

Template for summary reports in accordance with article 7 of the Protocol on Water and Health adopted by the Meeting of the Parties at its second session (Bucharest, 23-25 November 2010)

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

The targets and target dates have been established; the public consultation process is in progress (they will be posted on the websites of the Ministry of Environment and Climate Changes and of the National Administration "Apele Romane". They will be approved by the end of May.

2. Were they published and, if so, how?

After approval, the targets and the target dates will be published on the websites of the Ministry of Environment and Climate Changes, and of the National Administration "Apele Romane".

3. Has your country established national or local arrangements for coordination between competent authorities for setting targets? If so please describe, including information on which public authority(ies) took the leadership and coordinating role, which public authorities were involved and how coordination was ensured.

The responsibility for implementing the Protocol on Water and Health is shared between the Ministry of Environment and Climate Changes, as main coordinating body, and Ministry of Health. The process of setting targets according to the Protocol has started in 2009. In 2010 Romania participated to the first reporting cycle. Within this first reporting exercise the setting targets process had not been finalized, but those targets and target dates related to the EU Directives requirements have been taken into consideration.

With the aim to finalize the target setting process, under the leadership of the Ministry of Environment and Climate Changes a group of experts from the Ministry of Environment and Climate Changes, Ministry of Health, National Administration "Apele Romane" and National Institute of Public Health has been established. Also the Romanian Water Association was invited to be involved in this process.

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

During the target setting process have been taken into account:

- national legislation related to: water resources, drinking water, wastewaters, environment, public health, Municipal Public Services; Implementation Plans for EU Directives; National Sustainable Development Strategy Romania 2013-2020-2030; Sectoral Operational Programme Environment (SOP ENV), Priority Axis 1 "Extension and modernization of water and wastewater systems"; National River Basin Plan, including the Programmes of Measures, 2009 – 2015, according to the EU WFD.
- EU Directives related to water quality, EU WFD, Convention on the cooperation regarding the protection and sustainable use of Danube River, Sofia 1994 (as regard development of 2009 Danube River Basin Management Plan for the implementation of the EU WFD requirements).

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

The cost benefit analysis of the targets has not been performed but in case of some targets related to the EU Directives requirements, the costs are those mentioned within the Implementation Plans and/or developed within different projects financed by SOP ENV.

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

See point 1.

For those targets which are correlated with the water resources management, public consultations on River Basin Management Plans according to the EU WFD, including the Programme of measures, took place at national and local level under the coordination of the Ministry of Environment and Climate Changes and National Administration "Apele Romane". Also, the River Basin Committees have been involved in the stakeholder consultation process.

River Basin Committee (RBC) is a consultative body for the water management issues. There are 11 RBCs established at the level of each river basin. The RBCs are composed by representatives of the Ministry of Environment and Climate Changes, Ministry of Health through the Public Health Directorates and National Administration „Apele Romane”, prefectures, county council, water users, NGO's, etc.

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

The present report has been prepared by the Ministry of Environment and Climate Changes, Ministry of health, National Administration "Apele Romane", National Institute for Public Health and Romanian Water Association.

Ministry of Environment and Climate Changes promotes a unitary, coherent environmental policy, setting for itself some major targets to achieve, inter alia, integration of the environment requirements in the sectorial strategies; complying with the *acquis communautaire* for water and environment: supplying drinking water in all the localities, wastewaters treatment, and the ecological rehabilitation of the historically polluted areas or coastal erosion, etc; monitoring and diminishing the climate change risks; risk management and prevention of the flood-associated disasters; implementing the "polluter pays" principle; financing the projects related to environment, inclusively through the Environment Fund; raising the public awareness and strengthening the cooperation with the environmental nongovernmental associations.

Ministry of Health is responsible for approval of legal measures for the quality of drinking waters, for inspection of water supply systems and water treatment, for surveillance and monitoring of drinking water. Its responsibilities include: authorization and inspection of drinking water suppliers, including those from the food industry, assessment of the risk on human health, and restriction of the consumption. Public health authorities are responsible for adequate information of the public, including the measures for public health protection in case of non-compliance.

National Administration "Apele Romane", (under coordination of Ministry of Environment and Climate Changes) is responsible for the monitoring of the quality of surface water intended for the abstraction of drinking water and together with Environmental Agencies, National Environmental Guard, for control of the compliance with the legislation in force.

National Institute for Public Health - responsible for collecting drinking water quality and bathing water quality data, annual reporting for these issues, develops national programmes on water quality and relationship with health.

Romanian Water Association is an autonomous and professional, non-governmental and non profit association; it represents the main professional network in the water supply and sanitation field, by supporting the applied research and the information and good practices exchange, in order to assure the sustainable water management in Romania.

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

There are some constraints related to financial aspects (related especially the EU funds accessing) regarding the development of the infrastructure for drinking water and wastewater and sanitation. Therefore, taking into consideration the global economical and financial context, this report does not include detailed information on financial resources which are necessary for targets achievement.

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

The issue regarding the impact of the climate change on human health will be taken into account according with the Romanian Guide on the Adaptation to the Climate Change Effects.

Part Two

Common indicators¹

I. Quality of the drinking water supplied

A. Context of the data

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

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

Year	Population coverage of the centralized water supply (% of total national population)
2009	60.21
2010	67.88

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

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

This Report contains data about microbiological and chemical quality of drinking water that supply both the urban and rural populations.

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

Samples are taken both from the treatment plant outlet and distribution network, respectively from the consumer tap.

4. In the reports, the standards for compliance assessment signify the national standards. If national standards for reported parameters deviate from the WHO guideline values, provide information on the values (standards) used for calculation.²

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).

B. Bacteriological quality

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

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

² In order to ensure consistency and quality of the data resulting from sampling programmes, countries may wish to consider ensuring compliance with appropriate international standards for sampling programmes. Examples of such international standards are the ISO 5667 family of standards, in particular:

- 5667-1:2006 Guidance on the design of sampling programmes and sampling techniques;
- 5667-3:2003 Guidance on the preservation and handling of water samples;
- 5667-5:2006 Guidance on sampling of drinking water from treatment works and piped distribution systems;
- 5667-11:2009 Guidance on sampling of groundwaters.

<i>WatSan_S2</i>	<i>Baseline value (please specify the year)</i>	<i>Current value (please specify the year)</i>	
(no/100 ml)	2005	2007	2010
E. coli	5.75	3.09	1.35
Enterococci	4.64	2.88	1.62

C. Chemical quality

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

- Fluoride;
- Nitrate and nitrite;³
- Arsenic;
- Lead;
- Iron.

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

<i>Substance</i>	<i>Baseline value</i>	<i>Current value (please specify the year)</i>	
	2005	2007	2010
Fluoride	0,68	N/A	0
Nitrate and nitrite	1.88	<u>3,93</u> only nitrate	1.08
Arsenic	0,44	2,82	3.03
Lead	2,89	1,18	0*
Iron	7,57	5,99	8.48
Additional physico-chemical ³ parameter	6.36	6.03	2.72
1. Ammonium			
2 Aluminium	7.01	6.78	1.01
3 Manganese	6.58	0 *	7.54
4 Oxidisability	0.48	0*	0.24
5 Turbidity	2.9	0 *	2.51

* Only for water supply zone that supply above 1000 m³/day or 5000 inhabitants.

³ As defined in the WHO Guidelines for drinking-water quality.

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

In filling out the following table, please specify if the numbers reported are related to all exposure routes or only related to water (in which there is epidemiological or microbiological evidence for water to have facilitated infection).⁴

	<i>Incidence</i>			<i>Number of outbreaks</i>	
	<i>Baseline (specify the year)</i>	<i>Current value (specify the year)</i>		<i>Baseline (specify the year)</i>	<i>Current value (specify the year)</i>
	2005	2009	2010		
Cholera	0			*)	
Bacillary dysentery (shigellosis)	3.541	1.925	1.367		
EHEC ^a	No data for A04.3	0	0.009		
Viral hepatitis A	38.32	17.87	16.34		
Typhoid fever	0.009	0	0.014		

^a Enterohaemorrhagic E. coli.

The incidence is calculated per 100000 inhabitants and there are for all exposure routes.

*) There were no outbreaks recorded.

III. Access to drinking water

<i>Percentage of population with access to drinking water</i>	<i>Baseline value (specify the year) 2008*</i>	<i>Current value (specify the year) 2010</i>
Total	54.26	68.07
Urban		
Rural		

Please specify how access to drinking water is defined and calculated in your country.

The WHO/UNICEF⁵ Joint Monitoring Programme (JMP) for Water Supply and Sanitation defines access to water supply in terms of the types of technology and levels of service afforded. Access to water-supply services is defined as the availability of at least 20 litres per person per day from an “improved” source within 1 kilometre of the user’s dwelling. An “improved” source is one that is likely to provide “safe” water, such as a household connection, a borehole, a public standpipe or a protected dug well.

If your definition of access to drinking water from which the above percentages are calculated differs from that provided by the JMP, please provide the definition and describe your means of calculation.

⁴ If possible, please distinguish between autochthonous and imported cases

⁵ United Nations Children’s Fund.

IV. Access to sanitation

Percentage of population with access to sanitation	Baseline value (2005)		Current value (2008)		Current value (2011)	
	Population*)	% p.e**)	Population*)	% p.e**)	Population***)	% p.e**)
Total	52	48,02	57,4	49.46	51.44	56.96
Urban	90	71,78	98.73	74.10		82.93
Rural	10	8.25	13.73	8.26		11.25

Please specify how access to sanitation is defined and calculated in your country.

* The figures are related to access of population to the sanitation centralized public services, including small decentralized sewerage systems, septic tanks and safe excreta disposal.

Source: the Romanian Water Association: Strategy for sustainable development of public drinking water and sewage services "Romania 2025"

** 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 10 000 p.e and for rural area agglomeration with 2,000 – 10,000 p.e);

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

*** Source: Statistical Yearbook, elaborated by National Institute for Statistics 2011

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

Water quality

On the basis of national systems of water classification, the percentage of the number of water bodies or the percentage of the volume (preferably) of water⁶ falling under each defined class (e.g., in classes I, II, III, etc. for non-EU countries; for EU countries, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status).

For European Union countries

Ecological status of surface water bodies

Percentage of surface water classified as:	Baseline value		Current value		Current value	
	2005**		2007***		2010****	
	Rivers – km (%)	Reservoirs and natural lakes (%)	Natural water bodies (%)	HMWBs and AWBs (%)	Natural Water Bodies (%)	HMWBs and AWBs (%)
High status	29	16.07 - ultraoligotrophic	5.20	37.67	1.18	36.02
Good status	37	23.2 - oligotrophic	58.93		60.62	
Moderate status	23	0.9 – oligo-mesotrophic	33.96	61.18	33.21	58.39
Poor status	7	20.54 - mesotrophic	1.22	0.99 unassessed	3.26	0.98
Bad status	4	21.4 – eutrophic 1.79 – eutrophic-hipertrophic 16.1 - hipertrophic	0.68	0.16	0.6	
Total number water bodies unassessed	-	-	-	0.99	1.11	4.6
Total number/volume of water bodies classified	-	-	2791	608	1700	461
Total number/volume of water bodies in the country	-	-	2791	608	2791	608

*) 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

⁶ Please specify.

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"

***) The ecological assessment of water status in 2007 was based on methods in compliance with WFD requirements.

****) Assessment of water bodies status refers to the monitored water bodies in 2010 (source: Synthesis of water quality in Romania 2010, NAAR)

Chemical status of surface water

Percentage of surface water classified as	Baseline value (specify the year) 2005*	Current value (specify the year) 2007**	Current value 2010***
Good status	43.1	93.12	69.02
Poor status	56.9	6.71	5.92
Not Assessed water bodies	-	0.17	25.06
Total number/volume of water bodies classified	-	3393	2549
Total number/volume of water bodies in the country	-	3399	3399

*) 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"

***) The chemical assessment of surface water status in 2007 was based on methods in compliance with WFD requirements according to the River Basin Management Plans (refers to all designated water bodies), divided in natural and heavily modified water body as following as:

- 2791 natural surface water bodies (93.87% good chemical status; 6.13% poor chemical status);
- 608 heavily modified water bodies (88.8% good status)

*** Source: Synthesis of water quality in Romania in 2011 (refers only to monitored water bodies)

Chemical Status of groundwaters

Percentage of groundwaters classified as	Baseline value (specify the year) 2005*	Current value (specify the year) 2007**	Current value (2010) ***
Good status	60.66	86.62	76.76
Poor status	39.34	13.38	16.19
Not Assessed water bodies	-	-	8.34
Total number/volume of groundwater bodies classified	-	142	130
Total number/volume of groundwater bodies in the country	-	142	142

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

*) In 2005, the chemical status of ground waters was based on methods not fully in compliance with WED 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, heavy metals, bacteriological indicators, chlorides, sulphates, phenols, etc.

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

**) The assessment of ground water status in 2007 was based on methods in compliance with WFD requirements, according to the Romanian River Basin Management Plans (refers to all designated water bodies).

*** Source: Synthesis of water quality in Romania in 2011 (refers only to monitored water bodies)

According to the first River Basin Management Plan, all groundwater bodies are in good quantitative status (100%).

Water use

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

<i>Water exploitation index</i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year)</i>
Agriculture		
Industry ^a		
Domestic use ^b		

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

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

The used indicator in Romania is “Abstracted freshwater weight in total water resources”, as indicated in the below table:

	<i>Baseline value (specify the year) 2005</i>	<i>Current value (specify the year) 2008</i>	<i>Current value (specify the year) 2010</i>
Total abstracted freshwater (mill.cm)	5301	7220	6219
Total water resources (mill.cm)	63760	39406	61878
Abstracted freshwater weight in total water resources (%)	8,31	18,32	10,05

<i>Water use</i>	<i>Baseline value (specify the year) 2005</i>	<i>Current value (specify the year) 2008</i>	<i>Current value (specify the year) 2010</i>
Agriculture ¹	9.2	15.77	11.88
Industry ²	69.3	67.90	70.04
Domestic use ³	21.5	16.32	16.43

¹) The figure includes water abstraction for irrigation, fish breeding, salmonide farms and agricultural and breeding farms;

²) The figure includes water abstraction for energy cooling, manufacturing industry and transports.

³) The figure refers only to public water supply systems.

Part Three

Targets and target dates set and assessment of progress

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

For each target set in this area:

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

Target: Values of oxidability, ammonium, aluminium, iron, nitrate, lead, cadmium, pesticides and manganese will comply with Drinking Water Directive (hereinafter DWD) standards.

Target date: 31.12.2015

Intermediate targets:

- by 31 December 2010
 - for oxidability, ammonium, turbidity, aluminium, iron, heavy metals, pesticides, manganese for localities of more than 100000 inhabitants;
 - for oxidability and turbidity for localities with a population between 10 000 and 100000 inhabitants;
 - for oxidability and manganese, for localities of less than 10000 inhabitants.
- by 31 December 2015
 - for ammonium, nitrates, aluminium, iron, heavy metals, pesticides and manganese for localities with a population between 10000 and 100000 inhabitants
 - for ammonium, nitrates, turbidity, aluminium, iron, heavy metals and pesticides for the localities of less than 10 000 inhabitants.

Baseline conditions: Until 2007, mainly monitored parameters were those related to bacteriological risks, with important significance in the context of the public health. For parameters like leads, pesticides, trihalometanes it was a limited monitoring.

Level of target: nationwide.

Background justification: to comply with the EU Directives.

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

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 noncompliances ; periodic display of drinking water quality data at the town halls; briefings by Prefecture; press releases, when appropriate, that population is inform about noncompliance 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 registred 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. Assess the progress achieved towards the target.

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.

At 31 December 2010 (intermediate target), only 1 locality of less than 10,000 inhabitants was not comply with parametric value for oxidisability and only 1 locality between 10,000 and 100,000 inhabitants was not comply with parametric values for turbidity. Nonconformities are not likely to create health risks.

The water operators with the local authorities from localities that haven't meet the intermediate target (31.12.2010), accessed funding through the Environment Sectorial Operational Programme (hereinafter SOP ENV) for rehabilitation and expansion of water infrastructure. The works will be completed in 2015.

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.

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

Romania currently has no need to revise the objectives, but to find ways for a better implementation of them.

For intermediate targets see para. 2 and 3 from item 3.

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

Not applicable.

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

For each target set in this area:

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

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

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

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. Assess the progress achieved towards the target.

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 2010 the number of cases of methemoglobinemia hospitalized dropped to 73 from an average of 240 cases in 2002 – 2006 period.

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

A more reliable view of the epidemiological situation is provided by using epidemiological data spanning several years to calculate relative risk in general population. There is agreement that E. coli and Enterococci indicators have proven to be useful in the setting of the drinking water directive and therefore are to be kept, but there is general agreement to remove *Clostridium perfringens* from the list of parameters for routine compliance monitoring. Routine monitoring for pathogens is not recommended. However pathogens need to be analysed in relevant outbreak situation, for known hazards identified in the course of water safety plans or if any other evidence shows the relevance of a certain pathogen. There is a need of

suitable methods for pathogens. Safety is increased if multiple barriers are in place, including protection of water resources, proper selection and operation of a series of treatment steps and management of distribution systems (piped or otherwise) to maintain and protect treated water quality.

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of such 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: 31.12.2015.

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 (document approved by the Romanian 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://www.sdnr.ro/documents/national_strategy_for_sustainable_development/SNDD_2008_EN.pdf).

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

The legal/regulatory measures: are in place: 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.

Financial/economic measures: National Objectives with regard to the water and sanitation sector were extensively formulated within SOP ENV - Priority Axis 1 “Extension and modernization of water and wastewater systems”. SOP ENV contributes to the implementation of the 3rd National Development Priority of the NDP 2007- 2013 *Protection and Improvement of the Environment Quality*.

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. Assess the progress achieved towards the target.

In 2010, 67.88% of the total population was connected to centralized water supply.

Drinking water supply network	Baseline value 2005	Current value 2010	Current Value 2011
Number of localities (municipalities, towns and communes) supplied with drinking water installation of which:	1935	2252	2304
municipalities and towns	315	317	317
Simple length of network of the drinking water installation (km) of which:	47 778	63095	65901
municipalities and towns	25 171	27226	27474
Drinking water supplied to the users (mill.m ³) of which:	1089	1024	1022
for households use	628	689	677

- *Source:* Statistical Yearbook elaborated by National Institute of Statistics

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 (PHARE, ISPA, SAPARD, SAMTID and Cohesion Funds); construction of new water supply systems; rehabilitation/extension of network distribution; rehabilitation 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.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

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

Target date: 31.12.2018.

Intermediate targets:

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

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.

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; 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.e., 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 2002, 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. Describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational **including** management measures) to reach the target, **having regard to article 6, paragraph 5**, and, if applicable, the difficulties and challenges encountered.

The 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.

During 2001 – 2003 the followings have been established: number of agglomerations, status of the water supply on agglomeration categories, number of the inhabitants connected to the sewerage networks and to the wastewater treatment plant for each type of agglomeration, wastewater treatment plants type and treatment stages, estimative costs for rehabilitation, extension and building up of new water supply and sewage treatment systems.

By the end of 2011 41 Master Plans for 39 counties have been approved (Master Plans for Bucharest Municipality, and Vaslui, Hunedoara and Caras-Severin counties are in the pipeline).

Taking into account the outcomes of these Master Plans it is possible to have changes in the configuration of the already established agglomerations due to the results of future feasibility studies for optimal technical solutions.

The financial/economic measures including management measures: The main support came from the EU, through the pre-accession programmes (PHARE, ISPA, SAPARD), bilateral assistance from the EU Member States, Community programmes, loans from the EBRD and EIB, World Bank, 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, World Bank etc.).

Under the period 2007-2013, the interventions financed by pre-accession funds for water/wastewater 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.

SOP ENV including the Priority Axis 1 “Extension and modernization of water and wastewater systems” is closely linked to the national objectives of the strategy laid down in the National Development Plan (NDP) and National Strategic Reference Framework (NSRF).

The SOP’s total budget for the 2007-2013 programming period is approximately Euro 4.900 billion (2004 prices), which represents 23.8% of the financial sources of the NSRF. Out of this for water was allocated 3.960 billion Euro is envisaged as community support, more than 940 million Euro comes from the national budget.

The purpose of the process of regionalization of water services, initiated by Romanian authorities and supported largely by pre-accession programmes (PHARE, ISPA), 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.

Informational/educational including management measures: In December 2012 a brochure for public entitled “Situation of urban wastewater and sludge from the wastewater treatment plants in Romania” was published by the Ministry of Environment and Forests and National Administration “Apele Romane”. The reporting obligation frequency as required by art. 16 of UWWT Directive is every two years for elaboration national reports for the public information in order to present the situation of the wastewaters and sludge resulting from UWWTs and the measures taken to improve the infrastructure for wastewater. The first report was published in December 2007.

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. and the first intermediate target 2010, 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.

3. Assess the progress achieved towards the target.

At the end of 2008 the degree of the connection to the wastewater collecting system was 49.46% p.e. and the degree of the connection to the wastewater treatment plants was 42.18%. Today, there are 604 wastewater systems, of which 513 are operational; the other 91 are in various constructive stages.

In 2008, approx. 12.364 million inhabitants (57.4%) of the total population (21.54 mill.) have access to wastewater collecting and treatment services

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

Source: Statistical Yearbook elaborated by National Institute of Statistics

An improvement during 2006 – 2007 periods has been noticed in the process of rehabilitation, construction and upgrading of collecting systems and urban wastewater treatment plants, mainly for large agglomerations with more than 10,000 p.e. Also infrastructure projects for all agglomeration with more than 2000 p.e. were developed.

As regards investments in urban wastewater infrastructure in future Romania should secure necessary funds for adequate implementation of the UWWT Directive.

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

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

Not applicable.

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

For each target set in this area:

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

Target 1: reduction by 25% 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: 31.12.2020

Target 2 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 centers is 43.9 %.

The main problems are caused by obsolete and deficient materials of the distribution networks such as asbestos 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.

Target 2: There is a need to ensure that all towns can invest to maintain and upgrade their infrastructure in order to have good services, able to meet EU standards. This requires adoption and implementation of adequately designed development policies, focused on meeting the real needs of the population, as to ensure that services are to be affordable to everybody.

In this sense, the regionalization process is a key element aimed 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.

A key element for achievement of this objective 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, 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 main advantages in operating water and wastewater services at the regional level are indicated below: the regional supply of utilities by integrated systems and more professional management is expected to 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 reduction of political involvement in the course of business; the prices of water services are leveraged between urban and rural areas.

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

The legal/regulatory measures:

Target 1:

- Legislation in the field of public water supply services;
- 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.

Target 2:

- Legislation in the fields as: local public administrations, local public services, water supply and sewage services, etc
- SOP ENV

Financial/economic measures: Major investments in the field of drinking water/waste water infrastructure are under development. These investments are achieved through different instruments including the national (from State and local Budgets) and external funds: EU Funds (Cohesion and Structural Funds) multilateral grants, loans for public service and infrastructure investments with governmental or local guaranties, private funds and public-private partnerships with the purpose of increase of these services, especially in the rural areas; other sources; regional water operator own sources.

Total investments cost needed to implement requirements of Council Directive 98/83/EC are of 4.320 billion Euro, of which: 37.2% for measures of rehabilitation / upgrading of existing infrastructure for water; 60.7% for measures of construction/expansion of water infrastructure for localities; 2.1% for other measures (staff training, research studies, solution studies, feasibility studies, etc.).

These costs will include operating costs and annual maintenance of approx. 394 million Euro.

Costs for implementation of the measures will be funded in the 2004-2015 period as follows: 39.92% of European funds (structural and cohesion funds through the Sectoral Operational Program Environment, ISPA, PHARE, SAPARD, SAMTID, etc.); 19.34% of the state budget and local budgets; 13.77% from its own public and private partnerships, bank loans (EIB, EBRD); for 26.97% of the costs has not been identified the financing.

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.

The future challenges of regional operators will be inclusion of more rural localities within in operation and maintenance area.

3. Assess the progress achieved towards the target.

Target 2: The establishment of the regional operators within the process of regionalization of drinking water and wastewater services has been finalized in 2010 (42 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 regional operators	
	Year	
	2009	2010
Municipalities and towns	245	246
Rural localities	710	761
Total	955	1007

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

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of such 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: 31.12.2018.

Baseline conditions: link to target IV

Level of target: nationwide.

Background justifications: to comply with the EU Directives.

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

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: training programs and TAIEX workshops for public water services operators.

See also target IV, related to informational measures.

3. Assess the progress achieved towards the target.

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

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

Not applicable

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

Not applicable

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of such 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 Water Framework Directive (Annex IV) 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. Describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

Legal/regulatory measures are in place: 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).

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 Romane" established and maintain a computerized inventory of sanitary protection zones and protection perimeters for each hydrographic basin, which is submitted by the end of each year to the central public authority in the water field (Ministry of Environment and Climate Changes). These sanitary protection zones and protection perimeters are included in the Register of Protected Zones.

3. Assess the progress achieved towards the target

Year	Groundwater		Surfacewater	
	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

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

Not applicable.

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

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

For each target set in this area:

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

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

Link to target V b) related to the regionalization process (the regional water operators provide both water supply and sanitation services)

Target date: 31.12.2018

Level of target: nationwide.

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

Link to target V b).

3. Assess the progress achieved towards the target.

Link to target V b).

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of such 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: 31.12.2018

The target date for reducing the level of occurrence of untreated wastewater from users is correlated with the full implementation of European legislation in the water sector.

Common Target (2+3) date: continuously.

Baseline conditions:

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

Legal/regulatory measures:

GD no 188/2002 as amended.

Link to target IV.

- 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. 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. 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. In 2008 such plans were developed by 843 users.

- Implementation of warning system in case of accidental pollution

In Romania, according to the MO 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, related to informational measures.

3. Assess the progress achieved towards the target.

In 2011, 45 accidental pollution events were recorded of which 12 pollution by untreated wastewater due to the faults that occurred in the wastewater treatment plants operation.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

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

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/rain waters in the combined collecting systems is checked.

Level of target: nationwide.

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

Legal/regulatory measures: 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 with 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.

Informational/educational including-management measures.

See target IV, related to informational measures.

3. Assess the progress achieved towards the target.

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

Not applicable.

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

Not applicable.

XI. Quality of discharges of wastewater from wastewater treatment installations to waters within the scope of the Protocol (Art.6, Para.2 (H))

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of such 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 and groundwater bodies has to be achieved ultimately by the end of 2027.

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

Legal/regulatory measures:

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, modified and GD 351/2005 as amended. These acts established the maximal concentration of the quality parameters in the discharged water both into the sewerage systems and into the rivers.

Romanian River Basin Management Plan was approved by GD no. 80/2011 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 and M.O. 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, and for 4 years, in the case of hazardous or priority substances.

Financial/economic measures. Link to target IV.

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, related to informational measures.

3. Assess the progress achieved towards the target.

In 2007-2011 the total volume of adequately treated wastewaters resulting from the human agglomerations discharged into waters increased with 43.925 mill cm/year (14.6%). Therefore in the same period, the percentage of nontreated and inadequately treated wastewaters discharged into waters decreased from 77.80% in 2007 to 75 % in 2011.

Year	Total volume of urban wastewaters discharged into natural effluents (mill. cm/year)				
	Total	without any treatment or not required treatment	adequately treated	inadequately treated	Non treated
2007	1361.351	7.348	257.066	564.250	532.687
2009	1296.890	8.609	300.991	458.340	528.950
2011	1325.570	0.650	342.930	445.830	536.180

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

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

Target date: 31.12.2014.

Baseline conditions: 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.

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

Legal/regulatory measures: 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.

In order to protect the environment and in particular the soil where sewage sludge is used in agriculture, the Ministerial Order No 344/2004 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.

Informational/educational including management measures.

See target IV, related to informational measures.

2. Assess the progress achieved towards the target.

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

Under the ISPA 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.

Under SOP-Environment a National Strategy on sewage sludge from wastewater treatment plants has been developed. The draft of Strategy as well as the Environmental report to this Strategy has been subject for public consultation.

Having regard that this strategy needs to be approved by Governmental Decision, a public consultation process has started during April 2013. The documents have been posted on the site of the Ministry of

Environment and Climate Changes according to the national legislation in the field of decisional transparency in public administration.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

No target has been set up.

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

The 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.

3. Assess the progress achieved towards the target.

Not applicable.

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

Not applicable.

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

No target has been set up, taking into account that since 1990 wastewater has not been used for irrigation purposes.

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

For each target set in this area:

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

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

Target date: 31.12.2015

Level of target: nationwide.

Link to target VII

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

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.

3. Assess the progress achieved towards the target.

Water sampling and physical-chemical as well as bacteriological 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 number of sampling sections:	Number of sampling sections monitored			
	Year 2006	Year 2007	Year 2008	Year 2010
Total	199	208	213	216
which are classed as A1 quality*	55	73	71	38
which are classed as A2 quality*	118	125	125	156
which are classed as A3 quality*	26	10	17	22

*) 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).

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

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

Not applicable.

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

For each target set in this area:

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

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. Assess the progress achieved towards the target.

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.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

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

Legal/regulatory measures: G.D. no 459/2002 for approving water quality standards for natural bathing areas; G.D. no 88/2004 for approving surveillance standards, health inspection and control of natural areas used for bathing; G.D. no 546/2008 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 mounted 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 intersectorial collaboration.

3. Assess the progress achieved towards the target.

The deadline for compliance with the reference values of quality parameters for bathing water was five years, in accordance with the Government Decision 459/2002. This target has been achieved since 2007 bathing season.

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

Directive 2006/7/EC, transposed by G.D. no 546/2008 has set new targets and target date as: establishing the bathing water profile, classification of bathing water quality, monitoring quality parameters, assessing bathing water quality, as mentioned above.

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

Not applicable

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

For each target set in this area:

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

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

Target 1 date: April 2014

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. 536/1997 on the hygiene 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. Describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational including management measures) to reach the target having regard to article 6 paragraph 5 and, if applicable, the difficulties and challenges encountered.

Legal/regulatory measures: Ministerial Order no. 536/1997 on the hygiene 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. Assess the progress achieved towards the target.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

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

Target date: 31.12.2013

Level of target: nationwide.

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

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; Order of the Minister of Environment no. 137/2009 on the approving of the threshold values for groundwater catchment in Romania.

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. During 2010 the inventory will be validated and approved by a joint order of Ministers of environment, economy, finances and agriculture.

3. Assess the progress achieved towards the target.

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.

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

Not applicable.

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

Not applicable.

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

For each target set in this area:

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

The 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.

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.

The payment system 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. Assess the progress achieved towards the target.

The process is already started; measures related to all European legislation in the water management field have been defined and will coming into force in 2013.

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

Not applicable.

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

Not applicable.

XX. Additional national or local specific targets

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

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

Part Four

Overall evaluation of progress achieved in implementing the Protocol

In this part of the summary report Parties shall provide an analysis and synthesis of the status of implementation of the Protocol. Such an overall evaluation should not only be based on the issues touched upon in the previous parts, but should also include, as far as is possible, a succinct overview of implementation of: article 9 on public awareness, education, training, research and development and information; article 10 on public participation; article 11 on international cooperation; article 12 on joint and coordinated international action; article 13 on cooperation in relation to transboundary waters; and article 14 on international support for national action.

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

The process of the implementation of the Protocol is in progress. This implementation of the Protocol is done through the implementation of the EU Directives in the water field which contribute to the achievement of the objectives of the Protocol.

In order to fulfil the requirements of the Protocol, the process of setting targets is finalized and the document containing these targets and deadlines for their implementation will be approved till the end of May 2013. The transition periods required by Romania for the implementation of the Directives are taken into consideration for the setting of the data targets under the Protocol.

The cooperation between institutions with attributions in the field of water, environment, health and agriculture and different stakeholders is necessary for the achievements of the targets and during the process of reporting.

Different activities including *inter alia* targets setting and reporting, public participation, climate changes, impact on water and health, water related diseases surveillance developed/to be developed within the Protocol represent an important support for the implementation of the requirements under the Protocol.

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.

Romania pays a great attention to the public participation regarding water resources management measures. In this respect, River Basin Committees (a total number of 11) are the main consultative bodies established at the level of each river basin.

In terms of public information, the reports on drinking water quality are posted on the website of the National Institute of public health and local sites of the public health directorates.

In terms of public awareness, guide on the water of wells and methemoglobinemia, including information on sanitary measures to be taken in constructing wells, is being distributed in areas at the risk.

On the occasion of World Water Day it was organised campaigns of information–education– awareness: press conferences, meetings/briefings, to target groups (local operators of water, small farmers), promotion of measures for the control and prevention of water–related disease.

Romania has a long history regarding international and bilateral cooperation in the field of international watercourses, especially transboundary waters. Romania is party to the 1992 UNECE Convention on protection and use of transboundarywaters and international lakes and to the 1994 Convention on cooperation regarding the protection and sustainable use of the Danube River; experts are involved in the activities of working groups on specific topics with the aim to participate at the elaboration of different guidelines/manuals as well as to the development of the Management Plan of the Danube District in accordance with the EU WFD.

A great attention is paid to cooperation based on the agreements on transboundary waters with the neighbouring countries (Serbia, 1955, noting that the negotiation process of a new agreement has started since November 2010; Ukraine, 1997; Hungary, 2003; Bulgaria, 2004; Republic of Moldova, 2010). The issues covered by those agreements refer both at quantitative and qualitative aspects of water resources. Joint Commissions have been established with the aim to coordinate and to agree on the joint measures and activities which have to be developed at the level of the involved parties.

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Signature:

Gheorghe Constantin
Director
Ministry of Environment and Climate Changes
Date: 29 April 2013

Submission

Parties are required to submit their summary reports to the joint secretariat, using the present template and in accordance with the adopted guidelines on reporting, by **29 April 2013**. Submission of the reports ahead of this deadline is encouraged, as this will facilitate the preparation of analyses and syntheses to be made available to the third session of the Meeting of the Parties.

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

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