

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

## Part One

### General aspects

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

YES  NO  IN PROGRESS

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

They were published on the UNECE Protocol's homepage (in English and German). The webpage of the German Federal Environment Agency (FEA) is currently undergoing major overhaul, and its re-launch is planned for 2013. The new webpage will contain a link to the targets under the Protocol on Water and Health.

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.

Target setting in Germany was coordinated between the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Health as well as the FEA and the Robert-Koch-Institute (RKI). The responsible 16 German federal states' authorities/ministries had participated in the target setting process. Already established working structures with regard to water management and health issues had been used. Before submitting the targets to the Secretariat of the Protocol on Water and Health, they were coordinated with the Federal States through the German Working Group on water issues of the Federal States and the Federal Government (LAWA) and the Working Group on environmental health protection of the Federal States (LAUG). Amendments were gathered and a final consultation had taken place. The final paper has been adopted in the plenary meetings of both Working Groups.

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

All relevant existing national, EU and international strategies and legislation and its current developments, as well as non-statutory guidance (e.g. technical standards) were taken into consideration for all target setting areas, and stated in the respective target setting sections below. WHO instruments, like for example the WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, have also been taken into account.

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

No cost-benefit analysis was performed, as it has not been necessary for the targets Germany has set.

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 Federal Republic of Germany would have had to set its targets by April 2009. It was in particular due to the implementation of the EC Water Framework Directive (Directive 2000/60/EC) which took place during the same period that setting the targets was delayed. However, this delay allowed Germany to take into account the results of the public participation concerning the river basin management plans and programmes of measures in accordance with said directive, which also cover water supply and sanitation. Experience has shown that it is challenging to create public interest and therefore public participation in an area where there is limited potential for setting major national targets in view of the already achieved high connection and protection level in water supply and sanitation. Therefore, no additional participation of the public concerning the targets set in accordance with the Protocol on Water and Health was conducted within this process.

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.

For the main stakeholders involved, see also answer to question 3. above.

This report has been prepared based on existing information in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Health, as well as the FEA and the RKI, principal government agencies working under the umbrella of both ministries. Information was sought on some aspects from the German Technical and Scientific Association for Gas and Water (DVGW). Other stakeholders have not been involved.

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).

Germany is a federal state. To provide water supply and sanitation is in the responsibility of the municipalities of the 16 German federal states. The federal level is mainly responsible for the legal provisions and for the international relationships with regard to water management and health issues.

Descriptions of targets set under the Protocol are contained as submitted to the Secretariat in June 2011 ([http://www.unece.org/fileadmin/DAM/env/water/Protocol\\_on\\_W\\_H/Target\\_set\\_by\\_parties/germany\\_protocol\\_targets.pdf](http://www.unece.org/fileadmin/DAM/env/water/Protocol_on_W_H/Target_set_by_parties/germany_protocol_targets.pdf)). For description of the baseline conditions in the target setting areas, we refer to the respective sections of this target setting paper of 2011.

No additional particular circumstances are necessary for understanding this 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.

Regulation of legionella in drinking water was identified as an emerging issue for which action could be taken (see national target a.2 below).

No specific targets were set on other emerging issues, such as e.g. demographic change, micropollutants, regaining phosphates from the waste water treatment cycle etc. However, where relevant, these issues have been considered in the baseline analyses of the target setting.

## Part Two

### Common indicators<sup>1</sup>

#### I. Quality of the drinking water supplied

##### A. Context of the data

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

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

Figures reported under this indicator are for all central water supplies which provide drinking water to more than 5,000 inhabitants or serve more than 1,000 m<sup>3</sup>/day, respectively. In 2010, 70.16 million people (85.8 % of the population) were supplied with central water supplies of this size. A consolidated overview of non-compliance for supplies serving less than 5,000 inhabitants with respect to number of samples taken is currently not available. Data available on non-compliance for these small supplies only relates to number of supplies, not to number of samples taken, and can therefore not be feasibly compared to the data for the larger supplies.

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

Water supply systems reported under this indicator supply both urban and rural areas.

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

Both quality data for samples taken at the outlet of the treatment works and within the distribution system, as well as at the point of consumption are reported in the following sections.

The scope of sampling from drinking water distribution systems is to be coordinated with the pertinent local health authorities, and varies between supply systems accordingly.

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.<sup>2</sup>

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

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

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

Parameter	WHO guideline value (GV)	German drinking water ordinance value
Enterococci	No health-based GV established	0/100ml
Nitrite	3 mg/l (short-term exposure) 0.2 mg/l (long-term exposure)	0.5 mg/l 0.1 mg/l not to be exceeded at the water works outlet
Lead	0.01 mg/l	0.025 mg/l (valid up to 30 Nov 2013) 0.010 mg/l (starting 1 Dec 2013)
Iron	No health-based GV established	0.2 mg/l
Total pesticides	No health-based GV established	0.0005 mg/l
THM	The sum of the ratio of the concentration of each to its respective guideline value should not exceed 1	Total THM: 0.05 mg/l
Sulfate	No health-based GV established	250 mg/l
Turbidity	No health-based GV established	1 NTU

## 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*.

WatSan_S2	Baseline value (year 2005)	Current value (year 2010)
<b>E. coli</b>	water works and distribution: 0.2 %	water works and distribution: <0.1 %
	consumers' taps: 0.2 %	consumers' taps: <0.1 %
<b>Enterococci</b>	water works and distribution: 0.4 %	water works and distribution: 0.2 %
	consumers' taps: 0.4 %	consumers' taps: <0.1 %

## C. Chemical quality

Indicator to be used: WatSan\_S3. All countries shall monitor and report on the percentage of samples that fail to meet the national standard for chemical water quality with regard to the following:

- Fluoride;
- Nitrate and nitrite;<sup>3</sup>
- Arsenic;
- Lead;
- Iron.

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

<sup>3</sup> As defined in the WHO Guidelines for drinking-water quality.

<b>Substance</b>	<b>Baseline value (year 2005)</b>	<b>Current value (year 2010)</b>
<b>Fluoride</b>	water works and distribution: 0.0 % consumers' taps: 0.0 %	water works and distribution: 0.0 % consumers' taps: 0.0 %
<b>Nitrate and nitrite</b>	water works and distribution: Nitrate: 0.2 % Nitrite: 0.0 % consumers' taps: Nitrate: 0.1 % Nitrite: 0.1 %	water works and distribution: Nitrate: <0.1 % Nitrite: 0.0 % consumers' taps: Nitrate: 0.0 % Nitrite: 0.0 %
<b>Arsenic</b>	water works and distribution: 0.1 % consumers' taps: 0.1 %	water works and distribution: 0.0 % consumers' taps: 0.0 %
<b>Lead</b>	water works and distribution: 0.0 % consumers' taps: 2.1 %	water works and distribution: 0.0 % consumers' taps: 0.2 %
<b>Iron</b>	water works and distribution: 1.7 % consumers' taps: 2.6 %	water works and distribution: 0.7 % consumers' taps: 0.1 %
<b>Additional chemical<sup>4</sup> parameter 1: Copper</b>	water works and distribution: 0.0 % consumers' taps: 2.0 %	water works and distribution: 0.1 % consumers' taps: 0.0 %
<b>Additional chemical parameter 2: Total pesticides</b>	water works and distribution: 0.3 % consumers' taps: 0.1 %	water works and distribution: 0.2 % consumers' taps: 0.0 %
<b>Additional chemical parameter 3: THM</b>	water works and distribution: 0.0 % consumers' taps: 0.0 %	water works and distribution: 0.0 % consumers' taps: 0.0 %
<b>Additional chemical parameter 4: Sulphate</b>	water works and distribution: 0.4 % consumers' taps: 0.3 %	water works and distribution: 0.2 % consumers' taps: 0.0 %
<b>Additional chemical parameter 5: Turbidity</b>	water works and distribution: 0.8 % consumers' taps: 1.0 %	water works and distribution: 0.0 % consumers' taps: 0.0 %

<sup>4</sup> It is recommended to take into account new and emerging pressures such as climate change, or agriculture practices.

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

In filling out the following table, please specify if the numbers reported are related to all exposure routes or only related to water (in which there is epidemiological or microbiological evidence for water to have facilitated infection).<sup>5</sup>

	<b><i>Incidence (No. of cases) (all exposure routes)</i></b>		<b><i>Number of outbreaks &gt;4 cases (all exposure routes*)</i></b>	
	<b><i>Baseline (2009)</i></b>	<b><i>Current value (2012)</i></b>	<b><i>Baseline (2009)</i></b>	<b><i>Current value (2012)</i></b>
Cholera	0	0	0	0
Bacillary dysentery (shigellosis)	614, thereof 202 autochthonous	526, thereof 208 autochthonous	4	0
EHEC <sup>a</sup>	837, thereof 757 autochthonous	1,531, thereof 1,285 autochthonous	1	3
Viral hepatitis A	925, thereof 631 autochthonous	831, thereof 554 autochthonous	5	7
Typhoid fever	63, thereof 9 autochthonous	58, thereof 6 autochthonous	0	0

<sup>a</sup> Enterohaemorrhagic E. coli.

\* There is no confirmation for any of the outbreaks that these were actually caused by drinking water.

<sup>5</sup> If possible, please distinguish between autochthonous and imported cases

### III. Access to drinking water

<i>Percentage of population with access to drinking water</i>	<i>Baseline value (2005)</i>	<i>Current value (2010)</i>
Total	100%	100%
Urban	100%	100%
Rural	100%	100%

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

Under the German Drinking Water Ordinance of 21 May 2001 (TrinkwV 2001), last amended through the 2<sup>nd</sup> amending regulation of 05 December 2012, the requirements governing drinking water quality must be met by all drinking water supplies, regardless of their size, the quantity supplied, the number of persons served, or organizational and ownership structures. Therefore, the minimum requirements cited in the Ordinance apply to both centralized public water supply systems and private wells, which are all subject to surveillance by the authorities. Both centralized supplies and private wells are included in the figures given above on access to drinking water. Access is not defined in terms of volume available per day and capita. According to JMP definitions, 100 % of the population of Germany has access to improved sources. The vast majority of 99.2 % has access to household connections of piped supplies; a minority uses private wells with piped connections into home, too, typically employing protected dug wells, boreholes and protected springs.

The WHO/UNICEF<sup>6</sup> Joint Monitoring Programme (JMP) for Water Supply and Sanitation defines access to water supply in terms of the types of technology and levels of service afforded. Access to water-supply services is defined as the availability of at least 20 litres per person per day from an “improved” source within 1 kilometre of the user’s dwelling. An “improved” source is one that is likely to provide “safe” water, such as a household connection, a borehole, a public standpipe or a protected dug well.

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

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<sup>6</sup> United Nations Children’s Fund.

#### IV. Access to sanitation

<i>Percentage of population with access to sanitation</i>	<i>Baseline value (2005)</i>	<i>Current value (2010)</i>
Total	100 %	100 %
Urban	100 %	100 %
Rural	100 %	100 %

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

German statistics cover population connected to public sewers (with or without connection to wastewater treatment plants) and population not connected to public sanitation (with connection to small scale wastewater treatment plants or with septic tanks). Both public sewers and decentralized sanitation are improved sanitation; in 2010, 96.6 % of the population had access to public sanitation, and the remaining 3.4 % had access to decentralized sanitation.



## 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<sup>7</sup> 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

<i>Percentage of surface water falling under class<sup>a</sup></i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year)</i>
I		
II		
III		
IV		
V		
Total number/volume of water bodies classified		
Total number/volume of water bodies in the country		

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

#### Status of groundwaters

<i>Percentage of groundwaters falling under class<sup>a</sup></i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year)</i>
I		
II		
III		
IV		
V		
Total number/volume of groundwater bodies classified		
Total number/volume of groundwater bodies in the country		

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

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<sup>7</sup> Please specify.

## For European Union countries

### Ecological status of surface water bodies (Comment: Including ecological potential for artificial and heavily modified water bodies)

<i>Percentage of surface water classified as:</i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year) (Comment: Next evaluation of status due in 2015)</i>
High status	1.6 % (2009)	1.6 % (2009)
Good status	9.5 % (2009)	9.5 % (2009)
Moderate status	30 % (2009)	30 % (2009)
Poor status	34 % (2009)	34 % (2009)
Bad status	23 % (2009)	23 % (2009)
Total number of water bodies classified	9,567 (2009)	9,567 (2009)
Total number of water bodies in the country	9,863 (2009)	9,863 (2009)

### Chemical status of surface water bodies

<i>Percentage of surface water bodies classified as</i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year) (Comment: Next evaluation of status due in 2015)</i>
Good status	88 % (2009)	88 % (2009)
Poor status	12 % (2009)	12 % (2009)
Total number of water bodies classified	9,863 (2009)	9,863 (2009)
Total number of water bodies in the country	9,863 (2009)	9,863 (2009)

### Status of groundwaters

<i>Percentage of groundwaters classified as</i>	<i>Baseline value (specify the year)</i>	<i>Current value (specify the year) (Comment: Next evaluation of status due in 2015)</i>
Good quantitative status	96.2 % (2009)	96.2 % (2009)
Good chemical status	62.7 % (2009)	62.7 % (2009)
Poor quantitative status	3.8 % (2009)	3.8 % (2009)
Poor chemical status	37.1 % (2009)	37.1 % (2009)
Total number of groundwater bodies classified	989 (2009)	989 (2009)
Total number of groundwater bodies in the country	989 (2009)	989 (2009)

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).

According to the Water Framework Directive the status of water bodies is evaluated every six years. In this time the measures in the programmes of measures to improve water status can show first effects. The next overall evaluation of water bodies' status will be published in 2015.

For 2 % of the surface water bodies, the ecological status has not been evaluated due to missing methods or unclear conditions.

Water for drinking water in Germany is taken mostly from groundwater bodies and partly from surface water bodies. It is treated according to the quality of the raw water.

## 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.

*Comment: In Germany data based on this calculation are not collected and therefore not available.*

<b><i>Water gained or used / water exploitation index</i></b>	<b><i>Baseline value (specify the year)</i></b>	<b><i>Current value (specify the year)</i></b>
Agriculture	309 million m <sup>3</sup> (2001)*	1% (2011)
Industry <sup>a</sup>	27.2 billion m <sup>3</sup> (2007) **	19 % (2007) processing industry 60 % (2007) energy production, esp. cooling
Domestic use <sup>b</sup>	3.8 billion m <sup>3</sup> (2004) ***	13 % (2007) public water services

<sup>a</sup> Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.

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

\* *I.e. water gained by the agricultural, forest and fishery sectors*

\*\* *I.e. water gained directly by enterprises from surface freshwater or groundwater. In Germany, data were collected for the first time in 2007.*

\*\*\* *I.e. water provided for private households and small enterprises.*

## Part Three

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

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

For each target set in this area:

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

**National target a.1:** To improve access to information and sensitize the owners of private wells to the potential hazards to drinking water quality and their obligations under the Drinking Water Ordinance.

Target date: 31 December 2011

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 3.

**National target a.2:** To revise the national Drinking Water Ordinance

Target date: 31 December 2011 (target has been achieved earlier)

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 5.

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.

**National target a.1:** Please refer to target setting paper of 08.06.2011, page 4.

**National target a.2:** Please refer to target setting paper of 08.06.2011, page 7.

3. Assess the progress achieved towards the target.

**National target a.1:** The advice booklet was first published in February 2012. A second edition (which takes into account the recent changes in the German Drinking Water Ordinance of 21 May 2001 (TrinkwV 2001) since publication of the first edition) is currently being developed and planned to be printed and available in 2013.

The booklet is mainly distributed through local health agencies that hand it out to operators of private wells during their inspection activities. The authorities responsible for drinking water on Federal State level were asked to invite all local health agencies in their area of responsibility to use and distribute the booklet. Furthermore, it can be directly ordered and downloaded from the website of the Federal Environment Agency. Feedback shared on the booklet was throughout positive, and local health agencies confirmed its continued use in their work practice.

**National target a.2:** The revised Ordinance was published in the Bundesgesetzblatt (Federal Law Gazette) on 11 May 2011 and entered into force on 1 November 2011. An additional revision of the Ordinance was published in the Bundesgesetzblatt on 13 December 2012 and entered into force on 14 December 2012. Through the second revision, local health agencies were disburdened, the surveillance with respect to legionella in house installations was simplified, and it was stipulated that binding and clear hygiene requirements for materials in contact with drinking water will be developed, amongst other things. The individual national targets described (i.e. aspects of clear regulations on legionella, introduction of a parametric value for uranium, reduction of the parametric value for cadmium, introduction of special

consumer information obligations, comprehensive and specific regulations for water supply facilities in vehicles and temporarily operated water supplies, requirement for the official accreditation of certification bodies for products in contact with drinking water, and a requirement for the matrix-specific accreditation of drinking water analysis laboratories) were addressed through the two revisions of the Drinking Water Ordinance (TrinkwV 2001).

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.

Please see answer to question 3 above.

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.

**National target:** To maintain the Federal Ministry for Health's (BMG) support of the Conciliary Laboratory for Legionella. In connection with *Legionella*, reference is made to letter a 2) "Revision of the Drinking Water Ordinance".

Target date: No target date.

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 8.

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.

Please refer to target setting paper of 08.06.2011, page 10.

3. Assess the progress achieved towards the target.

The Federal Ministry for Health (BMG) continues to support the Conciliary Laboratory for Legionella. Furthermore, Germany fully participates in the European Legionnaires' Disease Surveillance Network (ELDS-NET) since October 2012, located at ECDC in Stockholm. The aim of the network is the early detection of clusters of travel-associated Legionnaires' disease (TALD) in Europe in order to identify and eliminate the source of infection.

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.

### **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.

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.

According to JMP-definition, 100 % of the population in Germany has access to improved drinking water supplies. As such, it is not possible to improve this area any further.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 11.

#### **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.

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.

In view of the connection levels achieved, no target has been set. In 2010, 100 % of the German population was connected to collective sanitation systems or other means of sanitation.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 13.



## 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.

**National target:** To describe and subsequently continuously improve drinking water quality from small-scale public drinking water supplies.

Target date: Continuous improvement. It is not yet possible to specify a target date.

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 17.

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.

Please refer to target setting paper of 08.06.2011, page 18.

3. Assess the progress achieved towards the target.

For 2008 and 2010, upon special request of the EU Commission, summary reports on the quality of drinking water have been prepared. However, so far these reports are not yet available in the public domain. With the Federal-Länder government information and communication platform *WasserBLick*, the technical basis for reporting, which could generally also be used for small supplies, has already been established (see section XX below). Some Federal States are already reporting data on smaller supplies that provide 10-1,000 m<sup>3</sup> per day.

Some discussion with some Federal States is currently still ongoing regarding regular reporting of drinking water quality for supplies delivering 10-1,000 m<sup>3</sup> at a national level.

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.

**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.

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.

In view of the high level of performance achieved by sanitation systems in Germany, especially with regard to wastewater collection and treatment, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 15.

## **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.

**National target:** To increase the number of water utilities with TSM confirmation and ensure compliance with the technical standards.

Target date: 31 December 2013

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 20.

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.

Please refer to target setting paper of 08.06.2011, page 21.

3. Assess the progress achieved towards the target.

The target date has not yet been reached. At the time of reporting, 361 companies were certified for the water sector (according to <http://www.dvgw.de/angebote-leistungen/technisches-sicherheitsmanagement-tsm/>, status 05 March 2013), representing a 3 % increase in the number of certified utilities.

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.

**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.

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.

In view of the high standards regulated for the management of sanitation, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 19.

## **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.

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.

In view of the rarity of such cases in Germany and the sufficient existing legal provisions, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 22.

**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.

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.

In view of the rarity of such cases in Germany and the sufficient existing legal provisions, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 22.

## **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.

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.

In view of the high performance levels of wastewater treatment plants in Germany and the sufficient existing legal and technical provisions, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 24.

## **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.

**National target:** To update the national Sewage Sludge Ordinance (AbfKlärV). The EC Sewage Sludge Directive (Directive 86/278/EEC) regulates the protection of the environment, and in particular of the soil, when using sewage sludge in agriculture. The Directive was transposed into German national law with the Sewage Sludge Ordinance (AbfKlärV), which imposes far more stringent requirements than the Directive. These requirements will be tightened up still further in the on-going revision of the AbfKlärV, extending the Ordinance's scope of validity to include horticultural measures, give greater consideration to organic pollutants, and regulate the hygiene safety of sewage sludge, as well as ensuring regular, voluntary quality assurance. By imposing high standards for sewage sludge (including organic and inorganic pollutants) that is recovered for use in soil, it is possible to reduce or avoid cultivation-related emissions from fertilisers, particularly into the soil, and to promote a sustainable closed substance cycle in the interests of resource conservation.

Target date: 31 December 2011

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 26.

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 regulatory process to update the Sewage Sludge Ordinance has started in 2011 and is still ongoing due to some delays in the interministerial discussions on Federal level.

3. Assess the progress achieved towards the target.

After the finalisation of the interministerial discussions a draft updated ordinance will be consulted with the relevant stakeholders in the second half of 2013.

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

The target has not changed, but the target date had to be revised. It is assumed that the updated Sewage Sludge Ordinance comes into force in the first half of 2014.

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.

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.

In view of the very little amount of waste water used for irrigation purposes and the fact, that domestic waste water cannot be applied to agricultural land according to national legal provisions, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 26.

**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.

In view of the existing protection of waters as sources for drinking water, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 19.

## **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.

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.

No target has been set, due to the rather high percentage of German bathing waters in compliance with the EU provisions and the clear provisions in the EU Bathing Water Directive. In the 2011 bathing season 94 % of the bathing waters had been in excellent, good or sufficient quality.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 29.

**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.

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.

Due to the existing sufficient EU and national legal provisions and due to the fact that Germany is in compliance with them, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 30.

## **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.

**National target:** To update the technical regulations on swimming pool water

Target date: 31 December 2012

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 32.

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.

Please refer to target setting paper of 08.06.2011, page 33.

3. Assess the progress achieved towards the target.

The standard DIN 19643 (parts 1-4) has been updated, including taking into account 551 appeals, and was published in November 2012. The Federal Environment Agency (FEA) envisages informing professionals of the changes and additions contained in the updated standard, e.g. through presentations and publications. These changes and additions are in particular changes in the requirements relating to swimming pool- and bathing water, new assessment and measures for detection of legionella in bathing water, inclusion of requirements for additional parameters in bathing water (bromate, chlorate, chlorite and arsenic), new chlorination-process (inline-electrolysis), UV treatment as an option for removal of chloramines from bathing water, and inclusion of a new filtration process (membrane filtration as ultrafiltration) for water treatment.

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 (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.

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.

In view of the statutory provisions already in force in Germany, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 34.

**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.

In view of effective existing management systems, no target has been set.

For further information on the baseline analysis, please refer to the target setting paper of 08.06.2011, page 36.

**XX The frequency of the publication of information on the quality of the drinking water supplied and of other waters relevant to the targets in this paragraph in the intervals between the publication of information under article 7, paragraph 2 (art. 6, para. 2 (2)).**

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 target:** To publish regular reports and consumer information on drinking water quality in water supply zones that deliver more than 10 m<sup>3</sup> of water per day or supply more than 50 people.

Target dates: 31 December 2011 (extending "WasserBLick" to include an interface for drinking water) and 31 December 2013 (annual publication of the drinking water quality report in large water supply zones).

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 38.

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.

Please refer to target setting paper of 08.06.2011, page 40.

3. Assess the progress achieved towards the target.

The reporting data from most of the Federal *Länder* is submitted in electronic format to the aforementioned national reporting portal, "WasserBLick". This portal has been extended to include drinking water reporting, and all national implementation data is entered into the WISE system from there.

The target date for annual publication of the drinking water quality report in large water supply zones has been postponed to 31 December 2015.

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.

Please see answer to question 3 above.

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



## **XXI Additional national target area: Improved national communication and education on water-related issues**

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.

**National target:** To improve Federal communication and education of the general public on the topics of drinking water, bathing and swimming, with particular consideration for children's health.

Target date: 31 December 2013

Baseline conditions: Please refer to target setting paper of 08.06.2011, page 42.

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.

Please refer to target setting paper of 08.06.2011, page 43.

3. Assess the progress achieved towards the target.

1. *UBA brochure on drinking water: "Rund um das Trinkwasser"*: The first and second editions of the brochure "*Rund um das Trinkwasser*" were published in 2011. The brochure is very well perceived and accepted amongst the general public. The document can be ordered directly through the UBA-website, and is also being distributed at the events of others, as for example water suppliers.
2. *Creation and maintenance of a catalogue of frequently asked questions (FAQs)*: A re-launch of the UBA website is scheduled for mid-2013. It is planned to publish the FAQs within the scope of this re-launch.
3. *Children's book and quiz*: The children's book was published in 2012, and the quiz went online in 2012. There is very high demand for the children's book which is very popular. The 3<sup>rd</sup> edition will be printed in 2013; all 3 editions were 30,000 copies each. Readings by the author for school classes, where the issue of water is presented to children in this extraordinary way, are also very popular. The quiz has been developed, and can be played online at the UBA-website. Children as well as adults like playing it at public events, such as on fairs and at open house days. Teachers are using the quiz to introduce the topic water in their classes.
4. *Website*: Revision of UBA's website in the section on drinking water is currently ongoing, and scheduled to be completed within 2013.

5. *Short films*: UBA's website is to include a library of short films on the topic of drinking water. It is planned to develop short films, based on the characters depicted in the children's book. To date, no films have been included on UBA's website.
6. *UBA brochure on bathing waters*: It is planned to develop an advice booklet, informing the general public on the topics of bathing waters and swimming by the end of 2014. This shall cover internal and external pools, as well as bathing waters. In addition to the technical / scientific topic of quality and treatment of pool waters and quality of natural bathing waters, the topic of health care in relation to swimming as physical exercise will also be covered.

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.

Please see answer to question 3 above.

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 article 9 on public awareness, education, training, research and development and information; article 10 on public information; article 11 on international cooperation; article 12 on joint and coordinated international action; article 13 on cooperation in relation to transboundary waters; and article 14 on international support for national action.

This analysis or synthesis should provide a succinct overview of the status 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.

A lot of the provisions of the Protocol on Water and Health have already been implemented in Germany. The access to drinking water and sanitation is overall provided. Provisions with regard to drinking water quality, quality of drinking water resources, good status of waters, water management etc. are existing and are implemented in practical terms.

Generally, Germany is on track with achieving the targets set. Some target dates are in the future, and their accomplishment can therefore not be fully assessed at this stage.

Education, training and informing the general public, including particularly children and adolescents, is an essential part considered in the target setting process. The underlying assumption is that an informed public can today and in the future provide a fundamental contribution to water related issues, such as water safety and protection of water sources. Information for the public is provided, and recent research results and policy developments are communicated in a timely manner in order to ensure their widespread perception and application. Public consultation with regard to water management issues and projects is guaranteed according to EU and national law. A lot of research projects with regard to emerging issues are ongoing, be it for example on climate change and its effects on water resources, or on resource efficient processes i.e. concerning waste water treatment. Improvements with respect to access to drinking water are not possible anymore in Germany.

The quality of drinking water supplied by large water supplies has already reached a high level, and has partly even improved further since the last reporting exercise under the Protocol. Therefore, measures targeting at these supplies are not sensible for Germany.

Therefore, target setting and measures with respect to drinking water focus on

- Keeping up the generally good status and the high level of health protection
- Improving the situation of small scale water supplies
- Improving existing deficiencies of drinking water installations in buildings, including e.g. the control of legionella and regulating materials in contact with drinking water, for example through

regulating these issues in the German Drinking Water Ordinance of 21 May 2001 (TrinkwV 2001) which was amended in 2012, and thus initiating improvement.

Target setting and measures with respect to enclosed bathing water focus on updating assessment and measures for detection of legionella, formulating requirements for additional parameters in bathing water (bromate, chlorate, chlorite and arsenic), and new treatment-processes for treatment of bathing water through revising the standard DIN 19643 "Treatment and disinfection of water used in bathing facilities".

Only 20 % of the available freshwater resources in Germany are currently used. Germany has no bigger water quantity problems, only in some regions and under certain weather conditions. As Germany is a densely populated country the water uses are manifold. Water pollution from point sources and diffuse sources are prevailing problems, but tackled by existing EU and national legal provisions that Germany always tries to be in compliance with. Water ecology, mainly biology, is another main issue, especially due to the provisions of the EU Water Framework Directive. A lot has to be done in this field too in Germany. Healthy ecosystems will also help with regard to continued implementation of the Protocol in the upcoming years.

No major improvements with respect to access to improved sanitation are possible in Germany. The level of performance achieved by sanitation systems in Germany is already rather high.

Germany strives for keeping up the high level performance in the sanitation sector, will improve the handling of sewage sludge (see target set) and will further discuss upcoming issues and problems, e.g. the demographic change (less wastewater causes longer water stays in the sewers), energy efficient wastewater treatment, presence of new pollutants (e.g. drug residues), recovery of usable waste water constituents and effects of climate change (presumably more heavy rain events in the future). No further specified targets with regard to implementing the Protocol can be set yet.

International cooperation takes place in six international river basin commissions or bodies as well as in 4 bilateral transboundary waters' commissions. The cooperation covers all water management issues like surface and groundwater quality, water ecology, flood protection, warning and alarm systems in case of accidents etc. Drinking water and sanitation are also issues in those international discussions. The above mentioned commissions, especially the international ones, are platforms to coordinate the implementation of EU water directives on river basin level, especially the EU Water Framework Directive and the EU Flood Risk Management Directive. Detailed information on international cooperation in river basins could be inter alia found in the compilation of transboundary cooperation fact sheets as part of the so called Blueprint of the EU Commission, see <http://ec.europa.eu/environment/water/water-framework/implrep2007/pdf/Governance-Transboundary%20Fact%20Sheets.pdf>.

Germany also cooperates with a lot of countries in the framework of the UNECE Water Convention and of course the Protocol on Water and Health. International support for national action is not really relevant for Germany.

Germany, together with the Czech Republic and the non-governmental organisation Women in Europe for a Common Future e.V. (WECF), leads the activity on small-scale water supplies and sanitation under the current Programme of Work of the Protocol. Particularly under this activity, Germany has contributed to international cooperation, joint and coordinated international action, and international support for national action through the following:

- Development of a draft policy guidance document: This document will include case examples of how policy instruments were applied in countries in the region. This will include information on success factors and challenges encountered during implementation, thus facilitating the exchange

of information on policy instruments and programmes applicable in the European Region. BMU provided financial support for this activity.

- Data collection on small scale water supplies through a questionnaire exercise: Comprehensive information on small scale water supplies within the European Region (including e.g. on how such systems are regulated) was requested from the countries in the region through a questionnaire exercise. The data will be assessed, and shall feed into the policy guidance document, thus also facilitating exchange of information within the region.
- Pilot projects funded and technically supported by Germany: A pilot project in Georgia, establishing an improved evidence base on the situation of small scale water supplies in two pilot districts, was funded under the BMU/ UBA Advisory Assistance Programme and conducted with technical support from Germany. Results of this project can serve as a thorough basis for target setting in the area of small scale water supplies. In Tajikistan, a pilot project on the implementation of Water Safety Plans (WSP) in small scale water supplies, funded by BMU, was carried out.

## Part Five

### Information on the person submitting the report

The following report is submitted on behalf of the Federal Republic of Germany in accordance with article 7 of the Protocol on Water and Health.

Name of officer responsible for submitting the national report: Ms. Bettina Rickert

E-mail: Bettina.rickert@uba.de

Telephone number:

+49 (0) 37437 76256

Name and address of national authority:

On behalf of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Health:

Federal Environment Agency

Heinrich-Heine-Straße 12

09645 Bad Elster

Germany

Signature:



Date: 26 April 2013

### Submission

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

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

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

United Nations Economic Commission for Europe

Palais des Nations

CH-1211 Geneva 10

Switzerland

E-mail: protocol.water\_health@unece.org

and

Regional Office for Europe of the World Health Organization

WHO European Centre for Environment and Health

Hermann-Ehlers-Strasse 10

53113 Bonn – Germany

E-mail: watsan@ecr.euro.who.int