaboration with International Water Association, regarding financial measures used for absorption of EU funds, increasing of the responsibilities of local public administration regarding the quality of water services, promotion of social partnership and measures for sustainable development.

### Target 3.1

Figure 1. The population served with water supply services, at the country level (2009 - 2020)

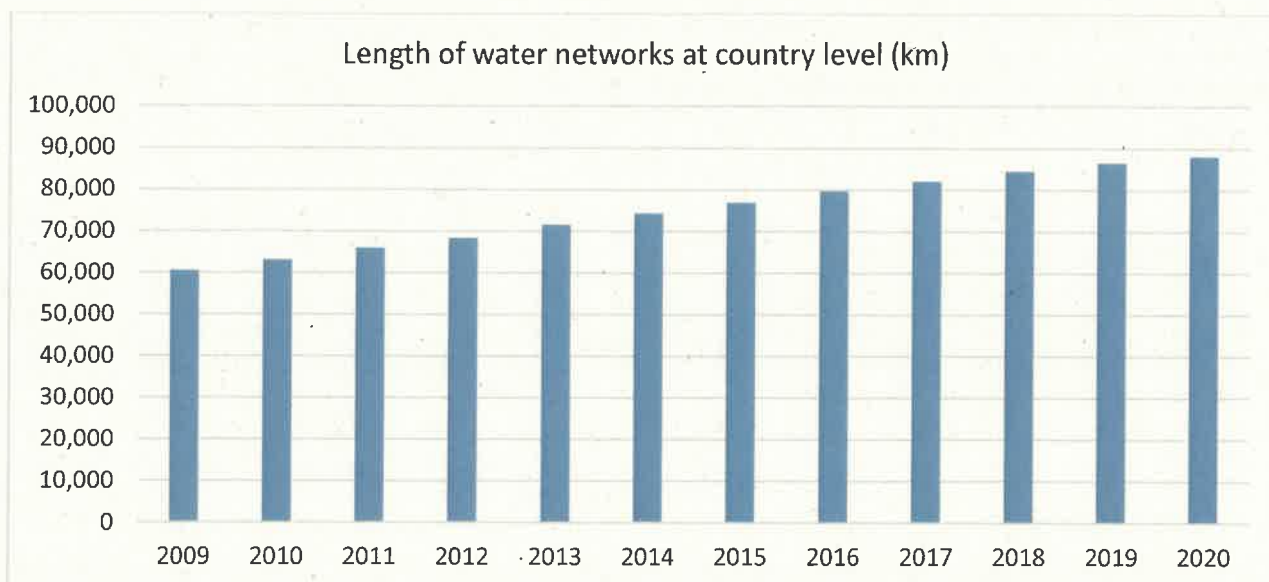


Data source: National Statistics Institute (INS)

If in 2009, a number of 11,790,494 people were served with water supply services from the centralized system at the country level, representing 54.9% of the total population, in 2020, the number of people served with these services was 13,936,918 persons, representing 72.4% of the resident population of Romania. Taking into account the growth rate of coverage with water supply services, it is estimated that the 90% target will be met by 2030.

### Target 3.2

Figure 2. The evolution of the length of the drinking water network during the 2009 – 2020 period

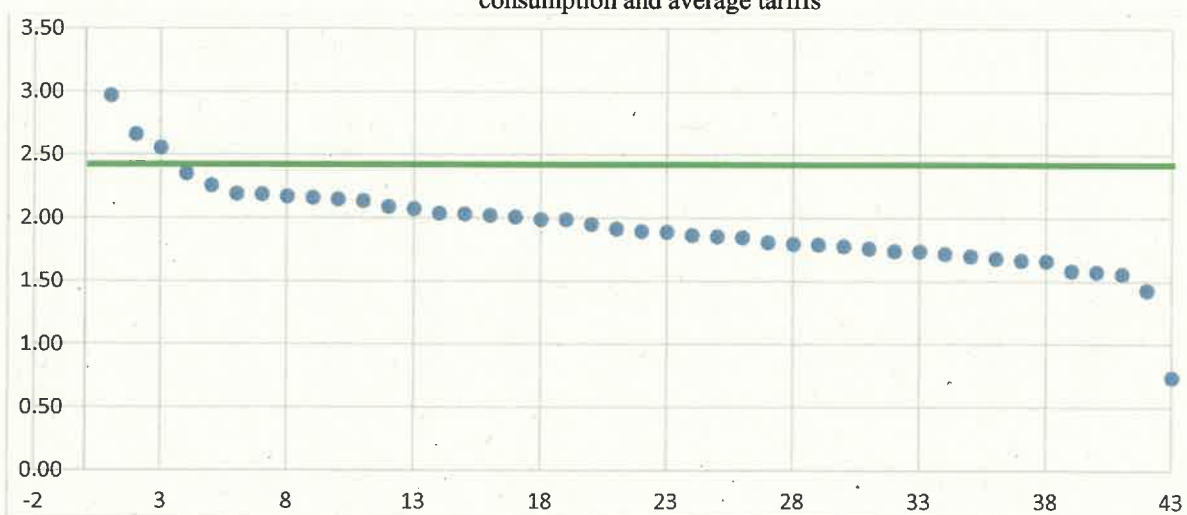


Data source: National Statistics Institute

The length of drinking water networks in the country has increased from 60,456 km in 2009 to 88,065.1 km in 2020, or 45.7%.

### Target 3.3

Figure 3. The affordability index for the 43 Regional Operators (ROs), in the year 2020 (%), the method of consumption and average tariffs



Data source: Romanian Benchmarking

In 2020, the average affordability level of the 43 ROs was of 1.93%. The highest value was 2.97% and only three companies were above 2.5%. In the context of a 4% maximum affordability level, this means that water and sewerage tariffs are affordable for the population.

#### 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 Protocol target *Levels of performance of collective systems for water supply and sanitation (article 6.2 (e))* covers the following *Sustainable Development Goals and targets*:

- Goal 1. No poverty - Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other



forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance;

- Goal 3: Good health and well-being ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination;

-Goal 6: Water and sanitation for all ; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all ; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse; 6.4 Increase water-use efficiency and sustainable withdrawals and supply of freshwater to address water scarcity; 6.a. Expand international cooperation and capacity-building;

- Goal 13: Climate action ; 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.

**Target 1:** reduction by 10% of the actual water leakage level within the drinking water centralized network through: improved performances of drinking water distribution network; replacement materials which do not meet European standards and regulations (in particular asbestos pipes).

**Target 2:** Improvement of the drinking water distribution services by establish of efficient regional structure for public water services (regionalization of water services)

**Target 1 date:** In progress (see 2019 Report; the original target date: 31.12.2020)

**Target 2 date:** Continuously (see 2019 Report; the original target date:31.12.2010)

#### **Baseline conditions:**

**Target 1:** A deficiency within the water supply systems is the water leakage. In 2009 the medium water leakage in the water distribution system within the urban centres was 43.9 %.

The main problems are caused by obsolete and deficient materials of the distribution networks such as azbociment and steel. The proportion in which these materials are present in the distribution networks ranges between 25% and 100%. The replacement within distribution networks will lead to a reduction of these materials to a maximum 20% until 2020.

The Development Strategy of efficient management of detection and reducing water loss it requires knowing the real performance of the systems, technical and economic, as well as implementing an action plan to reduce losses of water distribution networks. In the County Master Plans and applications for European funding are included mandatory requirements for application management strategy and an action plan for reducing water losses in transmission and distribution networks to a range of 10-25%.

**Target 2:** The real needs of the population, are to have equitable access at water and sanitation services.

This kind of services must to be affordable to everybody. In this light, all towns must to invest to maintain and upgrade their infrastructure in order to have good services, able to meet EU standards, must to achieve through adoption and implementation adequately designed development policies.

The regionalization process drive to improve the quality and cost efficiency of local water infrastructure and services. This process started in 2004 and consists of the concentration of the operation of the services provided to a group of municipalities within a geographical area defined with respect to a river basin and/or to administrative boundaries (region, county).

For the drinking water and wastewater operators, regionalization means merging two or more local operators (both municipal and rural localities) into one regionally working operator, usually at the county level. Still for achievement of this objective a key element is the implementation of an institutional model to allow the greater, stronger and experienced operators to provide water supply and sanitation services in many territorial administrative units based on a single contract for management delegation of these services. Within these management contracts there are established strategies for tariffs which lead to the application of an uniform tariff for all localities included in the strategy.

**Level of targets:** nationwide.

**Background justifications:** to implement all necessary measures to ensure drinking water supply in

accordance with DWD as amended in 2020 (recast), establishing requirements for drinking water, inspection of water systems, drinking water quality surveillance and monitoring, disseminating information and reporting.

**Target 1:** Besides the loss of purified waters, the water leakages within the distribution networks represent one of the reasons for drinking water interruption as well as a possible reason for water contamination with corrosion products and impurities.

**Target 2:** The operating water and wastewater services at the regional level show several advantages that are mentioned below: the regional supply of utilities by integrated systems and more professional management is expected to have like result in time, in the reduction of water loss, in the promotion of resource preservation, in minimum investment and in the protection of water sources; the strengthening of the capacity to prepare and implement investment projects as well as of the capacity to negotiate financing; improvement of service quality, of customer relations and their perception on utility operators; operation management by means of modern and efficient management instruments and the decreasing of political involvement in the course of business; the prices of water services are leveraged between urban and rural areas.

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/regulatory measures:**

**Target 1:**

- Legislation in the field of public water supply services;
- Ministerial Order no. 2,901 for the approval of the technical regulation "Norm regarding the design, execution and operation of the water supply and sewerage systems of the localities. Indicative NP 133-2013";
- Draft order on the approval of the General Framework for Water Safety Plans as well as the establishment of the responsibilities of the competent authorities (actually in the final stage on consultation). The operators have to assess the current situation, to develop and implement the Water Safety Plan and the Plan for reducing water losses in the water distribution networks.

Water safety plans have become mandatory for drinking water supply systems that supply more than 1,000 cubic meters per day or serve more than 5,000 people.

- Strategy in the field of sustainable development for medium and long term
- SOP ENV - Priority Axis 1 "Extension and modernization of water and wastewater systems", which main objective is to improve quality and access to water and wastewater infrastructure, by providing supply in majority urban areas by 2015 and establish effective regional structures for water services management.
- The "Detectivii apei pierdute" (Water Loss Detectives) magazine has been in place since 2011. It has been addressing to water professionals presenting information about events and opportunities for professional development, used equipment, applied strategies, and numerous case studies. (<http://detectiviiapeipierdute.ro/>).

**Target 2:**

- **Legislation in the fields as:** local public administrations, local public services, water supply and sewage services, etc  
SOP ENV Financial/economic measures: In the period 2007-2015 the situation was reassessed taking into account the dynamics of appearance and progress of investment programs for collection and treatment measures. Through Sectorial Operational Programme "Environment" (SOP ENV) 2007-2013 is provided support in implementation of measures under Priority Axis 1 "Extension and modernization of water / wastewater," based on the promotion and realization of feasibility studies at agglomerations and counties level and taking into account the situation in the Master Plans County already elaborated. Also, through the Large Infrastructure Operational Programme 2014-2020, the actions will be continued development of collecting systems and wastewater treatment, under Priority Axis 3 "Development of basic infrastructure in terms of efficient management of resources " as prioritization of Master Plans County, to comply with the Directive in terms of collecting and treatment of waste water for urban agglomerations with more than 2,000 p.e. The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023) and Sustainable Development Operational Programme 2021-2027 and the National Recovery and Resilience Plan (till 2026).

- National Strategy for drinking water supply, collection and waste water treatment (stage on drafting together with stakeholders) as enabling conditions for accession to the EU funds.
- National plan for investments for drinking and waste water sector having in view national EU obligations and the objectives of the National Strategy for drinking water supply, collection and waste water treatment .
- each Master Plans County must include an Action Plan for reducing water losses in the water distribution networks, up to 25%.

Total investment costs required to implement the Drinking Water Directive (98/83/EC) as amended were evaluated in the first National Management Plan at a total amount of 5008 mill. Euros. According to a revaluation, the investment costs were estimated to 9,717.272 mill Euro, but only 3,109.259 mill. Euro were invested in the period 2009-2015. The investments costs of 2,307.958 mill. Euro will be addressed to small rural settlements for the period 2016-2021. For period 2016-2021 Annual Operating and maintenance costs were evaluated at a total amount of 350.910 mill euro while other costs (training, research studies, etc.) at 73.560 mill.Euro. For the third National Management Plan (2022-2027), the necessary investment costs to implement the DWD are estimated to 10,302 mill euro. To these investment costs are added annual operating and maintenance costs of approximately 567 million Euros in the period 2022-2027.

**Informational/educational including management measures:** information campaigns organised by the water producers in the area where they provide services. Also, at the level of professional association of water operators (Romanian Water Association) there are developed benchmarking practices in order to improve the quality of water/waste water services.

The management measures are targeted to actions such as improvement of investments for extension and rehabilitation of water and wastewater infrastructure, efficiency of costs for these services, the benchmarking process, development of an active management of water leakages, replacement of water distribution networks, etc

Difficulties and challenges encountered.

**Target1:**

- The increased level of water leakages compared to the countries with performance management of unpaid water; the medium level of leakages recorded in 2010 was 53%. In 2011 the estimation of water leakages was almost 45%.
- Obsolete infrastructure for water pipes network.

**Target 2:**

- Administrative bottlenecks;
- Difficulties in establishing patrimony;
- Clarification of the ownership.

A challenge for regional operators is inclusion of more rural localities within in operation and maintenance area.

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

**Target 1:** At the national level the simple length of the drinking water distribution network was of 82, 090.4 km (as 31.12.2017). Compared with the existing situation to the end of 2016 (79,678 km), it was recorded an increase with 2,412,8 km. Drinking water losses due to drinking water distribution network were 37.3% on whole country, and in municipalities and cities 41.0%. These were caused by the advanced wear of pipelines for the supply and distribution of drinking water, as well as intake and pumping equipments.

Public utility activities of local interest have a social importance and an essential role in strengthening the sustainable development of quality and improving human living conditions. The National Institute of Statistics published the document entitled "Public utility activities of local interest" – 2017" (the statistical survey has as the main objective the collecting and providing statistics on water supply, sewerage and sanitation of localities, thermal energy/heat supply, natural gas supply and urban planning). The document is based on information included in statistical questionnaires by units with public utility activities of local interest, the departments of the public domain, the municipal, and cities/towns and communal mayoralities and commercial/trading societies that sell gas.

(Source: National Institute of Statistics - Activities regarding Public Utilities of Local interest 2017, link: <http://www.insse.ro/cms/ro/tags/activitate-privind-utilitatea-publica-de-interes-local>).

**Target 2:** The establishment of the regional operators within the process of regionalization of drinking water and wastewater services has been finalized in 2010 (43 regional operators). Population provided by regional operators (for water supply services) in 2010 increased with 6.1% compared to 2009.

Type of locality	Localities supplied by operators*							
	Year							
	2009	2010	2013	2015	2017	2018	2019	2020
Municipalities and towns	245	246	317	317	317	317	316	316
Rural localities	710	761	2050	2157	2217	2248	2270	2289



Total	955	1007	2367	2474	2535	2565	2586	2605
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\* The number of localities with water distribution network, by area of residence, macro-regions, development regions and Counties by National Institute of Statistics

The activities for improvement of the access of drinking water were/are oriented to: planning and design of drinking water projects in pre-accession and accession to EU in urban and rural areas with EU support (PHARE, ISPA, SAPARD, SAMTID and Cohesion Funds); construction of new water supply systems; rehabilitation/extension of network distribution; rehabilitation of water treatment plants.

During 2013 Regional Operators, members of Romanian Water Association had collaborated with governmental authorities with proposals in order to improve the legislative framework necessary to simplify the procedures for implementation of the investment in water/waste water infrastructure. There were also organized a special workshop in September 2013, in collaboration with International Water Association, regarding financial measures used for absorption of EU funds, increasing of the responsibilities of local public administration regarding the quality of water services, promotion of social partnership and measures for sustainable development.

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

The Protocol target *Levels of performance of collective systems for water supply and sanitation (article 6.2 (e))* covers the following *Sustainable Development Goals and targets*:

- Goal 3: Good health and well-being ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination

-Goal 6: Water and sanitation for all ; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all ; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse ; 6.4 Increase water-use efficiency and sustainable withdrawals and supply of freshwater to address water scarcity ; 6.a. Expand international cooperation and capacity-building

- Goal 13: Climate action ; 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

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

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.

**Targets:**

- Rehabilitation, modernization and extension of the sewage networks
- Improvement of urban wastewaters treatment by: construction /extension /up grading of wastewater treatment plants
- Establishment of innovative and efficient water management structures (efficient regional structures for the wastewater services management – to see target V

**Targets date:** 31.12. 2023 (see 2019 Report; the original target date: 31.12.2018)

**Baseline conditions:** link to target IV - Access to sanitation (art. 6, para. 2 (d))

Level of target: nationwide.

**Background justifications:** to comply with the EU Directives.

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).

**Legal/regulatory measures:** transposition and implementation of UWWT Directive (GD 188/2002 as amended); harmonization and updating of legal norms and technical standards with EU ones; authorization of waste water discharges in natural receiving waters; establishment of a new institutional structure for water/waste water infrastructure (Intercommunity Development Association, Regional Water Operators) and development of specific legal framework.

**Financial/economic measures.** Implementation actions provided by UWWTD Implementation Plan.

**Informational/educational including management measures:** See also target IV - Access to sanitation (art. 6, para. 2 (d)), related to informational measures.

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

Development of large investment programme for water/waste water infrastructure both in urban and rural area, link to target IV.

Under the new programming period 2007-2013, the investments in water/waste water infrastructure are going to be continued through the Operational Programme financed by Cohesion Fund as well as through the National Rural Development Programme (NRDP) financed by the European Agricultural Fund for Regional Development. The Sectoral Operational Programme for Environment (SOP ENV) is closely linked to the national objectives of the strategy laid down in the National Development Plan (NDP) and National Strategic Reference Framework (NSRF), and also the Romanian obligations from Access Treaty and the compliance with the provisions of European Environmental Acquis.

The integrated actions for the development of wastewater collection and treatment systems will be continued through the Sustainable Development Operational Program (SDOP) in the period 2021-2027 considering the construction and rehabilitation of sewerage networks and construction / rehabilitation / modernization (tertiary treatment) of wastewater treatment plants that ensure the collection and treatment of biodegradable organic load in agglomerations greater than 2,000 i.e.

The leading role in the process of continuous development of water/ waste water infrastructure is assured by Regional Operators. They continue to support also other small localities and localities in rural areas in order to be complied with EU provisions. A special attention is addressed to the strengthening of building capacity of the administrative structures of Associations of Municipalities and their relations with Regional Operators aiming to a better monitoring and supervision for implementation of water/waste water investment projects.

All water investments will be in accordance with the prioritizations from Master Plans at each county level, and also with updated National Management Plan and the 11 Basin River Management Plans.

The target date was revised taking into account the link with target and target date IV - Access to sanitation (art. 6, para. 2 (d)) as well as on the progressive implementation of the projects and their financing.

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

See above V- Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e)) point 4

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

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

**Target:** Establishment of sanitary protection zones for all drinking water abstraction.

**Target date:** continuously.

**Level of target:** nationwide.

**Background justifications:** to comply with the EU Directives.

Water intakes are protected areas for drinking water abstraction. According to the Art.6 and Annex IV to Water Framework Directive all protected areas were identified at the national level (including catchment protection areas for drinking water abstraction) and maps (in GIS) were elaborated.

Sanitary protection zones are required for protection of water bodies used for abstraction of water for human consumption. Establishment of sanitary protection zones is done in accordance with legal requirements.

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

Water Law and G.D. 930/2005 on nature and size of sanitary protection zone (special rules on the character and size of sanitary and geological protection zones).

Order no. 1278/2011 for the approval of the instructions regarding the delimitation of the sanitary protection zones and of the hydrogeological protection perimeter, for the groundwater or surface water sources, as well as their related catchments, according to the legislation in force.

Special measures according to the above GD apply for the following purposes: groundwaters or surface waters, and their associated water intakes used for centralized drinking water supply, economic units/agents for food and pharmaceutical industry, health, social and cultural units, constructions and facilities systems components for drinking water ; mineral waters deposits and their associated abstractions used for internal cure or bottling, bottling plants and sludge treatment plants; lakes and therapeutic mud; groundwater or surface water intakes used for bottling drinking water other than natural mineral water. National Administration "Apele Române" established and maintains a register of sanitary protection zones and protection perimeters for each river basin, which is submitted by the end of each year to the central public authority in the water field (Ministry of Environment, Waters and Forests). These sanitary protection zones and protection perimeters are included in the Register of Protected Zones and measures have been imposed at the national level, to prohibit certain activities as well as to restrict the use of land, to prevent the risk of contamination of water, as a result of human, economic and social activity.

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

Year	Ground water		Surface water	
	Total of groundwater abstraction catchments for drinking water supply	Sanitary protection zones	Total of surface water intakes for drinking water supply	Sanitary protection zones
2005	1617	1319	212	149
2010	2072	1690	278	184
2011	2226	1977	290	199
2013	2796	*	325	*
2017	3388	*	346	*
2018	3430	2913**	358	276**
2019	3523	2992**	361	277**

\* Groundwater abstraction catchment and surface water intakes have/could had different types of sanitary protection areas (severe regime, sanitary protection areas and hydrogeological protection areas) which can be overlap. Sanitary protection zones are established or in progress.

\*\* Sanitary protection area with severe regime

Source: National Administration Romanian Water, Protected Area Register 2020

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

The Protocol target Recognized good practice to the management of water supply and sanitation (article 6.2 (f)) overlaps the following Sustainable Development Goals and targets:

- Goal 6: Water and sanitation for all; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse; 6.4 Increase water-use efficiency and sustainable withdrawals and supply of freshwater to address water scarcity; 6.5. Implement IWRM, including through transboundary cooperation; 6.6. Protect and restore water-related ecosystems;
- Goal 12: Sustainable consumption and production; 12.4 Achieve environmentally sound management of chemicals and wastes, and reduce their release to water and soil in order to minimize their adverse impacts on human health and the environment;
- Goal 15: Life on land; 15.1 Ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems.



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

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

**Target:** Increasing the level of quality of sanitation services provided by the regional operators.

Link to target V b) - Levels of performance of collective systems and other systems for water supply (art. 6, para. 2 (e)) related to the regionalization process (the regional water operators provide both water supply and sanitation services)

**Target date:** Continuously (see 2019 Report; the original target date: 31.12.2018)

**Level of target:** nationwide

*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).*

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

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

**Level of target:** nationwide

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

Please, see above VII - Application of recognized good practices to the management of water supply (art. 6, para. 2 (f)) point 4.

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

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

**Target 1:** Reducing the level of untreated wastewater discharged into receiving waters

**Target 2:** Preventing and reducing the impact of accidental pollution (through implementation of plans at the level of potential pollution units)

**Target 3:** Implementation of the warning system for accidental pollution.

**Target 1 date:** Continuously (revised in 2021; the original target date: 31.12.2018)

**Common Target (2+3) date:** continuously.

**Level of target:** nationwide.

Background justification: Pollution of water resources by urban wastewaters is caused by the following factors: low rate of population connected to sewage systems and wastewater treatment plants; malfunction of existing sewage treatment plants; inappropriate waste management; development of urban areas and insufficient protection of water resources.

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

**Legal/regulatory measures:** GD no 188/2002 as amended.

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

- Implementing plans to prevent and control accidental pollution by potentially polluting units Organization of prevention and control of accidental pollution from potentially polluting water users are in accordance with the provisions of Law of Disasters 124/1995 and Water Law 107/1996 as amended. This activity is based on plans of potentially polluting units developed for each river basin plan. Methodological framework to establish a "plan to prevent

and control accidental pollution" is specified by MO no. 278/1997 and also by the Joint Order no. 1422/192/2012 of the minister of environment, waters and forests and the minister of administration and interior approving the Regulation on emergency management of floods, dangerous meteorological phenomena, accidents in hydrotechnical constructions, accidental pollution of watercourses.

- The purpose of the Plan is to prevent pollution incidents and to ensure optimal management of crisis situations that arise during the event, including rapid intervention to combat accidental pollution. The Plan is endorsed by the River Basin Committees. National Administration Romanian Waters through its River Basin Administrations provides technical assistance to potentially polluting units for developing these plans.

- Implementation of warning system in case of accidental pollution

In Romania, according to the Ministerial Order no. 226/2006, the following systems are in place and operational: Alarm System in case of pollution incidents (SAPA - ROM) – at national level and the Pollution International Alarm Centre within Convention on cooperation for the protection and sustainable use of the Danube River, Sofia 1994 (for accidental pollution with transboundary effects).

#### Informational/educational including management measures.

See target IV Access to sanitation (art. 6, para. 2 (d)), related to informational measures.

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

Target 1 – The target date for reducing the level of occurrence of untreated wastewater from users was revised based on the correlation with the full implementation of European legislation in the water sector.

See target IV Access to sanitation (art. 6, para. 2 (d)) and XI - Quality of discharges of wastewater from wastewater treatment installations (art. 6, para. 2 (h)).

Target 2 and 3 - see table below.

Accidental pollution events		
Year	Number of accidental pollution events recorded	Comments
2011	45	of which 12 pollution by untreated wastewaters due to the faults that occurred in the wastewater treatment plants operation.
2013	54	caused by untreated wastewaters, mine waters, organic and inorganic chemical substances and suspended solid runoff). These phenomena had an impact locally on basin river and due to the length of reduced time, nature of the pollutant, etc., the effects of those were reduced only to modification of value of physico-chemical indicators at local level/locally ; for this reason these phenomena did not induce significant changes on aquatic biodiversity on long term.
2016	47	Caused by oil product, untreated wastewater (18), mine waters, low oxygenation conditions, unidentified substances, semi-solid waste, other,
2017	70	Caused by untreated wastewaters (28), oil products and other hydrocarbons, semi-solid / solid waste, low oxygenation conditions, other nature unidentified substances, mine waters
2020	79	Caused by untreated wastewaters (40), oil products and other hydrocarbons, semi-solid / solid waste, low oxygenation conditions, other nature unidentified substances, mine waters
General comments: Oil pollution is mainly due to damage to oil and salt water pipelines due to their spillage. The occurrence of accidental pollution is due to the negligence shown by some economic operators during the technological processes or to non-compliance of the legal provisions regarding the discharge of waste water into natural receivers.		

Source: Synthesis of water quality in Romania, 2018-2020, developed by National Administration "Apele Romane"

Each potential pollution unit: -draws up and updates, as necessary, a Plan to prevent and control accidental pollution of water resources; - ensures the implementation of its own accident prevention and control plans and the accidental pollution warning system. A number of 1853 water users have established in 2020 own plans to prevent and combat accidental pollution.

It is necessary to intensify cooperation between all stakeholders in the water sector, including local Public Health Departments with the aim to take measures on avoiding a possible negative impact on public health in case of accidental pollution, according to the provision of the Water Law and G.D no. 270/2012 for approval of the Regulation of the organization and functioning River Basin Committee.

**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 Protocol target Discharges of untreated waste water and untreated storm water overflows (article 6.2 (g)) overlaps the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination

- Goal 6: Water and sanitation for all ; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse ; 6.6 Protect and restore water-related ecosystems

- Goal 11: Sustainable cities and communities ; 11.b Increase number of cities and human settlements adopting and implementing integrated policies and plans towards mitigation and adaptation to climate change and resilience to disasters

- Goal 14: Life below water – 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

Compliance with the EU Directives: the Urban Wastewater Treatment Directive 91/271/EC.

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

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

**Target:** Reduction of discharges of untreated storm water overflows from wastewater collection systems to waters by developing storage/buffer tanks.

**Target date:** In progress (see 2019 Report; the original target date: 31.12.2021)

**Baseline conditions:** Some of agglomerations with combined collecting systems have storage capacities of wastewater/rain waters which are used during the heavy rain periods and then the accumulated wastewater/rain waters are gradually treated in UWWTPs. Furthermore, in the process of the issue of water management permits for the new projects for construction, rehabilitation, extension and upgrading collecting systems and UWWTPs, the issue of storage wastewaters/storm waters in the combined collecting systems is checked.

**Level of target:** nationwide.

**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).**

**Legal/regulatory measures:**

According to the Law no. 241/2006 (republished in 2015) concerning the water supply and sewerage: - 'the sewage system must primarily ensure the collection, transport, treatment and discharge into a natural receptors of waste water from users of the water supply service as well as stormwater or surface water collected from the localities; - The local public administration authorities, according to the prerogatives assigned by law, has, inter alia, the following obligations towards the operators: to conclude with the operator a contract for collecting, channeling and purifying rainwater from the public and private domain of the locality.

According to the water legislation in order to obtain the water management permit for existing and for the new projects for construction, rehabilitation, extension and upgrading collecting systems and UWWTPs, the beneficiaries (water users e.g municipality or operator) should demonstrate capacity for collection and treatment the wastewater and ensure at least the pollutants concentration limit values for the discharges according to the national legislation, including



capacity for storage the rain water collected in a combined (unitary) sewerage system and/or its treatment in the UWWTPs (for normal and abnormal situations: heavy rains, etc.).

Relating to the impact of climate change conditions upon wastewater buffer installations the new sewage systems are designed as a separated one and are provided with the storage tanks for storm water.

Some of agglomerations with combined collecting systems have storage capacities of wastewater/rain waters, which are used during the heavy rain periods, and then the accumulated wastewater/rain waters are gradually treated in UWWTPs. Furthermore, in the process of the issue of water management permits for the new projects for construction, rehabilitation, extension and upgrading collecting systems and UWWTPs, the issue of storage wastewaters/rain waters in the combined collecting systems is checked.

#### **Informational/educational including management measures.**

See target IV, related to informational measures.

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

During periods of intense rainfall have been recorded events of exceeding the capacity of rain waters and wastewater collecting systems for 55 sewage networks/systems.

The River Basin Management Plans 2016-2021 approved by GD and the updated RBMPs 2022-2027, provide measures concerning at the collection and treatment of wastewater, which include types of works for the construction (extensions) and modernization of storm water drains: rehabilitation of the water distribution system (main transport pipelines, distribution pipes to users, storage tanks etc).

The new sewage systems are provided with the storage tanks for storm water.

The national percentage of wastewater collected through separate sewers is 51,24% (wastewater collected without pluvial waters), through combined sewers is 24,77% (wastewater mixed with pluvial water) and 10,25% represents both (separate and combined sewers in the same agglomeration). The target date is interlinked/is closely related to the achievement of the **target IV**.

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

Please, see above, X - Occurrence of discharges of untreated storm water overflows from wastewater collection systems (art. 6, para. 2 (g) (ii) point 4.

Compliance with the EU Directives related to water quality

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

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

**Target:** to fulfil requirements of WFD and other EU Directives related to water quality.

**Target date:** 31.12.2027

**Baseline conditions:** In 2005, 79% of the total wastewater resulted from the main sources of pollution was discharged into natural effluents, especially rivers, without any treatment or insufficiently treated. According to the statistical data, the situation of the wastewater discharged into rivers was:

- 65.1 % of the total volume of 4034.808 mil. m3/year need to be treated before discharge ;
- 20.5% of the total volume of 2626.139 mil. m3/yr were adequately treated;
- 1193.851 mil. m3/yr (45%, including cooling) water was untreated and 893.237 mil. m3/yr (34%) were inadequately treated.

The wastewater flow quantity was discharged from the following activities: energy cooling (51%), communal services (36%), chemical processing (5%) and metallurgy (3%). The quantity of wastewater which needed to be treated was discharged by communal services (56%), chemical processing (over 7%), and metallurgy (over 4%). The quantity of untreated wastewater was discharged by communal services (over 49%); chemical processing (over 4%). The activities

that discharged inadequately treated wastewaters are: communal services (62%), chemical processing (11%), mining (2.6%), metallurgy (2.4%), and pulp and paper industry (2.3%).

Level of target: nationwide.

**Background justification:** According to the Water Framework Directive, the good status of all surface water and groundwater bodies has to be achieved ultimately by the end of 2027.

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

The licence (water management authorization) specifies the quantity of the extracting water and the volume and the quality parameters of the discharged water, according to the Ministerial Order no. 662/2006. The water management authorization could also include an annex developed after the authorisation is released which provides the measures and the works that must be done in order to assure the achievements of the adequate quality of the discharged wastewater. The adequate quality of the discharged wastewater is established by the G.D. no. 188/2002 as amended and GD 570/2016. These acts established the maximal concentration of the quality parameters in the discharged water both into the sewerage systems and into the rivers.

Updated Romanian River Basin Management Plan 2016-2021 was approved by GD no. 859/2016 and represents the official instrument for implementation the measures for each pollution sources, in order to reduce the level of pollution from wastewater treatment installations/untreated wastewaters, correlated with the water quality and environment objectives of water bodies. According to the Water Law no. 107/1996 as amended and Ministerial Order no.662/2006 those who discharge wastewater into surface or ground water shall dispose such waters in accordance with conditions laid down in discharge authorization. Water management authorization is issued by the Water Authority for a maximum period of 5 years for waste water discharge.

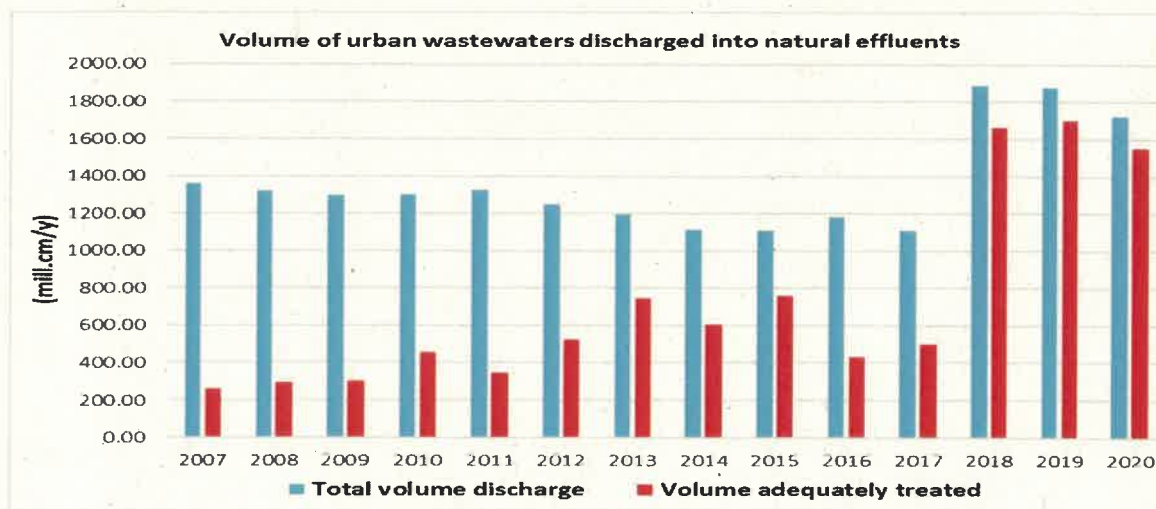
**Financial/economic measures:** Link to target IV- Access to sanitation (art. 6, para. 2 (d)) .

**Informational/educational including management measures:** The Water Authority determines the target emission limits up to the value of emission standards according to the type of discharged waste water and the amount of pollution they contain and also establish the deadline for achieving the emission limits, as well as the conditions under which waste water may be discharged until these limits are achieved.

See also target IV - Access to sanitation (art. 6, para. 2 (d)), related to informational measures.

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

In 2018-2020, compared to baseline condition and other intermediate date an increase of the volume of urban wastewaters discharged into natural effluents has been recorded due to the improvement of wastewater collecting and treatment systems.



Source: Synthesis of water quality in Romania, 2018-2020, developed by National Administration "Apele Romane"

In 2020, the total volume of wastewater discharged into water resources is 1723.32 million m<sup>3</sup>.

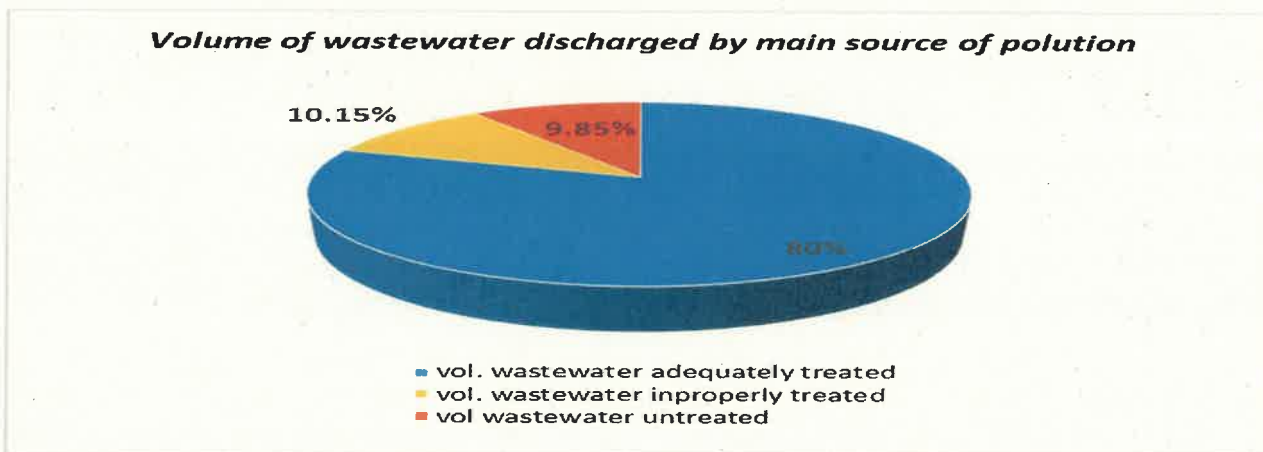
In the water resources are also discharged the cooling waters coming from the energy industry, approx. 2484.2 million m<sup>3</sup>, water that does not require treatment.

- 80.00% of the total volume of 1,723.320 mil. m<sup>3</sup>/yr were adequately treated;
- 169.56 mil. m<sup>3</sup>/yr (9.84%) water was untreated and 174.84 mil. m<sup>3</sup>/yr (10.15%) were inadequately treated.

The wastewater flow quantity was discharged from the following activities: communal services (62%), chemical processing (1.7%) and metallurgy (4.1%). The quantity of untreated wastewater was discharged by communal services (2.3%); chemical processing (0.08%), metallurgy (1.3%). The activities that discharged inadequately treated wastewaters are: communal services (6.7%), chemical processing (0.8%), metallurgy (0.6%), and pulp and paper industry (0.22%).

Wastewaters are adequately treated when the concentrations of all indicators do not exceed the limit values allowed included in the permit/authorization (it is sufficient to record exceedances to a single indicator for the discharged waters to be improperly treated).

Human agglomeration and industrial activities are the main sources of wastewater discharged into natural receptors. At national level, in 2020 cca 92% of these sources discharge wastewater after treatment, depending on the nature / type of this water. Out of the total number of 2615 treatment plants, a number of 1010 treatment plants functioned properly, and the remaining 1605 stations functioned improperly.



Source: Synthesis of water quality in Romania, 2018-2020, developed by National Administration "Apele Române"

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 Protocol target Quality of discharges of waste water (article 6.2 (h)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being ; 3.3 End neglected tropical diseases and combat water-borne diseases ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination
- Goal 6: Water and sanitation for all , 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse ;6.6 Protect and restore water-related ecosystems
- Goal 12: Sustainable consumption and production; 12.4 Achieve environmentally sound management of chemicals and wastes, and reduce their release to water and soil in order to minimize their adverse impacts on human health and the environment
- Goal 14: Life below water – 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Compliance with the EU Directives related to water quality.



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

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

**Target:** Approval of the National Strategy on sewage sludge from wastewater treatment plants

**Target date:** in process of approval (2019 Report: 31.12.2017 - proposed in 2016; the original target date: 31.12.2014)

**Baseline conditions:** The estimated amount of sewage sludge was of 171,086 t / yr (at the level of 2001).

Concerning the sewage sludge disposal methods, in Romania during 2005 – 2006 from the total sewage sludge production about 97% has been storage and about 3% has been final disposal through other methods (using as fertilizer in agriculture or co-incinerated in cement industry).

**Level of target:** nationwide. Background justification: to improve the human health and the environmental quality (water resources, air, soil, biodiversity) through minimizing of adverse effects caused by an inappropriate management of sludge and to comply with the EU legislation.

*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).*

It is necessary to be elaborated a National Strategy for Sludge Management (with the technical assistance and financial support of SOP). The draft of this strategy proposes efficient methodology of management, including options feasible to recover and use them, thus increasing involvement of stakeholders in the process of use and recovery of sludge, while pursuing awareness of the main aspects of agricultural use. The legal act for approval of the National Strategy for Sludge Management is still in debate.

By implementing the National Waste Management Strategy, of the Action Plan and the National Waste Management Plan and taking into account waste disposal legislation, Romania has to achieve targets for reducing the quantity of biodegradable waste and do not allow the disposal of non-stabilized treatment sludge on landfills.

The "National Waste Management Strategy 2014-2020", approved by Decision no. 870/2013, refers to the sewage sludge field in terms of energy recovery and disposal (Section 8). The Strategy will be regularly reviewed according with the technical progress and environmental protection requirements.

The National Waste Management Plan for the period 2018-2025 was approved by GD no. 942/2017 and has as main objectives: characterization of the current situation, identification of problems leading to inadequate waste management, setting national targets. (<http://www.mmediu.ro/beta/domenii/gestionarea-deseurilor/strategii-planuri-studii/>)  
(Source: updated Romania National Management Plan 2016-2021, approved by GD no 859/2016)

Romania has transposed Directive No. 86/278/EEC regarding the application of sewage sludge to land by Ministerial Order No 344/2004 regarding environment protection and in particular soils when sewage sludge is used in agriculture. It establishes more stringent values for concentrations of heavy metals and hazardous organic compounds. Also sludge must be treated before agriculture using and a special environmental permit is needed.

The management of sludge from urban waste water treatment plants includes: correlation between treatment and the storage capacity of the sludge coming from UWWTPs; investigation of the alternatives for the elimination/use of sludge in accordance with environmental legislation; auto-monitoring of sludge, compulsory for water service operators (GD no. 352/2005), keep up-to-date data on sludge characteristics and quantities applied.

National Environmental Guard controls and supervises the actions of sludge producers and users.

**Financial/economic measures:** Most of projects for wastewater treatment plants include also sludge management. These measures are financed through SOP ENV. Due to the need of important investments necessary in order to construct adequate facilities for treatment of sludge generated from wastewater treatment plants. Some progresses are done for sludge coming from waste water treatment plants of big agglomerations (with more than 150,000 p.e.)

**Informational/educational including management measures:**

See target IV- Access to sanitation (art. 6, para. 2 (d)), related to informational measures.

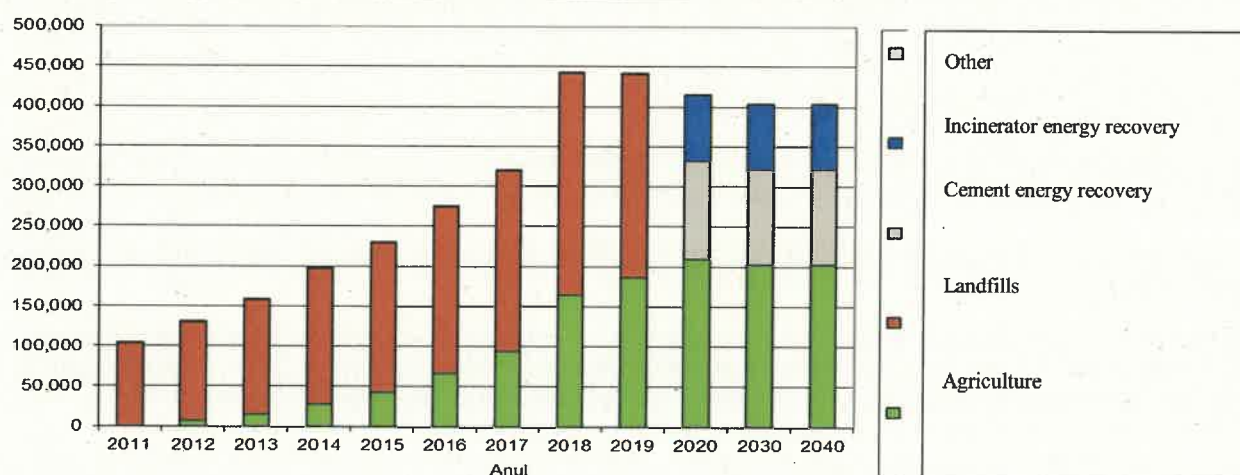
3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered.

During 2009-2011 from the total sewage sludge production about 98% has been storage and about 2% has been final disposal through other methods.

A projects in progress, the modernization of the status of the urban wastewater treatment plants and upgrading measures for treatment will get to an improvement of the quality of sludge. Also, by anaerobic fermentation the sludge will produce biogas. In these processes, the drying sludge will be more effective by using new and more efficient installations.

- The National strategy on the sewage sludge management, developed within a project funded by the European Regional Development Fund, is in process to be approved by Government Decision.

The objective development of National Sludge Management Strategy is to identify the best options in terms of environment and to regulate the use of sludge in a way that prevents and reduces harmful effects on soil, water, vegetation, animals and humans. Such National Strategy for Management of Sewage Sludge provides a framework for planning and implementing measures, to manage growing volumes of sludge from sewage urban rehabilitated existing and new from Romania, during 2020-2040 (<https://vdocuments.site/download/strategia-nationala-de-gestionare-a-namolurilor-de-purificare-partea-i-1pdf>).



Within the project mentioned above, the trends of sludge recovery/disposal for the period 2011-2040 were developed (tons dry substances/year).

The situation of sludge management in the urban treatment plants during the period 2015-2019 is presented in the Table below; it is observed that, out of the total amount of sludge generated at the level of 2019 by treatment plants, 230.59 million tons of dry matter sludge (s.u.), approx. 18.89% was used in agriculture.

Use of sewage sludge from wastewater treatment plants at national level -2013/2019

Source: National Institute of Statistics,

Uses of sludge	Sludge quantity (mill tons dry substances/y)					
	2013	2015	2016	2017	2018	2019
Total quantity produced	174,97	210,45	169,36	283,34	247,76	230,59
Total amount removed, of which:	172,57	155,81	169,36	283,34	247,76	230,59
Use in agriculture	8,01	10,64	16,51	35,01	46,39	43,56
Composting	0,45	0	0	1,76	4,15	12,19
Storage	117,65	104,23	107,96	168,45	128,32	130,02
Discharged into sea	0	0,3	0	0	0	0
Incineration	0,04	0,5	0,39	0,02	0,72	1,14
Other	46,45	40,91	44,5	78,1	68,18	43,67

Source: National Institute of Statistics

Within the National Sludge Management Strategy, a framework is established for the planning and implementation of measures for the management of increasing volumes of sludge from existing, rehabilitated and new urban wastewater treatment plants in Romania, in the period 2020-2040.

In Romania best practices and options for sludge disposal are as follows: use in agriculture, reforestation, land reclamation, landfill disposal, incineration and others (composting, solar drying, etc.). During 2016-2017 from the total sewage sludge production about 72.5% has been disposal landfill, about 7.4% has been use for agricultural purpose, 1.6% has been disposal incineration and 18.5% has been disposal through other methods.

There are also several opportunities for the Romanian water sector to make a valuable contribution in promoting a greener circular economy – which remain largely untapped. A crucial element is to improve management of sludge from WWTPs, gradually increasing the amount that is recycled in agriculture. The share has been increasing over the last 7 years, with half of all sludge from WWTPs expected to be recycled in agriculture by 2020, while the other half would be recycled for energy or in concrete factories. This also include promoting biogas production from WWTPs, which can significantly reduce the electricity purchase and carbon footprint of WWTPs, and which for large plants owned by the regional public utilities could be developed with private funds under PPPs. Finally, this includes the promotion of treated wastewater reuse for agriculture in the context of climate change adaptation (see also target XIII). Such “green” initiatives in water management would be in line with the EU vision, as promoted by the European Environmental Agency, to move towards a greener, more circular and resource-efficient economy in EU member states.

Although the use in agriculture is considered the cheapest option of valorisation in Romania it is suitable only in 16 counties due to the specific land conditions. Other options, as feasible solutions are: energetic revaluation, reforestation, land reclamation, incineration, composting, solar drying, etc.). The disposal of sludge still remain a main solution until the finalisation of the big investments in water infrastructure during the Large Infrastructure Operational Programme (LIOP) 2014-2020. The integrated actions for the development of water and wastewater systems and their financing continue through the Large Infrastructure Operational Programme – LIOP (till 2023).

In order to provide protection against potential health risks from residual pathogens as well as to protect environment the issue of disposal or reuse of sewage sludge originates from the process of treatment of wastewater, compliance with the national legislation in force/water permits are regularly controlled by the national and local authorities.

How to store or use sludge from urban wastewater treatment plants that need to be specified in the water management permits/authorizations must minimize negative environmental impacts. Discharges of the untreated wastewaters into surface water is forbidden, as stipulated in the Water Law.

Public service operators (for the collection and treatment of urban waste water) have obligation to monitor discharge effluents (self-monitoring) and report concentrations of the pollutants, the quantities of wastewater discharged and the technologies used, to the local water authorities and Basin Waters Administrations.

The target has not been changed but the date has to be revised. A possible review of the target is also subject to analysis.

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 Protocol target Disposal or reuse of sewage sludge from sanitation systems and quality of waste water used for irrigation (article 6.2 (i)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being; 3.3 End neglected tropical diseases and combat water-borne diseases; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination
- Goal 6: Water and sanitation for all; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse;
- Goal 15: Life on land; 15.1 Ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems

Compliance with the EU Directives related to water quality



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

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

No target has been set up

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 technical norm NTPA - 001/2002 on establishment of limits of pollutants loads of urban and industrial wastewater at the discharging in the natural receptors recommend the use of wastewater which contain nutrients at the irrigation of the forestry or agricultural lands with the approval of the land owners and of the competent authorities in the land reclamation field. The use of wastewater for irrigation has to take into account the nature of agricultural crop and need to have the agreement of the territorial public health inspectorate.

In 2017, Water Law no. 107/1996 has been amended to allow the use of wastewaters treated (in compliance with the technical norm mentioned above) for irrigation. At the national level, it is forbidden to discharge wastewaters into a groundwater or soil (land) according to the Water Law, with the exception of the use of wastewater properly treated for agricultural irrigation (only after developing specific studies). Where reuse of treated wastewater involves discharge into a surface water body, all of the requirements of the UWWTD apply.

In the last period there are concerns regarding the evident signals of climate change, it is necessary to take into consideration the local effects related to drought, and consequently to develop more the approaches to wastewater reuse. The development of schemes for the reuse of treated wastewater may have very different characteristics depending on the sources of the water, its intended use, the quality standards established for each use and the appropriate levels of treatment to achieve these quality standards on the most cost efficient and effective way.

At the EU-level European Commission has approved in 2020 the Regulation on minimum requirements for water reuse. The new Regulation on minimum requirements for water reuse for agricultural irrigation has entered into force and the new rules will apply from 2023 and are expected to stimulate and facilitate water reuse in the EU. Reuse of properly treated wastewater, for example from urban waste water treatment plants, is considered to have a lower environmental impact than other alternative water supply methods

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.

Please, see above XIII - Quality of wastewater used for irrigation purposes (art. 6, para. 2 (i)) point 4

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

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

**Target:** implementation of WFD as regards the quality required of surface water intended for the abstraction of drinking water

**Target date:** Continuously (see 2019 Report; the original target date: 31.12.2015)

**Level of target:** nationwide.

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

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).

**Legal/regulatory measures:** the quality of waters used as sources for drinking water is established in specific legislation: Water Law; GD 100/2002 as amended and GD 567/2006 for approval of the Quality Norms for surface water intended for drinking water abstraction and Rules regarding measurements methods and sampling frequencies

and analysis of samples from surface waters for drinking production. GD 100/2002 concerns surface water used or intended for the abstraction of drinking water after appropriate treatment and supplied by public distribution networks. This Decision sets the minimum quality requirements to be met by surface fresh water:

- parameters defining the physical, chemical and microbiological characteristics;
- limit values and guide values for these parameters;
- the minimum frequency of sampling and analysis;
- common non-mandatory reference methods for measuring the parameters.;

GD no. 930/2005 on nature and size of sanitary protection zones - has approved special rules on the character and size of sanitary and geological protection zones.

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

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

Water sampling and physical-chemical analysis are performed by National Administration Romanian Waters through its 11 River Basin Administrations laboratories and Water Management Systems laboratories - at county level - subsidiaries of River Basin Administrations.

The table below shows the evolution of surface water quality monitoring:

The total no of sampling	Number of sampling sections monitored**				
	Year 2006	Year 2013	Year 2017	Year 2020	Year 2021
Total	199	217	238	251	268
which are classed as A1 quality*	55	38	35	37	44
which are classed as A2 quality*	118	161	168	173	184
which are classed as A3 quality*	26	18	35	41	40

\* According to technical norm NTPA 013 (approved by GD 100/2002 and amended by GD 662/2005 and GD no. 567/26.04.2006) the standard

treatment technologies for transforming surface water of categories A1, A2 and A3 into drinking water are:

- **Category A1** - Simple physical treatment and disinfection, e.g. rapid filtration and disinfection;
- **Category A2** - Normal physical treatment, chemical treatment and disinfection, e.g. pre-chlorination, coagulation, flocculation, decantation, filtration, disinfection (final chlorination).
- **Category A3** - Intensive physical and chemical treatment, extended treatment and disinfection e.g. chlorination to break-point, coagulation, flocculation, decantation, filtration, adsorption (activated carbon), disinfection (ozone, final chlorination).

\*\* Source: *Synthesis of water quality in Romania*

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 Protocol target Quality of waters used as sources for drinking water, bathing, aquaculture and shellfish production (article 6.2 (j)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being ; 3.3 End neglected tropical disease and combat water-borne diseases ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination
- Goal 6: Water and sanitation for all ; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse ; 6.6 Protect and restore water-related ecosystems.

Compliance with the EU Directives related to water quality.

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

*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.*

### **Targets:**

- 1) Ensuring a high level of protection of bathing water
- 2) Monitoring of bathing water quality
- 3) Assessment and classification of bathing water quality
- 4) Management of bathing water quality,
- 5) Informing the public on the results of the monitoring of bathing water quality and risk management measures in order to prevent health hazards, especially in the context of predictable short-term pollution or abnormal situations.

Intermediate targets: establishing the bathing water profile.

### **Targets date:**

- 1), 2), 4), 5) – permanent
- 3) 31.12.2015 for first classification of bathing water zones, and annual from this date forward.

**Intermediate date target:** 31 March 2011

**Baseline conditions:** The Romanian legislation which is transposing the Directive 2006/7/CE provides a multi-phase implementation with full endorsement in December 2015 that include the first classification of bathing water.

**Level of targets:** nationwide.

**Background justification:** Fulfilment the requirements of European Union Directives and ensure the public health protection for users of bathing water

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

**Legal/regulatory measures:** G.D. no 88/2004 for approving surveillance standards, health inspection and control of natural areas used for bathing; G.D. no 546/2008 as amended, concerning the management of bathing water, which transposed Directive 2006/7/EC; Ministerial Order no. 183/2011 Methodology of monitoring and evaluation of bathing areas. Monitoring microbiological parameters according to the Directive 2006/7/CE started at 01 January 2012.

**Informational/educational** including management measures: A debate is organized annually with purpose to establish or revised the bathing zones. The public is informed about the list of bathing zones, water quality and profile of waters used for bathing.

In the natural areas where the bathing is sporadically practiced and not meeting infrastructure and/or safety conditions, there are installed warning signs.

**Information and education measures:** public information and education by installing the information boards in the touristic areas; mass- media communication; NGO's involvement.

**Management measures:** establishing a monitoring calendar; monitoring of bathing waters.

Difficulties and challenges encountered. It was identified the need to training the staff from public health directorates and water management directorates for purposes of an optimal application of legal provisions and also to ensure an effective Inter sectoral collaboration.

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

In 2021 was identified and reported 50 bathing water zones of which 49 are at the Black Sea areas (costal water), and 1 is inland water. The annual bathing season was of 106 days, from 1st of June to 15th of September. Constanta Directorate of Public Health released a report on the assessment in terms of water quality for all bathing areas (50). The results of report indicate 100% rate of compliance with mandatory values.



The annual report on bathing water quality in Romania has been elaborated by Ministry of Health and is uploaded on the European Environment Agency (EEA). The 2019 report is available at: <https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/assessments/state-of-bathing-water>.

The interactive map showing the quality of bathing areas at European level, including Romania is available on the same location (EEA), at <https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/state-of-bathing-waters-in-2019>.

All nationwide identified bathing waters are monitored according to the GD no 546/2008 transposing Directive 2006/7/CE during a four-year period. The monitoring results of the microbiological parameters enabled the accomplishment of the first classification of the bathing waters, which represented the method of bathing water quality assessment.

The first bathing water classification, established on the end of 2015 bathing season, based on quality parameters set in 2012 -2015 period, revealed some excellent, good and satisfying bathing water quality, as well as one of poor quality.

The target for 2021 was set to have no bathing waters with poor quality and to enhance the number of those with excellent quality and in the light of scientific and technical knowledge to introduce more precise and adequate methods for microbiological analysis.

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

SDGs 6, 3 and others are broad and universal and relevant for a closely approach of our national water and health situation. The Protocol and its process of target setting offer a framework for such an in-depth analysis as prerequisite for establishing targets in fulfilling the Protocol objectives and related SDGs. Referring to the 2030 Agenda for Sustainable Development - goal 6. Ensure availability and sustainable management of water and sanitation for all - 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally, after transposing the Directive 2006/7/CE to the Romanian legislation, its implementation got to the stage of full endorsement in December 2015 that included the first classification of bathing water and this continued also for the period 2016-2018 at local and national level. The public health protection for users of bathing water was ensured by applying the implemented requirements of the Directive 2006/7/CE, and fulfilling the targets by: monitoring of bathing water quality; assessment and classification of bathing water quality; management of bathing water quality; informing the public on the results of the monitoring of bathing water quality and risk management measures in order to prevent health hazards, especially in the context of predictable short-term pollution or abnormal situations; revision of bathing water profiles.

Also, the Protocol target Recognized good practice to the management of enclosed waters available for bathing (article 6.2 (j)) covers the Goal 3: Good health and well-being, targets 3.3 End neglected tropical diseases and combat water-borne diseases and 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination of Sustainable Development Goals.

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

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

**Target:** Ensuring the requirements concerning the quality of waters used for the production or harvesting shellfish.

**Target date:** continuously

**Level of target:** nationwide.

**Background justification:** to comply with the EU legislation.

*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).*

**Legal/regulatory measures:** GD no. 201/2002 as amended for approval the technical norms for water quality addressing to shellfish transposes the provisions of Directive 2006/113/CE. These norms include recommendations for water marine quality depending on specific Romanian species.

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

According to the Art.6 of WFD, Romania elaborates each year the Protected Areas Register which contains also information about the water quality in the coastal zone designated for harvesting shellfish. In 2011, the marine water quality for harvesting shellfish respects the requirement of the GD 201/2002 as amended and Directive 2006/113/CE.

As regard the coastal zones for growth and harvesting shellfish and given to the specific conditions of the Romanian coastal zone (namely the existence of natural habitats ensuring the ecological requirements for shellfish) in 2019 have been delimited three zones with a total surface area of about 425 Mm<sup>2</sup>. The National Institute for Marine Research and Development "Grigore Antipa" Constanta monitors the water quality parameters of the Black Sea in these zones with the aim to ensure the normal growth and reproduction of shellfish, environmental protection and food reserves for shellfish.

In 2019, a draft interinstitutional agreement was launched to cooperate between the Ministry of Environment, Waters and Forests, the Ministry of Education and Research, the Ministry of Agriculture and Rural Development and the National Sanitary Veterinary and Food Safety Authority. The purpose of this agreement is to establish and classify microbiologically the production and relocation areas from which the live bivalve molluscs will be exploited for human consumption in the Romanian sector of the Black Sea.

Under this agreement there were set up areas for the collection of shellfish in 2020.

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

Please, see above XV - Quality of waters used for bathing (art. 6, para. 2 (j)) point 4

Compliance with the EU Directives related to water quality

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

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

**Target 1:** To develop and publish a guideline on good practices of swimming pools.

**Target 1 date:** April 2014 – achieved; See point 3 and 4

**Target 2:** monitoring of water quality; sanitary control of swimming pool;

**Target 2 date:** continuously

**Baselines conditions:** In Romania the rules for swimming pools are provided in Ministerial Order no. 119/2014 on the hygiene and public health practice and the recommendation of the population living environment.

Level of target: nationwide.

**Background justification:** Considering that the facilities for bathing and swimming (pool, spa) have grown significantly in recent years, it was necessary to develop a guide that includes the new scientific developments and WHO recommendations.

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).

**Legal/regulatory measures:** Ministerial Order no. 119/2014 on the hygiene and public health practice and the recommendation of the population living environment.

**Informational/educational including management measures:** Display of panels with "Access Restricted" at the entrance in swimming pools for individuals with communicable disease, wounds or dermatitis

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

The guideline was prepared and published electronically on National Institute of Public Health website.

The provisions regarding enclosed water of the ministerial order no.119/2014 were improved compared with the provisions of the previous 536/1997 order, based on the guideline on good practices of swimming pools.

Target and target 1 –achieved

National Institute of Public Health, in collaboration with other institutions will develop a project of regulation for function and security of swimming pools with target date 2018.

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

This target set under the Protocol respond not only for the SDG 6 (clean water and sanitation), but also have impact on SDG 3 (good health and well-being), SDG 4 (quality education), SDG 11 (sustainable cities and communities) and others, ensuring the quality of waters using for bathing.

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

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

**Target:** The methodology for establishing and remediation of the contaminated sites (see 2016 Report)

**Target date:** 31.12.2020 (see 2016 Report) - The target has been successfully been met: See point 3

**Level of target:** nationwide.

### **Background justification:**

As in many other European countries, industrialization in Romania has a long history, it has emerged as a result of significant pollution of land and groundwater. Contaminated sites have a significant impact on the environment and human health. Romania took the last two decades through a major transition in which many of the companies and industries active in the socialist period were closed or were restructured, coupled with decreased ability to National Strategy and National Plan for the Management of Contaminated Sites from Romania were developed to address the issues of contamination of soil and groundwater as a result of human activities past and recent conducted on industrial sites, and to eliminate or limit the (potential) risk human health and the environment address contaminated sites for reuse them.

The economic activities in Romania produced many typologies of geological medium contaminations: contamination with oil and petroleum products, hazardous chemical substances, organic substances, pesticides, radioactive substances, etc.

The recent or actual economic activities continue to produce accidental contaminations of the geological medium.

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).

**Legal/regulatory measures:** General legal provisions of the Government Emergency Ordinance no. 195/2005 on environmental protection approved with subsequent amendments by Law no. 265/2006 with further amendments include aspects related to the geologic medium and contaminated sites issues, the soil, subsoil and terrestrial ecosystems issues.

Legislative framework with direct, complete and complex references regarding the contamination issues includes 2 G.D. (no. 1408 /2007 on soil and subsoil assessment and investigation ways and no. 1403 /2007 concerning the restoration of areas where the soil, subsoil and terrestrial ecosystems were affected). Legislative framework with direct references to the groundwater contamination includes: GD no. 53/2009 for approving of the National Plan for the protection of the groundwater against pollution and deterioration;

Indirect references to the contamination issue are given by: MO no. 756/1997 for approving of regulations on environment pollution assessment; Government Emergency Ordinance no. 68/2007 on environmental liability regarding the prevention and restoration of environmental damage.

According with the G.D no 1408/2007, Romania started the preliminary achievement of the national inventory of the contaminated sites.

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

Romania pays attention to the reuse of the contaminated land, to the ecological safety requirements and environmental safety for the environment and population protection.

The field regarding the management of the contaminated sites in Romania is in an initial phase of development, its basis been started only after 2005.

In this sense, some action programmes at national and sectoral level are necessary in order to ensure the



achievement of the national and European requirements for the investigation and knowledge of contaminated sites, the risk assessment caused by these, the promoting of recovery solutions for the affected geological environment.

The main tool used for planning to achieve these goals is represented by the National Strategy for the contaminated sites management. The Strategy developed in 2009 presents clear objectives, ways for their achievement and the necessary resources for a short, medium and long term. At the same time, the measures to achieve and maintain a high level of ecological security and environmental safety for the estimated periods of time, are anticipated. This also shows the Romania's situation and needs, the activities and measures with a national impact which has been implemented.

Target: the finalization and approval of national inventory of the contaminated sites.

Target date: 31.12.2013

The list of potentially contaminated sites was drawn up on the basis of existing national inventory data from the National Environmental Protection Agency and after updating the inventory in November 2013, and based on data obtained from the local authorities have found a total of 1,183 potentially contaminated sites, counties with most such sites being Giurgiu (223), Argeş (111) si Maramureş (109). The number of contaminated sites recorded a total of 210, the most affected counties being Hunedoara and Caraş-Severin. Counties that are the least polluted areas are Iasi, Satu-Mare and Tulcea. Decision no. 683/2015 approve the National Strategy and National Plan for the Management of Contaminated Sites in Romania. Their application is considering reducing the problems caused by contamination of soil and groundwater, and the risks they cause to human health and the environment. In the short term, until the end of 2015, the aim of the strategy is to trace the contaminated sites management principles; medium term, by 2020, the strategy aims to solve the problem of contaminated sites that require urgent action and long term, by 2050, completing action. The cost estimates for risk assessment and remediation of 1,183 sites potentially contaminated amounted to 7.145 billion euros, and in the case of the 210 contaminated sites, a total of 1.264 billion euros, funds that will be provided by accessing EU structural funds through state funding, but also by external funding and investment from the private sector. National Strategy and National Plan for the Management of Contaminated Sites will fund projects remediation of contaminated sites strictly through the 2014-2020 Large Infrastructure Operational Programme without introducing changes in governmental spending.

**The target has been successfully been met.** On the ground of the above, a new target and target date have been proposed: the original target: The finalization and approval of national inventory of the contaminated sites; with

Target date: 31.12.2013.

**The proposed target: The methodology for establishing and remediation of the contaminated sites; with**

**Target data: 31.12.2020**

**The target has been successfully been met:**

<http://www.mmediu.ro/app/webroot/uploads/files/Metodologia%20de%20investigare%20a%20siturilor%20potentially%20contaminate%20si%20a%20celor%20contaminate.pdf>

**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 Protocol target Identification and remediation of particularly contaminated sites (article 6.2 (l)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being ; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination ;
- Goal 6: Water and sanitation for all ; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse ; 6.6 Protect and restore water-related ecosystems
- Goal 12: Sustainable consumption and production ; 12.4 Achieve environmentally sound management of chemicals and wastes, and reduce their release to water and soil in order to minimize their adverse impacts on human health and the environment
- Goal 15: Life on land ; 15.1 Ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems

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

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

**Target:** reaching the good water status till the end of implementation of requirements of Water Framework Directive.

**Target date:** 31.12.2027.

**Level of target:** nationwide.

**Background justification:** to comply with Water Framework Directive and Flood 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 efficiency of Romanian water management system consists of its integrated character.

All the measures related to the integrated water management are part of the river basin planning and are focused on: optimum water supply for all users and reducing harmful effects of water due to floods, droughts (climate change) and accidental pollution. Additionally the river basin planning will integrate the requirements of Flood Directive: preliminary evaluation of the flood risk, hazardous flood risk map, Flood Risk Management Plan.

A national catalogue of structural and non-structural flood protection measures has been issued, based on a collection of potential measures to be used by each river basin administration in accordance with their specific needs for flood protection.

The financial and economical mechanism for quantitative and qualitative water resources management includes the contributions, payments, bonification and penalties as part of the way of financing on economic principles of the water management measures according to GD 1202/2010 regarding the specific contributions for water resources management.

This mechanism ensures the cost recovery and is based on the beneficiary pays principle and the polluter pays principles. Depending on the use of water resources, bonification can be granted to users who demonstrate concern for the use and protection of water quality or penalties for users to determine which deviations limits exceed the limit from water management authorization

An important tool for improvement of water resources management effectiveness is the application of the economic mechanism.

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

The process is already started; measures related to all European legislation in the water management field have been defined and came into force.

The implementation of the program of measures included in the RBMP has been analyzed in order to review for the next WFD implementation phase. The Directive rely on a cyclical process whereby river basin management plans are prepared, implemented and reviewed every six years. The financial effort to comply with EU water legislation is considerable. The total consolidated figure stood at 21 billion Euros for the cost of compliance, with 13 billion Euros for the period 2016-2021, and 6 billion Euros for 2022-2027. Many of the supplementary measures under the 2nd RBMP 2016-2021 are so far not fully funded, and implementation is currently being delayed.

In order to comply with the requirements of the WFD, the work program and time table for develop the next river basin management plans (2022-2027) have been elaborated in 2018. The third cycle of RBMP implementation in 2022-2027 shall allow to fine-tune the efforts, with new programs of measures to be prepared for each updated river basin management plan. The updated RBMP 2022-2027 has been under public and stakeholder consultation in 2021. To achieve the quality objectives of the water bodies by 2027, additional measures are needed, and these are related to the construction of sewage systems and wastewater treatment plants in human agglomerations of less than 2,000 l. e. The financing needs will be complemented by the European Agricultural Fund for Rural Development and the National Local Development Program. The financial effort to comply with EU water legislation is estimated in the third RBMP at cca. 20 billion euro having in view the basic and supplementary measures for the period 2022-2027. Beside this, at national level the total cost for the implementation of the program of measures after 2027 is estimated at about 2.5 billion euro.

In 2016 the Flood Risk Management Plans were finalized and approved through Governmental Decision and currently, the second FRMPs are in the process of updated. The nonstructural measures included in FRMP were also included in the River Basin Management Plans: restoration measures of retention areas through: wetlands restoration or creation of new wetlands, restoration and reconnection of floodplains; natural water retention measures in urban/populated areas through canals and gutters/ditches, drainage systems, collecting and storage of rainwater in large tanks, for later uses; natural water retention measures by changing or adapting land use practices in agriculture by maintaining the areas covered by meadows and pastures, cultivation practices for soil conservation; natural water retention measures by changing or adapting land use practices of forest management in flood areas, etc.

<https://rowater.ro/consultarea-publicului/directiva-de-inundatii/brosuri-de-prezentare/>

**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 Protocol target Effectiveness of systems for the management, development, protection and use of water resources (article 6.2 (m)) covers the following Sustainable Development Goals and targets:

- Goal 3: Good health and well-being ; 3.3 End neglected tropical diseases and combat water-borne diseases; 3.9 Reduce deaths and illnesses from hazardous chemicals and water and soil pollution and contamination ;
- Goal 6: Water and sanitation for all ; 6.1 Achieve universal and equitable access to safe and affordable drinking water for all; 6.2 Achieve access to adequate and equitable sanitation and hygiene for all, end open defecation and pay special attention to the needs of women and girls and those in vulnerable situations; 6.3 Improve water quality by reducing pollution, halve the proportion of untreated wastewater and increase recycling and safe reuse; 6.4 Increase water-use efficiency and sustainable withdrawals and supply of freshwater to address water scarcity; 6.5 Implement IWRM, including through transboundary cooperation; 6.6 Protect and restore water-related ecosystems; 6.a. Expand international cooperation and capacity-building
- Goal 11: Sustainable cities and communities; 11.5 Reduce number of deaths and number of people affected and direct economic losses caused by water-related disasters
- Goal 14: Life below water; 14.1 - By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- Goal 15: Life on land; 15.1 Ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems
- Goal 17: Means of implementation and revitalize global partnership

Compliance with the EU Directives related to water quality

## **XX. Additional national or local specific targets**

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

**Target:** - Extension / modernization of water and wastewater infrastructure for agglomerations of more than 2000 p.e. in Timis County

**Target date:** 31.12 2023

**Baseline conditions:** ensuring equitable access of water and sanitation for the public

**Level of target:** local level

**Background justification:** To meet the requirements of the European Union's environmental acquis and to meet investment needs identified by Member States that exceed these requirements, Aquatim Timisoara, as a water regional operator in Timiș County, was considering increasing the level of urban wastewater collection and treatment as well as the degree of provision of drinking water supply to the population.

**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 this case, it is about investments in the water and wastewater infrastructure in Timis County, promoted through Large Infrastructure Operational Programme (LIOP), being a continuation of the investments previously made through SOP Environment 2007-2013. The zonal approach to water and waste water systems has been aimed at optimizing investment



and operating costs. The investments were proposed starting from the existing situation and in order to treat the deficiencies in the water and waste water systems.

**Legal/regulatory measures:**

According to the obligations assumed by the Accession Treaty, for implementation the obligations deriving from Directive no. 98/83 / EC on the quality of the intended water of human consumption and Directive no. 91/271 / EEC on the collection and treatment of water to be used, it is necessary to comply with certain parameters of drinking water and must be met obligations collection treatment of waste water in agglomerations of more than 2,000 p.e.

**Financial/economic measures:**

The expected funding scheme is 75.35% Cohesion fund, 11.52 % Buget state, 1,77% local authorities contribution, the contribution of local authorities, plus the 11.35% Aquatim bank loan.

**Informational/educational including management measures:**

Management measures take into account carry on Programme POS Environment 2007-2013 to develop water infrastructure and sanitation in Timis county. The zonal approach to water and waste water systems has been aimed at optimizing investment and operating costs. The investments take account of the existing situation and are aimed at treating deficiencies in water and waste water systems.

The final beneficiaries will be 106 localities within the 45 Territorial Administrative Units of Timiş County. For the water supply system 52.77% of the total value will be used, and for the waste water system 47.23%.

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

Since the year 2016, the application for funding and the feasibility study were submitted for analysis and endorsement to the Ministry of European Funds. Several financial constraints have been made during the analysis and endorsement.

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

Established this target taking into account about SDG 6 Access of water and sanitation for all and is in connection with: 1.4 Poor & vulnerable have equal rights to access to basic services; 6.1&6.2 Safe drinking water and sanitation for all; 10.3 Reduce inequalities of outcome; 11.1 Basic services for all.

## **XX-II- Additional national specific 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.

**Target:** revised and establishment of water quality and monitoring quality Regulation in bilateral relation with neighbor country (Ukraine)

**Target date:** 31.12 2022

**Baseline conditions:** The regulation to be revised takes into account the way of assessing the quality of the border waters between two neighboring states: Romania and Ukraine.

(Regulamentul care trebuie revizuit are în vedere modul de evaluare a calitatii apelor de frontieră între 2 state vecine: România și Ucraina).

**Level of target:** transboundary

**Background justification:** Since 2013, there have been national legislative changes by the Parties in the field of water management, which leads to the need to revise „The Romanian-Ukrainian Co-operation Regulation on the assessment of the quality of the border waters and the procedure to be followed in the case of accidental pollution that can not be avoided on the border water courses ”

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).

Regulation on how to assess the quality of the transboundary waters is based on the provisions of art. 6 and 7 from „Agreement between the Government of Romania and the Government of Ukraine on cooperation in the field of transboundary water management”, signed at Galati on 30 September 1997, as well as the Convention on the Protection and Sustainable Use of the Danube River, adopted on June 24, 1994, in Sofia and The Convention on the Use and Protection of Transboundary Watercourses and International Lakes adopted in Helsinki, 1992.

**Legal/regulatory measures:** The Regulations may be amended and supplemented by the decision of the Commissioners of the Parties, in transboundary waters field and the amendments and supplements to the Regulation shall enter into force on the date of receipt of the latest notification by which the Parties inform themselves about the fulfillment of the internal procedures necessary for the entry into force of the Commissioners Protocol.

**Financial/economic measures:** each Part support necessarily financial involvement

### Informational/educational including management measures:

Information regarding at put in application Regulation will appear in Commissioners Protocols that are published through Government Decision

3. Please assess the progress achieved from the baseline towards meeting the target as well as any challenges encountered. *Evaluati progresul realizat de la linia de baza spre atingerea obiectivului, precum si orice provocari intampinate.*

The progress achieved from the baseline towards meeting, is to arrange bilateral meeting between specialists in water quality from both country involved, and the chalanges encountered is the negotiation lock, taking into account different national norms or internal standards, or different capacity of laboratories.

**The target has been successfully been met:** Published in the Official Gazette nr. 524 bis/June 18 2020: <http://www.monitoruljuridic.ro/act/protocol-din-12-decembrie-2019-sesiunii-a-xi-a-a-mputernici-ilor-pentru-aplicarea-acordului-nbsp-ntre-guvernul-rom-niei-i-guvernul-ucrainei-privind-cooperarea-n-domeniul-gospod-ririi-apelor-de-frontier-227109.html>

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

Reflecting the entire water cycle, the targets within SDG 6 - clean water and sanitation are interlocked this target is about take care to keep clean water resources. But SDG 17 "Strengthen the means of implementation and revitalise the global partnership for sustainable development", Partnership for the goals, taking into account the bilateral cooperation in this case, or by monitoring the quality of the water, (what this revised regulation proposes), can lead to the achievement of SDG 3 "health and well-being".

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

**XX.\*is shared in 2 parts: XX-I- Additional local specific target and  
XX-II- Additional national specific target**

## Part three Common indicators<sup>2</sup>

### 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?

Year	Population coverage of the centralized water supply (% of total national population)
2009	60.21
2010	67.88
2014	64.84**
2017	67.53%***
2018	69.4%***
2019	70.9%***
2020	72.4%***

2. \* Source: Ministry of Health – National Drinking Water Quality Reports

\*\* Number of resident population suffered significant variations in recent years

\*\*\* According to National Institute of Statistics

<sup>2</sup> 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.

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

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

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

*The rationale of this question is to understand any possible differences between the national standards for microbiological and chemical water quality parameters and the respective WHO guideline values.<sup>3</sup>*

In this Report, the standards for compliance assessment signify the national standards. National standards for reported parameters did not deviate from the WHO Guideline values. Romania has set parametric values for drinking water quality in accordance with Drinking Water Directive 98/83/EC provisions (transposed in national legislation: Law no. 458/2002 regarding drinking water quality, republished – hereinafter DWQ Law).

## 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.

For the main indicators *E. coli* and Enterococci, the percentage of samples that fail to meet the national standard is decreasing in the last years, being under 0.2 % for the large water supply areas (WSA, mostly urban areas). However, in small WSA, the percentage is higher, around 3%.

Parameter	Area/category	Baseline value	Value reported in the previous reporting cycle			Current value
		2005	2010	2014	2017*	2019
<i>E. coli</i>	<b>Total</b>	5.75	1.35	1.20	<b>1.0391</b>	<b>1.095</b>
	large WSA				0.1595	0.177
	small WSA				2.99	2.906
Enterococci	<b>Total</b>	4.64	1.62	1.55	<b>1.1548</b>	<b>1.09</b>
	large WSA				0.1784	0.132
	small WSA				3.31	2.984
Coliform Bacteria	<b>Total</b>				<b>2.4277</b>	<b>2.478</b>
	large WSA				0.637	0.466
	small WSA				7.63	7.557
Clostridium perfringens	<b>Total</b>				<b>0.575</b>	<b>0.503</b>
	large WSA				0.293	0.244
	small WSA				4.4	3.379
Total numbers of colonies, 37 C	<b>Total</b>				<b>1.89</b>	<b>1.677</b>
	large WSA				0.8025	0.833
	small WSA				5.06	4.107

\*Data are provided in accordance with National Report of NIPH

<sup>3</sup> The latest edition of the WHO *Guidelines for Drinking-water Quality* is available at: [http://www.who.int/water\\_sanitation\\_health/publications/dwq-guidelines-4/en/](http://www.who.int/water_sanitation_health/publications/dwq-guidelines-4/en/).



### 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.

Parameter	Area/ category	Baseline value	Value reported in the previous reporting cycles			Current value
		2005	2010	2014**	2017***	2019
Arsenic	Total	0,44	3.03			2.874
	LWSZ*			0.77	1.00	0
	SWSZ			16.78	4.61	5.523
Fluoride	Total	0,68	0	0		0.331
	LWSZ				0.0729	0
	SWSZ				0 %	0.772
Lead	Total	2,89				0
	LWSZ		0	1.15	0	0
	SWSZ			12.32	0.36	0
Nitrate	Total	1.88	1.8			3.038
	LWSZ			0.6	0.49	0.346
	SWSZ			15.32	4.82	8.255
Additional parameters: . Ammonium..	Total	6.36	2.72			1.686
	LWSZ			1.53	0.733	0.689
	SWSZ			10.34	8.883	6.771
Aluminium	Total	7.01	1.01			0.288
	LWSZ			1.04	0.544	0.25
	SWSZ			0.87	1.05	1.005
Manganese	Total	6.58	7.54			5.229
	LWSZ			5.89	0.707	1.195
	SWSZ			22.98	12.67	14.343
Oxidability	Total	0.48	0.24			0.031
	LWSZ			0,003	0.0064	0.003
	SWSZ			1,69	0.792	0.222

Turbidity	Total	2.9	2.51			0.381
	LWSZ			1,22	0.366	0.144
	SWSZ			3,66	1.99	1.818
Iron	Total	7,57	8.48			3.253
	LWSZ			2,69	1.671	1.318
	SWSZ			1,27	8.881	9.504

\*LWSA = Large water supply areas ( above 1000 m3/day or 5000 inhabitants); SWSA = Small water supplies areas

\*\* Data are provided in accordance with National Report for European Commission under Drinking Water Directive.

\*\*\*Data are provided in accordance with National Report of NIPH

## II. Outbreaks and incidence of infectious diseases related to water

Disease	Incidence rate per 100,000 population (all exposure routes)			Number of outbreaks (confirmed water-borne outbreaks)			
	Baseline 2005	Value reported in the previous reporting cycles 2010, 2014, 2017		Baseline 2005	Value reported in the previous reporting cycle		Current value 2020
			Current value 2020		2014	2017	
Shigellosis	3.541	1.367 0.766 0.63	0.078			0	0
Enterohaemorrhagic <i>E. coli</i> infection	No data	0.009 0.009 0.04	0			0	0
Typhoid fever	0.009	0.014 0.009 0	0,005			0	0
Viral hepatitis A	38.32	16.34 32.39 12.75	5,275			0	0
Cholera	0	0	0			0	0

The incidence is calculated per 100000 inhabitants and there are for all exposure routes. None of the diseases was reported in 2020 as having water transmission.

### III. Access to drinking water

Percentage of population with access to drinking water (centralized)	Baseline value	Value reported in the previous reporting cycle	Value					Current value
	2005	2010	2011	2013*	2017	2018	2019	2020
<b>Total</b>	54.26	68.07	59.81	62.88	67,53**	69,4**	70,9**	69.92***
Urban			89.3	88.32	94.99	98,7	-	-
Rural			27.33	31.97	30.8	35,3	-	-

Above data is based on national estimates .

\*Source: RBMP 2015-2021 based on information provided by Operators on Sewage and water supply services. Comparison of values data, between 2011 and 2013 from table, was necessary for have a trend view

\*\*According to National Institute of Statistics.

\*\*\* according to the data reported by the county public health directorates, based on the estimates of the water operators

Romania's population registered a decline this process, influences the percentage.

☐ Estimates provided by the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation. JMP definitions are available at <http://www.wssinfo.org/definitions-methods/watsan-categories>.

X 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):*

X Improved drinking water sources (as per JMP definition)

X Supplies located on premises

☐ Supplies available when needed

X Supplies that provide drinking water free from faecal contamination

### IV. Access to sanitation

During on baseline collecting data, are possible different difficulties on collecting data process, in main to keep same source of collecting data. The keeping same source is important for accurate comparisons in trend analysis.

Percentage of population with access to sanitation	Baseline value (2005)	Value reported in the previous reporting cycle (2013)	Value (year) (2017)	Current value (2020)
	% p.e*			
<b>Total</b>	48,02	59.95	63.70	66.15**
Urban	71,78	83.95	84.52	86.65
Rural	8.25	12.46	17.13	20.22

\* The figures are related to access of population to the centralized public sanitation services according to the provisions of Urban Waste Treatment Directive 91/271/EEC, (for the urban area represents agglomerations with more than 2000 p.e. - implementation status of UWWT Directive;



\*\* Despite the fact the investments in water and wastewater infrastructure has continued with increasing wastewater collection and treatment population connection rate, the main reason for the slight increase in collection and treatment levels in 2020 is the dynamics of changes in number and size of agglomerations, in terms of population equivalents, especially for those agglomerations at the limit of 2,000 p.e. Within a EU project started in 2019, a new methodology will be developed for delineation of agglomeration boundaries and calculation of their pollution load, options for IAS and an adequate process to ensure that they provide the required "same level of environmental protection".

Source: Yearly reports elaborated by National Administration "Romanian Waters", 2020, competent authority for UWWTD Reporting to EU.

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

### 1. Water quality

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

##### (i) Ecological status of surface water bodies

Percentage of surface water classified as:	Baseline value 2005**		Value reported in the second RBMP reporting cycle 2013***		Value Year 2017****		Value reported in the current RBMP reporting cycle 2020***	
	Rivers – km (%)	Reservoirs and Natural lakes (%)	Natural Water Bodies (%)	HMWBs* and AWBs (%)	Natural Water Bodies (%)	HMWBs* and AWBs (%)	Natural Water Bodies (%)	HMWBs* and AWBs (%)
High status	29	16.07- ultraoligotrophic	0.04	44.71				
Good status	37	23.2 -oligotrophic	70.49		55.54	42.85	69.10	51.14
Moderate status	23	0.9 – oligo-mesotrophic	28.91	54.94	38.45	58.04	26.95	48.51
Poor status	7	20.54- mesotrophic	0.08		3.82		3.46	
Bad status	4	21.4 – eutrophic 1.79 – eutrophic-hipertrophic 16.1 – hipertrophic	0.29	0.18	2.07	0.34	0.49	0.35
Total number/ water bodies		-	2465			628	747	315
Total number/ water bodies in		-	2470			2470	2456	569

\*) For HMWBs (heavily modified water bodies) and AWBs (artificial waterbodies), the figures represent the percentage of the number of water bodies with ecological potential (good and above; moderate).

\*\*\*) The biological assessment of water status in 2005 was based on methods not fully in compliance with WFD requirements; for rivers – the figures express the biological quality (km-%) based on the saprobic index; for reservoirs and natural lakes – the figures express the percentage of the number of reservoirs and natural lakes classified based on the phytoplankton biomass (out of the trophic degree).

Source: Synthesis of water quality in Romania in 2005, National Administration "Romanian Waters"

\*\*\* Source: RBMP 2015-2021 (The ecological assessment of water bodies' status in 2013 was based on methods in compliance with WFD requirements) and RBMP 2022-2027 (The ecological assessment of water bodies' status in 2020 was based on methods in compliance with WFD requirements).

\*\*\*\*Assessment of water bodies' status refers to the monitored water bodies in 2017 (source: Synthesis of water quality in Romania 2017, NAAR).

<i>Percentage of surface water classified as</i>	<i>Baseline value (specify the year) 2005*</i>	<i>Value reported in the second RBMP reporting cycle 2013**</i>	<i>Value year 2017***</i>	<i>Value reported in the current RBMP reporting cycle 2020**</i>
Good status	43.1	97.72	94.82	97.65
Poor status	56.9	2.28	5.18	2.35
<b>Total number/ water bodies</b>	-	3027	444	627
<b>Total number/ water bodies in the country</b>	-	3027	3027	3026

\*) In 2005, the chemical status of surface water were not evaluated, according with the requirements of WFD; the figures represent the percentage of the number of monitored control section within the chemical quality belongs to good status (classes I and II of national classification system) and poor status (classes III, IV and V of national classification system).

Source: Synthesis of water quality in Romania in 2005, National Administration "Romanian Waters".

\*\*)Source RBMP 2015-2021 - The chemical status assessment was based on methods in compliance with WFD requirements according to the River Basin Management Plans, considering all designated water bodies; RBMP 2022-2027 - The chemical status assessment was based on methods in compliance with WFD requirements according to the River Basin Management Plans, considering all designated water bodies.

\*\*\*Source: Synthesis of water quality in Romania in 2017 (refers only to monitored water bodies).

<i>Percentage of groundwaters classified as</i>	<i>Baseline value (specify the year) 2005*</i>	<i>Value reported in the econd RBMP reporting cycle 2013**</i>	<i>Value (year) 2017***</i>	<i>Value reported in the second RBMP reporting cycle 2020**</i>
Good quantitative status		100	100	100
Good chemical status	60.66	89.51	80.14	91.61
Poor quantitative status		0	0	0
Poor chemical status	39.34	10.49	19.85	8.39
<b>Total number/ groundwater bodies classified</b>		143	141	141
<b>Total number/ groundwater bodies in the country</b>		143	143	143

\*) In 2005, the chemical status of ground waters was based on methods not fully in compliance with WFD requirements; the figures represent the percentage of the number of monitoring drills which exceed the quality national standard limits (poor status): nitrates, phosphates, organic substances, ammonium, heavily metals, bacteriological indicators, chlorides, sulphates, phenols, etc. Source: Synthesis of water quality in Romania in 2005, National Administration "Romanian Waters".

\*\* Source: According to the River Basin Management Plan 2015-2021, all groundwater bodies are in good quantitative status

(100%) (refers to all designated water bodies); RBMP 2022-2027 - The quantitative/chemical status assessment of groundwater bodies was based on methods in compliance with WFD requirements according to the River Basin Management Plans, considering all designated groundwater bodies.

\*\*\* Source: Synthesis of water quality in Romania in 2017 (refers only to monitored water bodies) – National Administration "Apele Romane".

	<i>Baseline value 2005*</i>	<i>Value reported in the previous reporting cycle 2013*</i>	<i>Value 2017*</i>	<i>Value 2018**</i>	<i>Value 2019**</i>	<i>Curent value 2020**</i>
Total abstracted freshwater (mill.cm)	5301	6590	6857	6729	6987	7389
Total water resources (mill.cm)	40398	38347	38347	38346	38346	40930

Abstracted freshwater weight in total	13.13	17.19	17.88	17.55	18.22	19.27
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\* Source: Synthesis of water quality in Romania in 2005, 2013, 2017,

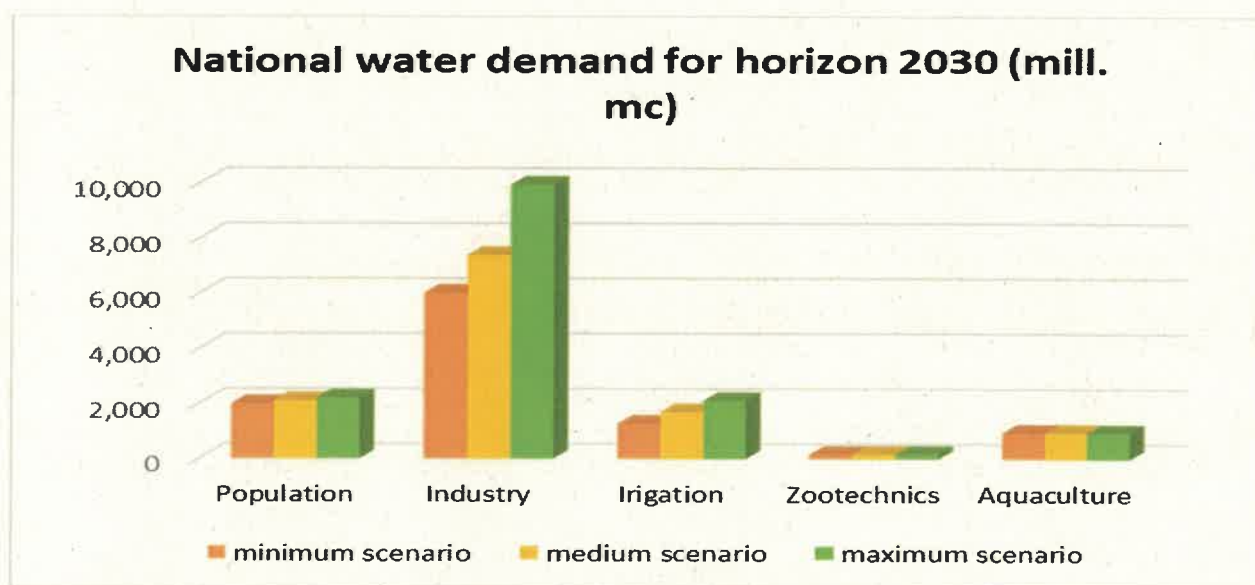
\*\* Source: Water Balance 2018-2020, National Administration Romanian Waters.

Year	Water abstraction			
	Population	Industry	Agriculture*	Energy**
	mii mc	mii mc	mii mc	mii mc
2016	596.221,12	3.254.389,04	1,203,110.4	346,948,119
2017	595.253,60	3.324.625,97	1,444,293	281,671,003
2018	617.867,09	3.744.508,53	1,348,217	344,228,583

\* Agriculture – (agrozootechnics + irrigations + aquaculture)

\*\* (hydropower, thermal energy, nuclear power)Source: Water Balance, National Administration Romanian Waters

To assess the requirements of water uses in Romania for the time horizon 2030, the methodology for forecasting the water requirements of uses developed within the National Institute of Hydrology and Water Management was applied. The purpose of the methodology is to estimate the quantities of water that will be needed in the coming years in order to evaluate the water policy development options regarding the planning processes necessary to ensure the water requirements for uses



Source: National Administration Romanian Waters, RBMP updated 2022-2027

## 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 X

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

The Minister of Health published the Methodology on the System of surveillance, warning, intervention and reporting of water related diseases that will contribute to the achievement of the health objectives of the Water and Health Protocol and the main objective of Directive 98/83 EC on the quality of water intended for human consumption (in Romania, Water Law no. 458/2002 republished), protection of human health against the adverse effects of water contamination. [http://www.ms.ro/wp-content/uploads/2018/11/Sisteme-alertaraspuns-Art.-8-rotocol\\_ApaSanatatea.pdf](http://www.ms.ro/wp-content/uploads/2018/11/Sisteme-alertaraspuns-Art.-8-rotocol_ApaSanatatea.pdf)

The key elements of the water-related disease surveillance and outbreak response systems are:

- Competence of working team
- Identification of alert situations and thresholds
- Surveillance systems for drinking water and for water-related communicable diseases
- Intervention and response (health authorities, water operators)
- Notification, communication, data management and reporting

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

The national strategy for the risk management of flooding has an social objective related to prevent the occurrence of epidemics or minimize deterioration of the population health as a result of the impact of the floods and associated pollution.

[http://www.mmediu.ro/app/webroot/uploads/files/2012-01-10\\_risc\\_inundatii\\_hg846din2010aprobaresnmri.pdf](http://www.mmediu.ro/app/webroot/uploads/files/2012-01-10_risc_inundatii_hg846din2010aprobaresnmri.pdf)


The preventive measures established by the Ministry of Health include a guide for education and behavior of the population of flood risk areas (first-aid maneuvers) for the accomplishment of a minimal reserve of materials, personal effects, food and drinking water for subsistence in such situations, behavior and skills for keeping and maintaining appropriate individual and community hygiene; establishment of first-aid points, where people have been hurt can address for preventive and curative medical care. During the flood event, the management of emergency situations caused by floods include antiepidemic measures, drinking water quality control, providing psychological assistance to traumatized persons such as due to the flood phenomenon. Measures following the passage of the phenomenon are water quality monitoring, with analysis and specialized consultancy on the disinfection of fountains and other water sources, providing medical assistance and psychological assistance for the people affected by floods, assessing the health status of affected communities and adopting rehabilitation and restoration measures.

## Part five

### Progress achieved in implementing other articles of the Protocol

Art. 9. Public awareness, education, training, research and development and information

Art. 10. Public information

	On January 7, 2019, the Ministry of Waters and Forests launched the national information campaign "We protect water!", part of the project "Integrated Control of Nutrition Pollution" implemented by MWF and financed by a loan from the International Bank for Reconstruction and Development.
The campaign "We protect water!" is mainly addressed to small farmers who, either through lack of information or lack of resources, do not meet the minimum requirements for water protection against nutrient pollution. The major cause	

of this type of pollution is the inappropriate management of manure, most of the time stored directly on the ground, and its leakage directly into the groundwater and, hence, into the wells of people from rural areas.

<http://apepaduri.gov.ro/apar-apa-campanie-nationala-de-informare-pentru-prevenirea-poluarii-apeilor-cu-nitrati-proveniti-din-surse-agricole/>;  
[www.apanoastra.ro](http://www.apanoastra.ro).

On the occasion of World Water Day – 22 March and of Danube Day – 29 June, and in the frame of projects, Ministry of Waters and Forests, National Administration Apele Române and its 11 River Basin Administrations and the River Basin Committees organised activities/actions on information–education–awareness on water resources protection: press conferences, meetings/briefings, exhibitions, visits to RBA water laboratories, etc.,

Regional operators, Water Companies, Professional Associations and NGO's initiated and organised information and awareness campaigns and carried out various actions aimed to draw attention to water resources protection and use, environment protection, safe drinking water and personal hygiene, water supply and sanitation. These activities took place on the occasion of World Water Day, World Toilet Day, Danube Day, etc., and within projects (<https://aquastiri.ro/2018/11/19/campanie-aquademica-in-mediul-rural-despre-igiena-si-siguranta-apei-de-ziua-mondiala-a-toaletei/>; <http://aquademica.ro/convocator-aquademica-clubul-epurarii-se-reuneste-in-aprilie/>; <http://www.monitorulcj.ro/economie/63612-protejati-reteaua-de-canalizare-si-mediul-inconjurator!-canalizarea-nu-este-cosul-de-gunoi-al-orasului!-campanie-de-informare-si-constientizare-initiata-de-compania-de-apa-aries-p-#sthash.PtvvzqK.dpbs>; <https://www.apanovabucuresti.ro/en/children-s-page/>; <https://www.aquatim.ro/pori-deschise-la-aquatim-de-ziua-mondiala-a-apei-2628.html>)

Specific information and documents related to water resources (legislation, programmes and reports, EU Directives, projects, etc.) are available on the website of National Administration "Apele Române" to the public with the aim to inform or consult the public. <http://www.rowater.ro>

At the request information related to waters are provided to public according to the Law no. 544/2001 as amended regarding free access to information of public interest. In addition the public has access to information of public interest on water management (as an obligation in the process of transposition of the Water Framework Directive) owned by the Ministry of Waters and Forests, National Administration "Apele Române" and River Basin Committees according to the Ministerial Order no.1012/2005 on the approval approving the Procedure on the Mechanism for Access to Public Interest Information on Water Management.

Information related to drinking water quality are provided by regional operators on their websites in order to inform public.

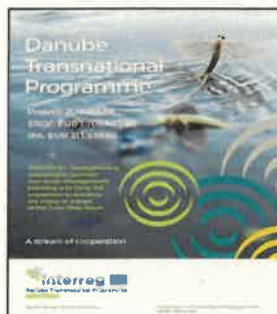
Art. 11. International cooperation

Art. 12 Joint and coordinated actions

Art. 13 Cooperation in relation to transboundary waters

The process of negotiation of a new agreement on transboundary waters with Republic of Serbia (during 2010 – 2018 7 rounds of negotiation took place) was finalised and both Parties took steps for signing the agreement.

Art. 14 International support for national action



Strengthening cooperation between river basin management planning and flood risk prevention to enhance the status of waters of the Tisza River Basin – JOINTISZA Project

The main aim of the project financed in the frame of the INTERREG Danube Transnational Programme is to further improve the integration of water management and flood risk prevention planning and actions for the next RBM planning cycle, in line with the relevant EU legislation.

01.01.2017 – 30.06.2019, project


The project involves the joint efforts of the five countries that share the Tisza River Basin — Hungary, Romania, Serbia, Slovakia and Ukraine (01.01.2017 – 30.06.2019)

<http://www.interreg-danube.eu/approved-projects/jointisza>

 <p>Managementul Sedimentelor din Dunăre Restaurarea echilibrului sedimentar în Rulul Dunăre</p> <p>interreg</p>	<p><b>Danube Sediment Project - Restoration of the Sediment Balance in the Danube River,</b></p> <p>project financed in the frame of the INTERREG Danube Transnational Programme</p> <p>14 partners from 9 countries along the Danube River will address these challenges by developing transnational measures for sustainable sediment management in the DanubeSediment project. Austria, Bulgaria, Croatia, Germany, Hungary, Romania, Serbia, Slovakia, Slovenia (01/01/2017 - 30/06/2019)</p> <p><a href="http://www.interreg-danube.eu/approved-projects/danubesediment">http://www.interreg-danube.eu/approved-projects/danubesediment</a></p>
 <p>Integrated Nutrient Pollution Control Project</p>	<p>The Overall Development Objective of the project is to support the Government of Romania towards meeting the EU Nitrate Directive requirements by (a) reducing nutrient discharges to water bodies, (b) promoting behavioral change at the commune level, and (c) strengthening institutional and regulatory capacity." The Global Environment Objective (GEO) is "to reduce over the long-term, the discharge of nutrients (nitrogen and phosphorus) into water bodies leading to the Danube River and Black Sea through integrated land and water management." The Project has four components: (i) commune-based investments in Nitrate Vulnerable Zones (NVZ), (ii) support for institutional strengthening and capacity building, (iii) public awareness and replication strategy, and (iv) project management. The proposed interventions are built on the successes and lessons learnt from the previous pilot project as well as on similar projects in ECA and other regions.</p> <p>Integrated Nutrient Pollution Control Project - <a href="http://www.inpcp.ro/en/home/">http://www.inpcp.ro/en/home/</a> and <a href="http://www.apanoastra.ro">www.apanoastra.ro</a></p>
 <p>interreg</p> <p>Danube Transnational Programme</p> <p>Danube Floodplain</p>	<p><b>DanubeFloodplain Project - Reducing the flood risk through floodplain restoration along the Danube River and tributaries</b></p> <p>Project financed in the frame of the INTERREG Danube Transnational Programme</p> <p>Main objective: Strengthen transnational water management and flood risk prevention</p> <p>1.06.2018 -30.11.2020</p> <p><a href="http://www.interreg-danube.eu/approved-projects/danube-floodplain">http://www.interreg-danube.eu/approved-projects/danube-floodplain</a></p>
 <p>interreg</p> <p>Danube Transnational Programme</p> <p>Tackling hazardous substances pollution in the Danube River Basin by Measuring, Modelling-based Management and Capacity building</p>	<p><b>Danube Hazard m3c Project - Tackling hazardous substances pollution in the Danube River Basin by Measuring, Modelling-based Management and Capacity building</b></p> <p>Project financed in the frame of the INTERREG Danube Transnational Programme</p> <p>11 partners from 9 countries along the Danube River will address these challenges by developing transnational measures for sustainable sediment management in the DanubeSediment project: Austria, Bulgaria, Croatia, Hungary, Romania, Moldova, Slovakia, Slovenia, Montenegro</p> <p>The project aims to achieve a durable and effective transnational control and reduction of HS water pollution.</p> <p>1.07.2020 – 31.12.2022</p> <p><a href="http://www.interreg-danube.eu">http://www.interreg-danube.eu</a></p>

In the frame of bilateral agreements on cooperation on protection and use of transboundary waters with Hungary, Bulgaria, Ukraine and Serbia, as well as on the specific Regulations, experts meetings took place on water quality monitoring and assesment activities, including inter-laboratory comparability.



Romania – General information	
	Location: S-E Europe
	Surface: 238,391 skm
	The resident population*: 19.023millions inhabitants (as 1 December 2021)*)
	11 River Basins Administrations
	– rivers – 78,905 km
	– lakes – 129
	– transitional waters – 781.37 skm
	– costal – 571.8 skm
	Administrative division: 41 counties and Bucharest municipality
	Land use: 61.7% agricultural land, 28.2 % forests, 3.6 % waters and ponds
	<b>97.4 % in the Danube River Basin</b>

The benefits from the pilot project consist in the enhancement in the quality of the information and harmonization with the INSPIRE Directive, reducing the administrative burden levels closer to the citizen, the improvement of the exchange and computerization of data.

## 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.

<i>Institutional setting</i>	<i>Previous value 2017 *</i>	<i>Current value 2020 / 21 *</i>
<i>Schools</i>		
Sanitation service (connected to centralized sewage systems)	44.97 %	63.07 %
Drinking-water service (connected to centralized drinking water systems or own monitored and sanitary approved wells)	71.79 %	88.22 %
Basic hygiene service (equipped with separate toilets, including sinks and soap for proper hygiene)	71.56 %	85.87 %
<i>Health-care facilities</i>		
Sanitation service (connected to centralized sewage systems)	96.58 %	96.49 %
Drinking-water service (connected to centralized drinking water systems or own monitored and sanitary approved wells)	99.22 %	98.40 %
Basic hygiene service (equipped with separate toilets, including sinks and soap for proper hygiene)	100 %	100%

\*Report of local Public health authorities (partial data)

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):

X To improve WASH in schools

X To improve WASH in health-care facilities

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

Strategy on Modernizing Educational Infrastructure 2017-2023  
([https://www.edu.ro/sites/default/files/Strategie%20SMIE\\_2017docx\\_0.pdf](https://www.edu.ro/sites/default/files/Strategie%20SMIE_2017docx_0.pdf)) has an strategic objective to improve the quality of safe and functioning learning environments by reducing the average value of an inadequate utility indicator. The suitability of school utilities include heating and ventilation systems, sewerage, waste collection and sanitation. The education infrastructure must to provide a safe and secure learning environment for students and it is necessary to reduce the inequalities between

Hand hygiene and environmental cleaning were key measures to limit exposure to infection in health care facilities and school settings. Essential actions for their implementation included integrating key health and hygiene messages, including on the prevention of COVID-19, providing hand hygiene stations with sufficient soap and clean water or alcohol-based rub at entrances / exits , toilet areas and canteens; increase the frequency of cleaning, ensure sufficient staffing and updated protocols/checklists for regular cleaning of the environment, including toilets, and for cleaning and disinfecting frequently touched surfaces.

Ministry of health in collaboration with Ministry of education published in the Official Gazette no. 942 of Oct. 2021 The Order for the approval of the measures for organizing the activity within the educational units / institutions in conditions of epidemiological safety for the prevention of SARS-CoV-2 virus diseases.

Ministry of health in collaboration with Ministry of youth and sports published in the Official Gazette no. 505 of June 2020 The Regulation on the conditions necessary for the resumption of swimming activities in indoor and outdoor pools in Romania in the COVID 19 situation.

2. Safe management of drinking-water supply

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

YES ☐ NO ☐ IN PROGRESS ☒

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

YES ☐ NO ☐ IN PROGRESS ☒

The introduction of water safety plans is a risk-based approach which is strongly supported by the World Health Organization both towards the European Commission and other United Nations structures and instruments such as 2030 Agenda for Sustainable Development, Protocol on Water and Health, and others). So, the Romanian Government agreed with this approach and in September 2017, an Order (22/30 August 2017) regarding the amendment of the Quality of drinking water Law (458/2002) transposed in our national legislation the European Directive 1787 /2015 which requires the elaboration of the water safety plan, and according to it, the drawing of the list of the drinking parameters to be monitored.

A General Framework for Water Safety Plans must be approved and also the responsibilities of competent authorities and water operators must be established by a common order of the Ministry of Health, the Ministry of Waters and Forests and the Ministry of Regional Development, Public Administration and European Funds (work in progress - the deadline was December, 2018)

Water safety plans will become mandatory, for drinking water supply systems providing an average water quantity of more than 1,000 cubic meters / day or serving more than 5,000 people.

Ministry of Health elaborated the normative act for WSPs, in collaboration with the Ministry of Environment and in consultation with ARA, water operators, etc., which is in the process of legislative approval.

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

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

Percentage of population	Current value (specify year)
<b>Total</b>	-

In Romania there are 3067 centralized drinking water systems (large WSZ and small WSZ). Of these, around than 15% have implemented a voluntary risk based approach.

### 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):

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

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

Regionalization process created high-performing water companies able to ensure both EU-funded projects and the operation of facilities in neighboring agglomerations at a supportability level accessible to the population based on the principle of solidarity.

## Part seven

### Information on the person submitting the report

The following report is submitted on behalf of **ROMANIA**, in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: **Gheorghe CONSTANTIN, Director, Water Resources Management Directorate**

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