Dear Madam or Sir,

Please find attached the French report established by services of the ministry of social affairs and health and of the ministry of the environment, energy and sea to respond to its commitments under article 7 of the Protocol on Water and Health.

With best regards,

[Signatures]

Object: French summary report under article 7 of the Protocol on Water and Health
Attachment: 1
Template for summary reports under the Protocol on Water and Health

Part One
General aspects

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

*Please provide detailed information on the target areas in Part Three.*

YES ☐ NO ☐ IN PROGRESS ☐

*If targets have been revised, please provide details here.*

Targets are established by European directives (see question 4) applicable in France within the scope of the Protocol on Water and Health.

Furthermore, country specific targets are included in the National Health and Environment Plan (PNSE) jointly established by ministries responsible for health, environment, research and work. In order to meet specific needs of populations, stakeholders and territories, the PNSE is implemented at local level through Regional Health and Environment Plans (PRSE).

Pursuant to provisions provided by the law of 9 August 2004 on public health policy, France develops a PNSE every 5 years. Thus, PNSE 1 (2004-2008), PNSE 2 (2009-2013) and PNSE 3 (2015-2019) have been published; they include specific targets on “water and health”.

PNSE 3 (2015-2019) aims at reducing, as much as possible and in the most efficient way, impacts of environmental factors on health, in order to enable anyone to live in an environment favorable for health. It revolves around 4 categories of issues suggested by a scientific support committee: priority health issues; issues of knowledge on exposures and their effects; issues for health and environment research; issues for local actions, information, communication and training. There will be annual assessments to assess progress made.

PNSE 3 (2015-2019) defines several important actions on “water and health”.
- Implement protection of catchments used to supply drinking water against accidental pollutions and diffuse pollutions;
- Monitor priority emergency substances in catchment used to supply drinking water against accidental pollutions and pollutions;
- Promote the implementation of health safety plans for drinking water supply (it is one of the 10 priority actions to implement and to develop in the Regional Health and Environment Plan PRSE 3);
- Develop a national actions plan on on-site sanitation;
- Develop a national actions plan on micro-pollutants in water;
- Analyze the impact of disparities of legionellosis on the territory;
- Support equitable access to drinking water and sanitation.

Finally, it should be recalled that a framework of targets also existed in previous plans, such as the National Health and Environment Plan PNSE 2 (2009-2013):
- Ensure protection of supply areas of the most threatened 500 catchments;
- Control distributed domestic water quality

*The UNECE does not guarantee the accuracy of the translation.*
Achieving targets of PNSE 2 has been assessed by the High Council for Public Health (HCSP), whose report, published in September 2013, is available online: http://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=379.

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

Please explain whether the targets and target dates were published, made available to the public (e.g. online, official publication, media) and communicated to the secretariat.

PNSE 3 (2015-2019) was the subject of a press release issued by the ministers responsible for ecology and health, after its presentation to the Council of ministers, on 12 November 2014. PNSE 3 is published online on the websites:


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.

Targets of PNSE 3 (2015-2019) were set by directly concerned ministries (ministries of ecology, health, research and work). Other ministries (ministries of agriculture, industry) have also been associated with the development of this plan. Coordination and management roles were jointly assumed by ministries of ecology and health. To define targets of PNSE 3 (2015-2019), ministries relied on implementation assessment reports of targets of PNSE 2 (2009-2013), on conclusions of Environmental Conferences held in 2012, 2013 and 2014, of exchange meetings with local services in charge of PRSE, and on the work of three specific working groups, a scientific support committee and a steering committee. In addition, ministries conducted in 2014 a public consultation via the website of the Ministry of Ecology.

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

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

In the water and sanitation field, France applies European directives into national law. These include:


5. Was cost-benefit analysis of targets set performed, and if so how?
Alternatively, please explain to what extent financial implications were taken into account when setting targets.

Such analysis has not been explicitly conducted under the PNSE.

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?

The development of PNSE 3 (2015-2019) was based on conclusions of working groups consisting of elected officials, community representatives, representatives of employees and companies, experts and stakeholders from the State. As such, its development was subject to a consultation with the different stakeholders. The progress of PNSE 3 (2015-2019) is managed by a monitoring group involving different stakeholders; this monitoring group publishes every year an annual progress report for the current year.

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

This report was jointly prepared by the ministries responsible for health and ecology. The Institute for Public Health Surveillance (InVS) has also contributed to its drafting regarding data related to waterborne infections.

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 no special circumstances to report.

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.

Emerging issues are addressed in specific plans. Thus ministries responsible for ecology and health published a national actions plan on on-site sanitation (2015-2019) and established a project of national actions plan on micro-pollutants in water (2016-2021), which should be published shortly.
Part Two
Common indicators

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:


Articles R. 1321-2 and R. 1321-3 of the CSP define quality requirements to be met by water intended for human consumption:
- do not contain a number or a concentration of micro-organisms, parasites or any other substance presenting a potential health hazard;
- comply with quality limitations set by decree of 11 January 2007 aforementioned. These limits are set for parameters, which when they are present in water, are likely to generate effects on consumer health. They concern microbiological parameters and chemical substances. Quality limits are usually based on WHO recommendations;
- meet quality references set by decree of 11 January 2007 aforementioned. Quality references are guide values. Concerned substances, without any direct impact on health with concentrations usually observed in water, may report a significant presence of an element or a substance at the level of the resource and/or a dysfunction of treatment facilities. They may also be the source of discomfort or inconvenience for the consumer.

Managing non-compliance situations of water quality requirements based on a health risk assessment, represents an essential point of the health safety system. It aims, in any case, to protect health.

Technical and organization risk management chain results from:
- application of articles R. 1321-26 to R. 1321-36 of the CSP by the individual responsible for the production of distribution of water (PRPDE) and by the authorities, according to the categories of the relevant parameters;
- assessment by the prefect, State representative in the region, of health risks.

Water quality historic and knowledge of the reliability of the water production and distribution system are useful for risk assessment and can be used for decision making and consumer information. Early detection and management of such events are used to verify the relevance of the health safety system.

Information helps managing these situations and the PRPDE must:
- inform health authorities (provided by articles R. 1321-25 to 29 from the CSP)
- inform consumers (provided by Article R. 1321-30 of the CSP).

Communication towards health authorities must be transparent and can take different forms from transmitting excesses concerning water quality to actual alerts. Communication towards consumers must specify necessary measures to control hazards.

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

The rationale of this question is to understand the population coverage of the water quality data reported under sections B and C below. Please describe the type of water supplies for which data is

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1 In order to allow an analysis of trends for all Parties under the Protocol, please use wherever possible 2005—the year of entry into force of the Protocol—as the baseline year.
included in the following tables, and the population share covered by these supplies. Please also clarify the source of the water quality data provided (e.g., data from regulatory authorities).

<table>
<thead>
<tr>
<th>Data from the Ministry of Health, SISE-Water</th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of the population for all distribution units (UDI), “All UDI”</td>
<td>59.8 millions</td>
<td>65.2 millions</td>
</tr>
<tr>
<td>Size of the population for UDI for over 5 000 inhabitants, &gt;= 5000 h.)</td>
<td>43.9 millions</td>
<td>49.1 millions</td>
</tr>
</tbody>
</table>

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

Indicators are provided for all distribution units (or UDI servicing rural and urban populations), of all sizes, and for UDI for over 5000 inhabitants (UDI servicing urban populations).

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

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

The compliance point is defined in Article R. 1321-5 of the CSP. For waters supplied by a distribution network, it means taps that are normally used for human consumption. The division of responsibilities of concerned stakeholders in case of a non compliance situation is detailed from Articles R. 1321-44 to R. 1321-46 of the CSP. Some parameters must be given special attention because of discharge that can occur in indoor networks (lead, copper, nickel, iron, cadmium, etc.) and because of the possible degradation of the water microbiological quality in distribution networks. Analysis to assess water compliance are carried out at the tap of the consumer (for: E. coli, enterococci, lead) or at the point of distribution/release of the purification unit (for: Fluorides, Nitrates, Arsenic, Iron, Pesticides).

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.

Standards used for indicators are quality standards of European Directive 98/83/EC on the quality of water intended for human consumption which refers to WHO guide values for drinking water quality.

**B. Bacteriological quality**

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

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli</td>
<td>All UDI : 2.9 %</td>
<td>All UDI : 1.9 %</td>
<td>All UDI : 1.5 %</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.3 %</td>
<td>&gt;= 5000 h : 0.2 %</td>
<td>&gt;= 5000 h : 0.1 %</td>
</tr>
<tr>
<td>Enterococci</td>
<td>All UDI : 3.1 %</td>
<td>All UDI : 1.9 %</td>
<td>All UDI : 1.3 %</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.2 %</td>
<td>&gt;= 5000 h : 0.2 %</td>
<td>&gt;= 5000 h : 0.1 %</td>
</tr>
</tbody>
</table>
C. Chemical quality

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

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

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

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

Quality limits are mentioned: QL.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride (QL = 1.5 mg/L)</td>
<td>All UDI : 1.49 %</td>
<td>All UDI : 1.08%</td>
<td>All UDI : 0.74%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.64%</td>
<td>&gt;= 5000 h : 0.77%</td>
<td>&gt;= 5000 h : 0.80%</td>
</tr>
<tr>
<td>Nitrate (QL = 50 mg/L)</td>
<td>All UDI : 1.64%</td>
<td>All UDI : 0.86%</td>
<td>All UDI : 0.85%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.50%</td>
<td>&gt;= 5000 h : 0.08%</td>
<td>&gt;= 5000 h : 0.13%</td>
</tr>
<tr>
<td>Nitrite</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Arsenic (QL = 10 µg/L)</td>
<td>All UDI : 3.07%</td>
<td>All UDI : 1.93%</td>
<td>All UDI : 1.15%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 1.57%</td>
<td>&gt;= 5000 h : 0.26%</td>
<td>&gt;= 5000 h : 0.08%</td>
</tr>
<tr>
<td>Lead (QL = 10 µg/L en 2013)</td>
<td>All UDI : 1.64%</td>
<td>All UDI : 1.42%</td>
<td>All UDI : 3.06%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 1.17</td>
<td>&gt;= 5000 h : 1.06%</td>
<td>&gt;= 5000 h : 2.54%</td>
</tr>
<tr>
<td>Iron total (QL = 200 µg/L)</td>
<td>All UDI : 1.73%</td>
<td>All UDI : 1.24%</td>
<td>All UDI : 1.02%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 1.21%</td>
<td>&gt;= 5000 h : 0.96%</td>
<td>&gt;= 5000 h : 0.67%</td>
</tr>
<tr>
<td>Atrazine desethyl (QL= 0.1 µg/L)</td>
<td>All UDI : 6.10%</td>
<td>All UDI : 2.59%</td>
<td>All UDI : 1.86%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 2.15%</td>
<td>&gt;= 5000 h : 0.56%</td>
<td>&gt;= 5000 h : 0.25%</td>
</tr>
<tr>
<td>Atrazine (QL= 0.1 µg/L)</td>
<td>All UDI : 1.45%</td>
<td>All UDI : 0.38%</td>
<td>All UDI : 0.21%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.33%</td>
<td>&gt;= 5000 h : 0.07%</td>
<td>&gt;= 5000 h : 0.00%</td>
</tr>
<tr>
<td>Bentazon (QL= 0.1 µg/L)</td>
<td>All UDI : 0.07%</td>
<td>All UDI : 0.09%</td>
<td>All UDI : 0.14%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.20%</td>
<td>&gt;= 5000 h : 0.03</td>
<td>&gt;= 5000 h : 0.02%</td>
</tr>
<tr>
<td>2,6 Dichlorobenzamide (QL= 0.1 µg/L)</td>
<td>All UDI : 0.21%</td>
<td>All UDI : 0.32%</td>
<td>All UDI : 0.14%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.18%</td>
<td>&gt;= 5000 h : 0.05%</td>
<td>&gt;= 5000 h : 0.09%</td>
</tr>
</tbody>
</table>

\(^2\) 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 consider the following points:

(a) For reporting outbreaks, please indicate if the numbers reported are related to all exposure routes or only related to water (i.e., for which there is epidemiological or microbiological evidence for water to have facilitated infection);

(b) For reporting incidents:
   (i) Please report cases per 10,000 persons;
   (ii) Please differentiate between zero incidents (0) and no data available (-);
   (iii) If possible, please distinguish between autochthonous and imported cases.

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

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

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

Data below concern metropolitan France and the overseas departments. No waterborne transmission was documented for cases in 2015. Furthermore, in 2015, 42% of hepatitis A cases and 88% of typhoid cases were imported.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metolachlore (QL= 0.1 µ g/L)</td>
<td>All UDI : 0.12%</td>
<td>All UDI : 0.18%</td>
<td>All UDI : 0.13%</td>
</tr>
<tr>
<td></td>
<td>&gt;= 5000 h : 0.11%</td>
<td>&gt;= 5000 h : 0.13%</td>
<td>&gt;= 5000 h : 0.13%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incidence</th>
<th>Number of outbreaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera</td>
<td>No indigenous case</td>
</tr>
<tr>
<td>Bacillary dysentery (shigellosis)</td>
<td>1.08 / 100,000 (average 2010-2012)</td>
</tr>
<tr>
<td>Enterohaemorrhagic E. coli.</td>
<td>0.2 / 100,000 (average 2009-2011)</td>
</tr>
</tbody>
</table>
Viral hepatitis A

<table>
<thead>
<tr>
<th>Year</th>
<th>Incidence Rate / 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2011</td>
<td>2.0</td>
</tr>
<tr>
<td>2010-2012</td>
<td>1.6</td>
</tr>
<tr>
<td>Baseline</td>
<td>1.12</td>
</tr>
</tbody>
</table>

Typhoid fever

<table>
<thead>
<tr>
<th>Year</th>
<th>Incidence Rate / 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2012</td>
<td>0.22</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.18</td>
</tr>
</tbody>
</table>

*: In 2005 and 2012, incidence data presented are estimated in general population from the number of EHEC infections confirmed by the CNR. In 2015, is presented the incidence rate of the hemolytic uremic syndrome (SHU) in France among children under 15 years (search for EHEC in the stools is not routinely performed in France, monitoring of infections is based on the monitoring of pediatric SHU).

III. Access to drinking water

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

Pursuant to provisions of Article R. 1321-1 of the CSP, all uses (drinking, cooking, food preparation and other domestic uses) must use water meeting legislative and regulatory provisions of the CSP in relation to water intended for human consumption, and the individuals responsible for the production of distribution of water (PRPDE) must:

- Have an prefectural authorization under Article L.1321-7 of the CSP;
- Monitor water quality and submit to health control of the Regional Health Agency (Article L. 1321-4 of the CSP);
- Respect quality limits and references (Article R. 1321-2 of the CSP);
- Use only materials in contact with water (R. 1321-48), products and process after treatment (R. 1321-50 of the CSP) in accordance with regulations.

In terms of drinking water supply, local authorities do not have the obligation to provide all homes with a public distribution network of drinking water, but when the network exists, the town planning code provides that any residential building must be served by this network.

Indeed, more than 99 % of the population is services by a public drinking water network. If there is no public network, water production for human consumption, implementing Article L. 1321-7 of the CSP, is subject to:

- A declaration before the Mayor, in case of a single family use of the water (use limited to one family) and be subject to an analysis by an approved laboratory;
- An authorization by the prefect in any other case.

The entire French population has access to drinking water even if difficulties persist especially in overseas departments or authorities (in French Guiana 13.5% of the homes are not serviced with drinking water and in Mayotte around 25% of households have no access to water at home or in the pen). However, these very specific situations do not contribute significantly to statistics compiled at national level.

<table>
<thead>
<tr>
<th>Percentage of population with access to drinking water</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2010)</th>
<th>Current value (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Urban</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Rural</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Please specify if the above data is based on national estimates or estimates provided by the WHO/United Nations Children’s Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation.

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

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

IV. Access to sanitation

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

<table>
<thead>
<tr>
<th>Percentage of population with access to sanitation</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2011)</th>
<th>Current value (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Urban</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Rural</td>
<td>95%</td>
<td></td>
<td>96%</td>
</tr>
</tbody>
</table>

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

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

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

These are national estimates. In France, the main issues is no longer to ensure access to water and sanitation, which today services almost the entire population, but to ensure that sanitation systems have the necessary purification equipment to properly process the pollution load that reaches them in the light of European requirements.

Sanitation is collective (urban population) or non-collective (rural population).

Collective sanitation

Urban wastewater from populations concentrated in one area (urban area) are connected to a public collection network that carries out effluent to a wastewater treatment plant (WWTP) to be treated and then discharged into the receiving environment, in accordance with European Directive 91/271/CEE.

In France, homes of almost 55 million people are connected to a collective sanitation system. Of these 55 million people, 97 % have a sanitation system complying with regulations.

France counts 19,398 sanitation areas (data 2014) including 19,688 WWTP representing a global charge of 78 million Equivalents-inhabitants (Eh) (maximum week including industrial and commercial activities) for a treatment capacity of all WWTP of 102 million Eh. There are 3,605 urban areas of more than 2,000 Eh for 3,728 WWTP (some urban areas are composite and include several plants). They present a pollution load of 73 million Eh. Of the 73 million Eh of pollution generated by urban areas of more than 2,000 Eh, there will only be 2.8 million Eh that will not respect regulatory treatment or 3.9% of the 3,728 WWTP of more than 2,000 Eh.

It is estimated that, each year, about 3 to 4 % of the WWTP should be renewed for obsolescence or lack of treatment capacity (lifetime of a WWTP id about 30 to 40 years). About one hundred WWTP belonging to urban areas of more than 2,000 Eh are rebuilt or rehabilitated each year.

Non-collective sanitation
Homes that are not serviced by a public wastewater network should treat themselves their wastewater before discharging them into the environment by implementing an individual installation of water treatment.

It is estimated that there are 5 million on-site sanitation systems, concerning 17% of the population or about 12 million people living in France. Of these 12 million people, 96% have implemented an individual installation complying with regulations.

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 water 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 non-European Union Countries

Status of surface waters

<table>
<thead>
<tr>
<th>Percentage of surface water falling under class</th>
<th>Baseline value (specify the year)</th>
<th>Value reported in the previous reporting cycle (specify the year)</th>
<th>Current value (specify the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>III</td>
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<td></td>
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<tr>
<td>IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number/volume of water bodies classified</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number/volume of water bodies in the country</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Status of groundwaters

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

* Please specify.
<table>
<thead>
<tr>
<th>Percentage of groundwaters falling under class&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Value reported in the previous reporting cycle (specify the year)</th>
<th>Current value (specify the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total number/volume of groundwater bodies classified</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total number/volume of groundwater bodies in the country</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Rename and modify the number of rows to reflect the national classification system.
For European Union countries

For the condition of water bodies, data are not yet consolidated and all will be subject of reporting to the European Commission.

Ecological status of surface water bodies

<table>
<thead>
<tr>
<th>Percentage of surface water classified as:</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2009)</th>
<th>Current value (specify the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good status</td>
<td></td>
<td></td>
<td>41%</td>
</tr>
<tr>
<td>Moderate status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor status</td>
<td></td>
<td></td>
<td>57%</td>
</tr>
<tr>
<td>Bad status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total number/volume of water bodies classified</strong></td>
<td></td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td><strong>Total number/volume of water bodies in the country</strong></td>
<td></td>
<td></td>
<td>11 523</td>
</tr>
</tbody>
</table>

Chemical status of surface water bodies

<table>
<thead>
<tr>
<th>Percentage of surface water bodies classified as</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2009)</th>
<th>Current value (specify the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good status</td>
<td></td>
<td></td>
<td>44%</td>
</tr>
<tr>
<td>Poor status</td>
<td></td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td><strong>Total number/volume of water bodies classified</strong></td>
<td></td>
<td></td>
<td>67%</td>
</tr>
<tr>
<td><strong>Total number/volume of water bodies in the country</strong></td>
<td></td>
<td></td>
<td>11 523</td>
</tr>
</tbody>
</table>

Status of groundwaters

<table>
<thead>
<tr>
<th>Percentage of groundwaters classified as</th>
<th>Baseline value (2005)</th>
<th>Value reported in the previous reporting cycle (2009)</th>
<th>Current value (specify the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good quantitative status</td>
<td></td>
<td></td>
<td>89%</td>
</tr>
<tr>
<td>Good chemical status</td>
<td></td>
<td></td>
<td>59%</td>
</tr>
<tr>
<td>Poor quantitative status</td>
<td></td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>
Percentage of groundwaters classified as poor chemical status: 41%

Total number/volume of groundwater bodies classified:
- Quantitative: 98%
- Qualitative: 100%

Total number/volume of groundwater bodies in the country: 574

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

### Water use

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2000-2010 : 2.3%</td>
<td>2010 : 1.6%</td>
<td></td>
</tr>
<tr>
<td>Industry(^a)</td>
<td>2000-2010 : 1.7%</td>
<td>2010 : 1.4%</td>
<td></td>
</tr>
<tr>
<td>Domestic use(^b)</td>
<td>2000-2010 : 3.1%</td>
<td>2010 : 2.9%</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) 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).

### Part Three

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

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

*For countries in the process of setting targets, please provide information on the relevant target areas (e.g., baseline conditions, provisional targets, etc.)*

*Suggested length: one page (330 words) per target area.*
I. Quality of the drinking water supplied (art. 6, para. 2 (a))

For each target set in this area:

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

The primary target is to comply with provisions of European Directives, especially Directive 98/83/EC, Directive 2009/54/EC (natural mineral waters) and directive 2013/51/Euratom.

In addition, the National Health and Environment Plan PNSE3 (2015-2019) defines several important actions to improve drinking water quality:

- Implement protection of catchments used to supply drinking water against accidental pollutions and diffuse pollutions;
- Monitor priority emergency substances in catchment used to supply drinking water against accidental pollutions and pollutions;
- Promote the implementation of health safety plans for drinking water;
- Develop a national actions plan on micro-pollutants in water;

Finally, several national indicators allow monitoring water quality evolution intended for human consumption:

- Proportion of the population supplied at least one time with non compliant water during the year for microbiological parameters (E. coli and enterococci);
- Proportion of the population supplied at least one time with non compliant water during the year for pesticide parameters;
- Percentage of drinking water distribution units presenting non compliance with quality limits for bacteriological parameters and/or presenting non compliance with quality limits for physicochemical parameters during a period of at least 30 days in aggregate over the year. This indicator is intended for regional use in the frame of Multi-annual targets and resources contracts 2015-2018 between the State and Regional health agencies.

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.

In its reports submitted in 2013 for the previous period, France has described in details principles and provisions taken from a legislative and regulatory point of view, regarding safety of drinking water and especially authorizations to use water for human consumption, health monitoring of drinking water, and water quality monitoring by the PRDE.

3. Assess the progress achieved towards the target.

Since its previous report, France has issued the following regulations:

Decree of 24 December 2015 amending the Decree of 11 January 2007 amended regarding sampling and analysis program of monitoring water (EDCH).

Decree of 9 December 2015 establishing terms of radon measurement of water intended for human consumption, including bottled waters excluding natural mineral waters, and of water used in a food business not coming from public distribution, in the framework of health control, adopted pursuant to Articles R. 1321-10, R. 1321-15 and R. 1321-16 of the CSP.


Decree of 9 December 2015 amending the Decree of 14 March 2007 on quality requirements of bottled water, treatments and special labelling designations of natural mineral water and spring bottled waters as well as bottled natural mineral water distributed in public refreshment areas.

Decree of 7 August 2015 amending the Decree of 25 January 2010 on water status monitoring program pursuant to Article R. 212-22 of the Environmental Code.

Decree of 11 April 2014 amending the Decree of 25 January 2010 on water status monitoring program pursuant to Article R. 212-22 of the Environmental Code.
Decree of 22 October 2013 as amended on health control analysis and bottled water monitoring and natural mineral waters used for therapeutic purposes in a thermal establishment or distributed in public refreshment areas

The following management measures were published by the ministry responsible for health:

Instruction No. DGS/EA/4/2015/356 of 4 December 2015 on health risk management in case of quality limits violation for the sum of concentrations of tetrachlorethylene and trichlorethylene in the EDCH.

Information Note DGS/EA/4/2014/300 of 28 October 2014 on the implementation of the Decree of 22.10.2013 on sanitary control analysis and monitoring of bottled water and natural mineral water used for therapeutic purposes in a thermal establishment or distributed in public refreshment areas.

Instruction DGS/EA/4/2013/413 of 18 December 2013 on the application of the Decree of 25 November 2003 on terms of exemption requests for water quality limits for human consumption adopted pursuant to Articles R. 1321-31 to R. 1321-36 of the CSP and information of the European Commission, as well as the development of a national report on granted exemptions.

Instruction DGS/EA/4/2013/229 of 6 June 2013 on national campaigns of emerging and microbiological parameters measurements in bottled water and measurements of total chromium, hexavalent chromium and phthalates in water provided by a public distribution network.

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

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

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

For each target set in this area:

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

About 1,200 cases of legionellosis are reported every year in France (1348 cases of legionellosis were reported to regional health agencies in France in 2014). Conducting a study on the factors of the geographical gradient (east-west) of legionellosis on the territory is one of the targets published in PNSE 3 (2015-2019).

Other episodes of water-related diseases (acute gastroenteritis) only result from rare and occasional malfunctions of water production installation (breakage of pipes, backflow, high turbidity of raw water episodes) or major flooding. They are listed by the National Institute of Health Surveillance (1 by year or 1 every 2 to 3 years on average in the last 10 years.

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.

In its reports submitted in 2013 for the previous period, France has described in details regulatory provisions and management measures, with regard to legionellosis prevention. Since then France has published the following texts:

Decree of 14 December 2013 on general requirements for installations under the declaration regime under heading No 2921 of the nomenclature of installations classified for environmental protection.

The following management measures were published by the ministry responsible for health:

Information Note DGS/EA/4/2015/118 of 13 April 2015 on the consequences of the amendment of norm NF T90-431 “Water Quality - Detection and enumeration of Legionella spp. and Legionella pneumophila - methodology by direct seeding and after concentration by membrane filtration or centrifugation” (Revision 2014)

3. Assess the progress achieved towards the target.

Changes in the number of legionellosis cases are relatively stable in France.

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

Not applicable

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

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

For each target set in this area:

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

The National Health and Environment Plan PNSE3 (2015-2019) set the following target:


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

Pursuant to law “Brottes” published in April 2013, the Government authorised by the amended Decree of 14 April 2015, the implementation of a social water pricing experimentation, for 5 years and until April 2018, by 50 authorities organizing water and sanitation services, these include 8 major cities (Paris, Lille, Bordeaux, Nantes, Strasbourg, Grenoble, Rennes, Brest).

In addition, a draft law aiming at the effective implementation of the right to drinking water and sanitation introduced by a Deputy in April 2015 was reviewed by the National Assembly. The provisions of this draft law revolve around the obligation to provide public sanitary facilities by local authorities, and the creation and funding of preventive assistance for the payment of water bills. This draft law is subject to examination by the Parliament.

3. Assess the progress achieved towards the target.

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

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

In view of the definitions of the JMP programme, 100 % of the population in France has access to an improved water supply source. Also, on a macroscopic scale, it is not possible to go further in improving this target indicator. However, the right to water and sanitation is not effective for all in our country:

- from a pricing and financial point of view, there is a consensus considering that the cost is excessive when the water bill exceeds 3% of households income. Also, some reports estimate that nearly a million households in France have access to water at a price considered excessive in relation to their income.

- from a geographical point of view, specificities are encountered especially in mountain areas or in overseas territories. In addition, in Mayotte around 25% of the population lacks access to drinking water at home. Furthermore, in La Reunion there are water cuts.
- from a population point of view, right to water is not effective for more than 100,000 people who have no permanent or direct access to water and sanitation, including homeless people and people living in precarious habitat or migrants.

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

For each target set in this area:

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

With regard to sanitation, France must comply with European directives, in particular Directive 2000/60/EC and Directive 91/271/EEC.

Regarding collective sanitation, the target is to ensure a free collection system with no discharge in dry weather and to ensure the compliance rate of wastewater treatment plants (WWTP), which currently stands at around 98%. In order to continue compliance of networks and WWTP, the Health Action Plan 2012-2018 was launched. This action plan and the related relation are available on the website of the ministry responsible for the environment: http://assainissement.developpement-durable.gouv.fr/

Regarding non-collective sanitation, the target is to achieve that 97 % of rural population has a compliant sewage system by end 2016. This target was set by the law on water and aquatic environments of 30 December 2006. Almost all homes have a sewerage system. Priority Action focuses on on-site sanitation systems posing environmental or health problems. Each year 4% of on-site sanitation systems are renewed.

In addition, the National Health and Environment Plan PNSE3 (2015-2019) defines as a target the publication of a National action plan on non-collective sanitation, which was realized by ministries responsible for ecology and health. Targets of this new plan of actions, running until 2019 are to improve the application of the regulation on non-collective sanitation, to make mechanisms more reliable, more sustainable and more understandable for users, to give greater visibility of the sector to the industrial world and to ensure the professionalization of actors, from design to facility inspections. The Action Plan and related regulations are available on the website: http://www.assainissement-non-collectif.developpement-durable.gouv.fr/

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.

In its reports submitted in 2013 for the previous period, France described in detail legislative and regulatory provisions on sanitation. Since then, France has published especially the following texts:

Decree No. 2015-1039 of 20 August 2015 on the public service management of urban rain water;

Decree of 21 July 2015 on collective sanitation systems and non-collective facilities, with exception of individual sewerage systems receiving a gross load of organic waste less than or equal to 1.2 kg / day BOD5;

Decree of 20 March 2015 amending the Decree of 21 December 2007 as amended on procedures for determining fees for water pollution and modernization of collection networks

Decree of 25 June 2014 amending the Decree of 2 August 2010 on the use of water from purification treatment of urban waste water for irrigation of crops or green areas


The following management measures were published by the Ministry of Ecology:

Technical Note of 7 September 2015 on the implementation of certain provisions of the Decree of 21 July 2015 on collective sanitation systems and non collective sanitation installations, with
exception of non collective sanitation receiving a lower organic pollution load or equal to 1.2kg / day of BOD5;

Technical Note of 19 January 2015 on the monitoring of the presence of micro-pollutants in water discharged into the environment through wastewater treatment plants;


3. Assess the progress achieved towards the target.

Regarding collective sanitation, the rate of non-compliant plants of more than 2,000 inhabitants Equivalents (i.e. that do not respect regulatory treatment) with regard to Urban waste water Directive decreased from 5.95% end 2011 to 3.92 end 2014. France has considerably reduced the number of these non-conformities which amounted to 20% in 2006.

Today the challenge is to verify that wastewater is collected and treated including for heavy rainfall to limit discharge of untreated wastewater.

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

Regarding collective sanitation, France was part of a non-compliant plants list evaluated in 2006 and had set a target of 100% compliance with regard to this target. The observation quickly emerged that, each year, new non-compliance appeared and had to be taken into account. The target was thus transformed to maintain 98% compliance to integrate these new non-conformities.

Today the challenge for France is to improve inclusion of rainwater in collective sanitation systems to limit discharges. For this, the Ministry of environment has set new standards of conformity for collection systems during rainy weather in its regulation. See chapter X.

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

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

For each target set in this area:

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

Law n ° 2009-967 of 3 August 2009 on the implementation of the Grenelle Environment provides in Article 27 to: generalize the detection of leaks in networks; program the required work when water losses are of excessive in relation to the type of network and situation of water resources used at a reasonable cost, without resulting in excessive water prices; ensure sustainable good clean quality water supply to meet the basic needs of citizens.

More specific objectives were introduced by Law No 2010-788 of 12 July 2010 (art. 161) on the national commitment to the environment and by Decree No 2012-97 of 27 January 2012. These targets are set at the scale of the drinking water service (producer – carrier – distributor). Targets are the following: the service must have and annually update a detailed description of drinking water transport and distribution facilities. It is considered that the service has a detailed description if the index of knowledge and patrimonial management of drinking water systems (ICGP) of the service is greater than or equal to 40 points out of 120. Such description should have been established before 31 December 2013. An action plan against leaks including a draft multiannual program for network improvement work must be set if the service network performance is below the performance threshold calculated for the service. This action plan should have been developed before 31 December 2015 if the conclusion on the performance inadequacy was made in 2013, unless the performance threshold was reached in-between.
Average efficiency from the drinking water network based on the number of inhabitants in 2012 (source: Observatory on public water and sanitation services, 2015)

<table>
<thead>
<tr>
<th>Population (number of supplied inhabitants)</th>
<th>Average efficiency of the distribution network</th>
<th>Population coverage (in total 60% of the population covered)</th>
<th>Number of services (28% of services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than de 1 000</td>
<td>70%</td>
<td>520 116</td>
<td>1 213</td>
</tr>
<tr>
<td>1 000 to 3 500</td>
<td>73%</td>
<td>2 046 310</td>
<td>1 182</td>
</tr>
<tr>
<td>3 500 to 10 000</td>
<td>76%</td>
<td>4 299 788</td>
<td>859</td>
</tr>
<tr>
<td>10 000 to 100 000</td>
<td>77%</td>
<td>13 063 010</td>
<td>583</td>
</tr>
<tr>
<td>Over 100 000</td>
<td>84%</td>
<td>19 289 810</td>
<td>55</td>
</tr>
<tr>
<td>National average</td>
<td>79.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knowledge and patrimonial management index of the drinking water network (ICGP) in 2012 (source: Observatory on public water and sanitation services, 2015)

<table>
<thead>
<tr>
<th>Population (number of supplied inhabitants)</th>
<th>Average ICGP</th>
<th>Population coverage (in total 57% of the population covered)</th>
<th>Number of services (27% of services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than de 1 000</td>
<td>45</td>
<td>512 022</td>
<td>1 261</td>
</tr>
<tr>
<td>1 000 to 3 500</td>
<td>50</td>
<td>1 913 615</td>
<td>1 118</td>
</tr>
<tr>
<td>3 500 to 10 000</td>
<td>57</td>
<td>3 953 209</td>
<td>795</td>
</tr>
<tr>
<td>10 000 to 100 000</td>
<td>66</td>
<td>12 144 860</td>
<td>540</td>
</tr>
<tr>
<td>Over 100 000</td>
<td>74</td>
<td>18 762 960</td>
<td>52</td>
</tr>
<tr>
<td>National average</td>
<td>62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Technical measures: establishment of an observatory on public water and sanitation services (this observatory provides a tool for local authorities and services operators to manage their services as part of a governance through performance, to calculate their indicators and prepare the annual report on prices and quality of services), drafting several guides to support services and authorities in leakage reduction policy, technical support for territorial departmental directorates with local authorities on this policy;

Financial measures: support provided by water agencies as part of their intervention program to fund networks descriptive studies, works to equip networks and through calls for projects to finance leaking pipe sections change, support provided by the Deposits and Consignments Fund upon request of the ministry of environment, in order that it offers to local authorities and services loans at low rates for works to improve the performance of their network;

Information measures: communication of existing targets and existing reporting via various internet platforms (e.g. SISPEA), information and awareness of local authorities on good network management by water agencies;

Tax measures: doubling the levy on water withdrawal for the following use “drinking water supply”: year n + 1 if year n ICGP is less than 40 out of 120 (doubling continues over the following years to reach the ICGP threshold), year n + 3 if year n service performance is below the performance threshold and that at the end of year n + 2 the action plan against leaks is not implemented (except if the performance threshold is reached in the meantime. It remains a “simple” doubling event if the above two case arise simultaneously.

In addition, Water Development and Management Master Plans (SDAGE) 2016-2021 include measures aiming at securing drinking water distribution.

3. Assess the progress achieved towards the target.
The first data at the scale of services, for the activity of year 2014, were collected by Water Agencies. However, these data are not yet stabilized and validated and therefore cannot be provided in the context of this reporting.

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

It appeared that the target date originally scheduled, i.e. 2013 was inappropriate, especially because local authorities did not have sufficient technical support to implement this policy. It was postponed to 2014 by Article 36 of Law No 2014-1655 of 29 December 2014 on revised budget.

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

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

For each target set in this area:

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

Treatment targets are set by Directive 91/271/EEC concerning urban waste-water treatment according to the size of the urban area and the sensitivity of the environments (sensitive areas or not). They are transposed into the National sanitation action plan 2012-2018. The target of the ministry of environment is to maintain the current compliance rate of wastewater treatment plants (WWTP), which is around 98%, because there will always be annually a percentage from 2 to 3% of new non-conformities related to load changes and obsolescence of some structures. Each end of year is established a list of newly urban areas and WWTP that are non-conforming or saturated, or requiring new deadlines as sensitive areas. As of 31 December 2014, it was expected that conformity of the most delayed WWTP would be completed in 2019.

The second cycle of the Water Framework Directive also requires achieving good water status by 2012. Achieving this target requires to strengthen treatments on a number of WWTP and to reduce discharge of collection systems in case of wet weather. Strengthening phosphorus or ammonia nitrogen treatment should be considered in new sensitive areas.

When sectoral directives apply (swimming, shellfish aquaculture…) treatment level and collection must be adapted to these challenges.

Regarding non collective sanitation installations, the target is to eliminate any environmental or health impact. All deadlines of urban waste water treatment Directive have already been exceeded. If new non-conformities appear in dry or wet weather then the challenge is to solve this problem as quickly as possible.

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

With regard to the urban waste water treatment Directive, regulatory measures are the following (application of the circular of 8 December 2006): formal notice to meet deadlines, consignment of amounts if deadlines are not respected, blocking urban planning projects in case of non compliance, pending the start of works, records and judicial proceedings followed by the prosecutor in some cases.

Financial measures taken by water agencies are: abolition of allowances for treatment in case of non-compliance, implementation of contracts with local authorities and reduction of support in case of non compliance with deadlines. Water agencies are continuing their support programs. In some cases, regions and departments are involved. In overseas departments, the European Union (EU funds) intervenes as well as the National Office for Water and Aquatic Environments (ONEMA).
There is need to prevent any new cases of non-compliance. Any new WWTP declared non-
compliant must ensure compliance as soon as possible. Hence dashboards are published to monitor
the work at national level.

All data on collective sanitation are available on the internet providing access to these data for
more than 400 water stakeholders daily. The dissemination of these data has also an important
economic role allowing companies to organize their market.

Regarding the water framework directive, water development and management master Plans
(SDAGE) were voted end 2015 for each major river basin for the period 2016-2021. These
SDAGEs include programs of measures to be implemented to achieve the targets of the water
framework directive.

Dissemination of environmental quality data is a way to get to know the environments and to
facilitate the adoption of appropriate measures. Concerning non collective sanitation, an action plan
was set to promote a comprehensive approach.

3. Assess the progress achieved towards the target.

Regarding Directive 91/271/EEC concerning urban waste water treatment, non-compliance rate of
WWTP of more than 2,000 inhabitant-equivalents increased from 5.95% in 2011 to 3.92% in 2014.

Regarding the Water Framework Directive, biochemical demand in oxygen dropped by almost half
over the period 1998-2012, a result of improved performances achieved by WWTP, even if the
indicator is fairly stable since 2008. Ammonium, another parameter characteristic of the
effectiveness of purifying treatments, also confirms a clear decreasing trend (~62%), but more
influenced by low rainfall for years 2003, 2005 and 2011, which resulted in a bad dilution.
Similarly, orthophosphate nearly reduced by half over the period, the combined effect of a
significant reduction of agricultural inputs and of an improvement of urban plants performance.

Regarding non collective sanitation, pollution being diffuse, impact is much more difficult to
identify especially because all receiving environments (soil or surface areas) have an important
self-purifying capacity in relation to low pressures of pollution induced.

Regarding sectoral directives please refer to specific chapters of the report. If collection systems of
plants have an impact on a swimming area or a shellfish aquaculture area, measures must be taken
at the earliest stage to stop this impact. Numerous WWTP in coastal areas have already set up a
removing system for microbiology but nowadays it is fundamental to have a very significant
reduction in discharges during wet weather.

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

Targets to be achieved and measures to implement, for surface water and groundwater, have been
updated for the second cycle of the Water Framework Directive. The SDAGE 2016-2021 set the
targets for each water body and major guidelines to achieve these targets.

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

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

For each target set in this area:

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

Catchment protection is a requirement in France since 1964 through the establishment of protection
perimeters (PP) by declaration of public interest.

In addition, National Health and Environment Plan PNSE 3 (2015-2019) define several important
actions to improve drinking water quality:
• Implement protection of catchments used to supply drinking water against accidental pollutions and diffuse pollutions;
• Monitor priority emergency substances in catchment used to supply drinking water against accidental pollutions and pollutions;
• Promote the implementation of health safety plans for drinking water supply (it is one of the 10 priority actions to implement and to decline in the Regional Health and Environment Plan PRSE 3);
• Develop a national actions plan on micro-pollutants in water.

Finally, it should be recalled that a framework of targets also existed in previous plans, such as the National Health and Environment Plan PNSE 2 (2009-2013):
• Ensure protection of supply areas of the most threatened 500 catchments;
• Improve knowledge and reduce the risks associated with medications release into the environment, in order to develop a national actions plan.

Achieving targets of PNSE 2 has been assessed by the High Council for Public Health (HCSP), whose report, published in September 2013, is available online: http://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=379.

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.

Protection of catchments used for drinking water supply:

General inspection services of ministries responsible of ecology, health and agriculture published in 2014 an expert report aimed at improving efficiency and at simplifying provisions on the protection of catchment areas of drinking water. Based on these findings, a national multi-sectoral working group on catchments, led by the ministries meets periodically.

Promoting the development of health safety plans for water supply:

The Code of public health (CSP) provides for the establishment of a permanent monitoring of water quality, conducted by the individual responsible for the production of distribution of water (PRPDE), based on an identification of dangers presented by the supply system of drinking water. This monitoring, complementary to health control managed by regional health agencies (ARS), is not limited to an analytical verification of water quality, but also includes an audit of measures taken for the protection of used resource and of operation of the installations, and the conduction of a health file gathering all information collected for monitoring. PRPDE are also encouraged to implement a quality management system including hazard identification and actions to control them.

These provisions are consistent with the assessment approach and the health risk management introduced by Directive 2015/1787/EC amending Annexes 2 and 3 of Directive 98/83/EC. In June 2015, they were the subject of a conference with the ARS.


The presence of medication residues in the environment is a topic that questions and mobilizes many stakeholders in France. The national plan on medication residues in water (PNRM), published in 2011 by the ministries responsible for health and ecology was completed in 2015. This plan aimed particularly at bringing together stakeholders and at creating a national dynamic to improve knowledge on the existence and the effects on both the environment and human health, from medication in water. In addition, the European Commission introduced in 2013 new European requirements for Community policy in the water field, by setting up a system of vigilance lists regarding particular medication. The upcoming set up of a strategy on water pollution by medication at European level is expected. Achieving the PNRM targets has been the subject of a report prepared by the joint secretariat of ministries responsible health and ecology, in conjunction with the steering committee and the scientific support group.

3. Assess the progress achieved towards the target.

Catchment protection through the establishment of protection perimeters is monitored closely by the Ministry of Health (see Figure 1). In October 2015 in France, 72.3% of catchments were protected (81.6% of the water flow). Regarding catchment protection against diffuse pollution, 1000 priority catchments were identified in the Water Development and Management Master Plans
(SDAGE) for the period 2016-2021, approved in December 2015. Progress on developing action plans for the first 500 priority catchments (called "Grenelle") is the following: delimitation study of the catchment area was conducted for 91% of the catchment, and the action plan has been validated for 64% of catchments.

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

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

Figure 1 – Evolution of data on catchment protection in France
(Source: SISE-Water - Ministry of Health / Regional Health Agencies)
VIII. Application of recognized good practice to the management of sanitation (art. 6, para. 2 (f) continued)

For each target set in this area:

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

   See Chapters IV and VI of this report.

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.

   Actions implemented by the ministry responsible for the environment on sanitation are:

   • Renewed Action Plan on sanitation for the period 2012-2018;
   • Publication of a new decree, Decree of 21 July 2015, regulating collective and non collective sanitation receiving a gross load of organic pollution higher than 1.2 kg/day of BOD5;
   • Publication of a technical note of 7 September 2015 specifying provisions to be complied for monitoring the natural environment in wet weather at the collection systems level and performance achieved in terms of waste water collection;
   • Promotion of integrated management (at the source) of rainwater and alternative techniques (such as swale, trenches, rain gardens, etc.). The policy of the ministry responsible for the environment is directed towards reducing soil sealing in order to favour infiltration of rainwater;
   • Publication of a national actions Plan on non collective sanitation for the period 2015-2019;
   • Implementation of trainings courses for actors and involvement of central administration in conferences to communicate about this policy;
   • Updated by the decentralized services of databases and their validation at regional and national levels in order to have reliable data;
   • Development of a single national IT platform for data exchange (Vers'eau);
   • Development of new IT tools to channel regulatory information and self-monitoring on sanitation (Wake for data relating to sewage sludge spreading plans and campaigns and Reed for self-monitoring raw data and operation);
   • Data transparency through publication and presentation on a website dedicated to all public collective sanitation which completely falls within the scope of open government data;
   • Availability for water stakeholders on sanitation through this sanitation portal of numerous information on collective sanitation, http://assainissement.developpementdurable.gouv.fr/
• - Publication and monitoring of national scorecards on non-conformities situation in treatment plants regularly elaborated and updated with a request for variation at basin level.

An IT tool “Géocoucou” has been deployed can allow water stakeholders on the ground to cross pressure and impact. http://www.deb.developpement-durable.gouv.fr/

Water police services, National Office for Water and Aquatic Environments (ONEMA) and Water agencies are directly involved in the implementation of this work.

3. Assess the progress achieved towards the target.

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

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

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

For each target set in this area:

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

Directive 91/271/EEC concerning urban waste water treatment stipulates that all wastewater produced by the urban area is collected, transported and treated before its release into the environment. This obligation is included in articles R.2224-10 articles and R.2224-11 of the general code of local authorities and in the decree of 21 July 2015 on collective sanitation.

During dry weather, necessary actions to comply with Urban Waste Water Treatment Directive are almost complete. The Commission allows direct wastewater discharges during dry weather if they represent less than 1% of the gross load of organic pollution of the urban area sanitation, within the limit of 2,000 inhabitant-equivalents. Such tolerance corresponds to non chronic releases, of short duration, low rate and low frequency and not affecting compliance with the target of the Directive.

Regarding non collective sanitation, almost all homes have now a more or less efficient individual sanitation system, but 4% of the installations must be renewed each year. Priority is given to facilities that pose health or environmental problems.

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.

See Chapter IV-2 and VI-2 of this report.

Contractors set up a monitoring of collection systems and of treatment plants in order to maintain and verify their effectiveness and to control the absence of direct discharge of untreated wastewater in dry weather.

In case of problems, measures, coercive if necessary, are taken by services in charge of monitoring the compliance of installations.

3. Assess the progress achieved towards the target.
See Chapters IV and VI-3 of this report.

Today, almost all urban areas of sanitation no longer discharge untreated wastewater during dry weather. Priority is given to discharges of untreated sewage during wet weather.

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

See Chapter VI-4 of this report.

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

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

*For each target set in this area:*

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

Today, one of the main areas of work at national level concerning collective sanitation concerns the reduction of discharges of untreated sewage during wet weather, from a qualitative and quantitative perspective.

Indeed, discharges of untreated wastewater during wet weather cause:

- Bathing areas and shellfish aquaculture areas decommissioning and food poisoning of many people eating seafood,
- Non-compliance with targets in some Natura 2000 areas for emblematic species (white-clawed crayfish, freshwater pearl mussel),
- Failure to achieve good ecological and chemical status of the Water Framework Directive,
- Widespread contamination of our rivers and lakes by pathogenic germs that may cause public health problems in connection with boating, reuse of river water, river fishing,
- Massive contamination of rivers and oceans by micro and macro waste causing death of hundreds of thousands of fish, marine mammals and seabirds. This issue is in direct link with the targets of the Marine Strategy Framework Directive strategy.

It is therefore essential to better take into account this issue at global scale, issue which is part of the Urban Waste Water Treatment Directive.

The target set by national legislation is to intercept and treat wastewater until situations of heavy rainfall that correspond to the 95 percentile of flow arriving at the plant (called reference flow). If necessary, considering the targets of the Water Framework Directive, more ambitious goals can be imposed by the water police services.

Technical Note of 7 September 2015 of the ministry responsible for ecology recalled provisions to respect on monitoring of direct discharges to the environment by collection systems during wet weather. To comply with the meaning of the Urban Waste Water Treatment Directive, the note specifies that collection systems must meet one of the following three options:
• Discharges during wet weather represent less than 5% of the volumes of wastewater produced by sanitation urban area during a year;

• Discharges during wet weather represent less than 5% of pollution stream produced by sanitation urban area during a year;

• Less than discharges 20 days were recorded during a year at the level of each storm overflow subject to regulatory self-monitoring.

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.

To assess compliance of collecting systems according to one of the above mentioned criteria, the decree of 21 July 2015 provides that the following structures be subject to self-monitoring without delay:

• Storm overflow (and pumping stations overflows located downstream of an area serviced entirely or partly by a unitary network) located downstream of a section for collecting a gross load of organic pollution (CBPO) by dry weather superior or equal to 120 kg/d BOD5 (unitary or mixed network). Such monitoring measures the daily discharge time and an estimate of discharges volumes.

Monitoring this type of storm overflows can be limited if the prefect decides so, to storm overflows which represent minimum 70% of direct discharges to the environment. The choice of this form of monitoring is a decision of the prefect and must be specified in an authorization decree and in the self-monitoring manual.

• Storm overflow (and pumping stations overflows located downstream of an area serviced entirely or partly by a unitary network) located downstream of a section for collecting a gross load of organic pollution (CBPO) by dry weather superior or equal to 600 kg/d BOD5 (unitary or mixed network) and discharging more than 10 calendar days per year on five-year period average (unitary and mixed network). Such monitoring consists of a measurement of continuously discharged volumes and an estimate of pollution flow discharged. The pollution load discharged into the receiving environment is estimated based on the concentration of unpurified wastewater measured at the entry of the wastewater treatment plant.

• Overflows of pumping stations in separate system located downstream of a section for collecting a gross load of organic pollution (CBPO) by dry weather superior or equal to 120 kg / day of BOD5. Such monitoring consists of a measure of the daily discharge time.

The second step to assess the compliance of collection systems is to use a national program to ensure the right match between the rates at the entry of the plants and the objectives set by regulations. In case of problems, measures, coercive if necessary, are taken by services in charge of monitoring installations compliance.

The programs of measures included in the water development and management master plans (SDAGE) may also provide for special measures.

3. Assess the progress achieved towards the target.

See Chapter VI-3. Progresses are to be estimated with respect to environmental quality evolution. But rainfalls are intermittent by definition, quality parameters of integrators (biological indices, etc.) may be affected by phenomena of occasional massive discharges while physicochemical quality seems good.

Provisions of new decree of 21 July 2015 and of the technical note of 7 September 2015 are expected to improve the situation and reduce discharges of untreated wastewater during wet
weather. The decree of 21 July 2015 reinforces the primacy given to management at the source in optimizing sanitation systems.

For the quality of shellfish aquaculture areas, see corresponding section.

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

See Chapter VI-4 of this report.

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

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

For each target set in this area:

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

See Chapter VI-1 of this report. Targets are defined in national legislation which derives from European regulations. The decree of 21 July 2015 specifies the treatment levels to be respected. This decree is a transcript of European Directives.

This regulation is available online on the sanitation portal: http://assainissement.developpementdurable.gouv.fr/

Treatment targets are to be achieved for a daily volume entering at or below the reference rate, corresponding to the 95 percentile of flows arriving at the station, and excluding unusual situations described in the order of 21 July 2015 (maintenance, disaster natural, breakdowns etc.).

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.

See Chapter VI-2 of this report.

To achieve the target, contractors of treatment plants have to set up a monitoring of their systems according to parameters and at intervals defined in national regulation. Such monitoring information is transmitted to the service responsible for monitoring sanitation facilities which rules according to their values on the compliance or noncompliance of the sanitation system.

In addition, service in charge of monitoring can carry out on site monitoring to monitor compliance with the requirements of national regulations.

3. Assess the progress achieved towards the target.

See Chapter VI-3 of this report.

In 2012, performance achieved by plants to destroy macro-pollutants were 96% for BOD5, 92% for COD, 85% for phosphorus, 75% for overall nitrogen and 85% for NTK.

In 2010, performance achieved by plants to destroy macro-pollutants were 94% for BOD5, 89% for COD, 77% for phosphorus, 65% for overall nitrogen and 80% for NTK.
4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

See Chapter VI-4 of this report.

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

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

For each target set in this area:

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

There is no quantitative target. The qualitative target is to ensure sustainability of sludge management resulting from the treatment of waste water, by adapting the regulatory framework to ensure sustainable sludge management, by improving scientific knowledge to anticipate and by supporting technical and economic actors in the sector to help them in their choices. It is a national scope target within the 2012-2018 Plan “for a sanitation policy contributing to aquatic quality targets”.

This target was taken considering the existing will to favour sludge recycling, particularly through agricultural development and to reduce to a bare minimum waste into landfills.

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 spreading practices are regulated by the water law which requires systematic reporting to the State representative (Prefect), providing impact study and management plans as well as realising the traceability of the spread lands. Pollutants concentrations (7 metals, 3 PAH and sum of 7 main PCB) contained in spread sludge are regulated, monitored and limited. Limit flows spread on the soil over 10 years are planned. Sludge may not be spread when soils have certain characteristics. National requirements for these practices result from the requirements of Directive 86/278 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture.

Studies of sewage sludge are also planned and funded annually by the National Office for Water and Aquatic Environments (ONEMA) to improve scientific knowledge in the area.

3. Assess the progress achieved towards the target.

In 2014, 55% of the sludge was directly spread on agricultural land, 35% were used for the production of compost, used in agriculture, 3% was incinerated and 2% was sent to a landfill site.

The following table shows sludge use evolution over several years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Valorization by agricultural spreading</th>
<th>Valorization by composting</th>
<th>Incineration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>55</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>58</td>
<td>31</td>
<td>3</td>
</tr>
<tr>
<td>2010</td>
<td>48</td>
<td>23</td>
<td>21</td>
</tr>
</tbody>
</table>
4. In the review of progress achieved towards the target, has it appeared that the target and target date need to be revised, e.g., in the light of scientific and technical knowledge? If so, and if the revised target and target date have already been adopted, please describe them.

Security and control of agricultural sludge valorisation require attention and a high involvement of all stakeholders. The ministry responsible for ecology led in this context especially the following work:

- Management of a guarantee fund for risk related to agricultural spreading of municipal or industrial wastewater sludge, which implementing decree was published in 2009. The fund, requested especially by the agricultural profession, aims to compensate farmers and land owners, if land having received of urban or industrial sewage sludge spreading, become totally or partially unfit for cultivation due to the creation of a health risk or to the occurrence of an environmental damage related to the spreading.
- Follow-up to a mission of general councils of ecology and agriculture on the spreading nutrient materials of residual origin.
- Mandatory use of computerized monitoring of the spread land of sludge on agricultural soils, from 1 January 2016.
- Active monitoring of the problem of polluting substances, especially organic contaminants, via research activities and via the introduction of mandatory monitoring of hazardous substances for water in sludge at wastewater treatment plants of more than 10 000 inhabitant-equivalents.

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

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

For each target set in this area:

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

National Health and Environment Plan PNSE 3 (2015-2019) defines two targets related to reuse of treated wastewater:
- Participate in European work on defining criteria for the reuse of treated wastewater;
- Accompany the testing of two model treatment plants with reuse of treated wastewater for currently unregulated uses.

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.

Ministries responsible for health, ecology and agriculture published the Decree of 25 June 2014 amending the Decree of 2 August 2010 on the use of water coming from the purification of treated urban waste water for irrigation of crops or green areas.
Provisions of this legislation providing a frame for the reuse of treated wastewater to ensure protection of public health and the environment by protecting people handling crops, consumers of products irrigated this way and irrigation professionals, and people attending irrigated green spaces and residents. It applies to urban waste water treatment plants and to non collective sanitation installation of more than 20 inhabitant-equivalents. Only irrigation of crops or green areas is allowed. Other uses, such as washing roads, are not part of its scope.

The decree defines use limitations (possibility or not according to irrigation mode), distance and terrain, according to the quality level of treated wastewater. It requires the establishment of a quality monitoring program of treated waste water and of the soil quality that will be irrigated, as well as traceability of irrigation operations. Use limitations are related to the nature of irrigated vegetation and associated risks. Regarding green areas accessible to the public, irrigation should take place outside opening hours to the public.

Distance limitations have also been established to protect some sensitive activities (swimming, shellfish aquaculture, etc.).

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

Not applicable

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

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

For each target set in this area:

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

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

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

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

Major provisions are those incurred vis-à-vis protecting catchments used for drinking water supply mentioned in paragraph VII and in the regulatory framework established in France, detailed in the report of the previous period.
XV. Quality of waters used for bathing (art. 6, para. 2 (j), second part)

For each target set in this area:

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

The target is to comply with the provisions of national legislation transposing Directive 2006/7/EC.

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

3. Assess the progress achieved towards the target.

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

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

The framework of the overall objective in France is the one detailed in the report of the previous period. Bathing water quality is assessed annually and is subject to reporting to the European authorities whose conclusions are public: http://www.eea.europa.eu/fr/publications/qualite-des-eaux-de-baignade-6.

![Figure 2 – Evolution of the quality of sea bathing water in France from 1991 to 2014](Source: 2014 Report of the European Environment Agency)

In France, 97.4% of all existing sea bathing waters was at least of sufficient quality in 2014.
In France, 89.1% of existing freshwater bathing waters were at least sufficient of quality in 2014.

Results of health inspections of bathing water quality are available online on the website of the ministry responsible for Health: http://baignades.sante.gouv.fr/baignades/editorial/fr/accueil.html

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

For each target set in this area:

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

Water quality objectives for shellfish aquaculture were adopted by the Water Framework Directive, after the abrogation of Quality of shellfish waters Directive. These targets are transposed into French law in Article D.211-10 of the Environmental Code where are indicated guide values and mandatory values for different parameters (O2 content, metals, hydrocarbons, fecal coliforms, etc.).

Production and harvesting of shellfish areas are regulated on the basis of a health ranking by group of shell, in the interests of public health and particularly within the framework of European regulations. Shellfish harvesting areas are subject to requirements of the “hygiene package” (especially (EC) regulations No 853/2004 and 854/2004). As such, the state services monitor classified areas to ensure good health of shellfish consumed.
In addition, Water Development and Management Master Plans (SDAGE) should encourage the development of shellfish vulnerability profiles, according to Articles R.214-15 and R.214-8 of the Code of environment. Vulnerability profiles aimed at identifying, quantifying and prioritizing different sources of microbiological pollution that may affect shellfish areas in order to define actions to reduce and manage health risk.

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

Since 2012, an atlas of French shellfish areas presents these shellfish areas and their health classification (http://www.atlas-sanitaire-coquillages.fr/). It is established on the basis of prefectural decree of ranking, provided by Departmental Directorates of the territories and the sea. Determined on the basis of the results of analyzes conducted on shellfishes from the area, these classifications reflect the microbiological quality of these shellfishes and their contamination by chemical contaminants.

This classification is complemented by frequent monitoring that allows to determine the possible level of shellfish contamination, which can lead, as a result, to areas management procedures (temporary closures and other restrictive measures in case of detected contamination), in order to ensure consumer health protection.

In addition, the decree of 21 July 2015 on waste water treatment systems secures additional measures to improve discharge plants quality and collection system to protect aquaculture areas. The prefect may enact stricter standards to protect shellfish areas and special monitoring of the environment can be set up when shellfish use may be compromised.

3. Assess the progress achieved towards the target.

In 2015, quality could be determined for 304 areas with sufficient data: 12 areas (3.9%) present a good quality (A) 261 areas (85.9%) present an average quality (B), 22 areas (7.2%) poor quality (C) and 9 areas (3%) a very poor quality. Areas classified for burrowing (group 2) have more degraded contamination profiles. In total, 260 points have a historic over 10 years of data on the period 2006-2015. For 239 monitoring locations (91.9%), the test is not significant and no trend is identifiable. 10 points present a tendency to increase the levels of contamination (3.8%) and 11 have a tendency to decrease (4.2%). In 2015, 171 “REMI” alerts were triggered, including 17 of level 2. 87 were preventive alerts (analysis triggered by suspected contamination) only 8 showed contamination. The number of alerts related to detected contamination is thus only 92.

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

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

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

For each target set in this area:

1. Describe the target, target date and baseline conditions. Please include information on whether the target is national or local, and intermediate targets as relevant. Also include information on the background and justification for the adoption of the target.
The framework of the overall objective in France is the one detailed in the report of the previous period.

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.

Specific management measures were published by the Ministry of health:
- Information Note DGS/EA 4/2014/166 of 23 May 2014 on census modalities, sanitary control exercise and classification of bathing water for each bathing season from year 2014.

3. Assess the progress achieved towards the target.

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

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

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

For each target set in this area:

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

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

3. Assess the progress achieved towards the target.

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

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

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

For each target set in this area:

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

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

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

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

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

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

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

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

3. Assess the progress achieved towards the target.

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

5. If you have not set a target in this area, please explain why.
Part Four
Overall evaluation of progress achieved in implementing the Protocol

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

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

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

Suggested length: up to 3 pages

Part Five
Information on the person submitting the report

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

Name of officer responsible for submitting the national report: M. Yannick Pavageau
E-mail: yannick.pavageau@sante.gouv.fr
Telephone number: + 33 1 40 56 74 43

Name and address of national authority: Ministère des affaires sociales et de la santé, Direction générale de la santé, Sous-direction de la prévention des risques liés à l’environnement et à l’alimentation, Bureau de qualité des eaux, 14 avenue Duquesne, F-75 350 Paris 07 SP

Signature:
Date: 11 April 2016

Submission

Parties are required to submit their summary reports to the joint secretariat, using the present template and in accordance with the adopted guidelines on reporting, by 18 April 2016. Submission of the reports ahead of this deadline is encouraged, as this will
facilitate the preparation of analyses and syntheses to be made available to the third session of the Meeting of the Parties.

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

**Joint Secretariat to the Protocol on Water and Health**

United Nations Economic Commission for Europe  
Palais des Nations  
1211 Geneva 10  
Switzerland  
E-mail: protocol.water_health@unece.org  

and  

World Health Organization Regional Office for Europe  
WHO European Centre for Environment and Health  
Water and Sanitation Programme (WSN)  
Platz der Vereinten Nationen 1  
53113 Bonn  
Germany  
E-mail: watsan@ecehbonn.euro.who.int