FORMAT FOR SUMMARY REPORTS UNDER THE PROTOCOL ON WATER AND HEALTH

PART ONE: GENERAL ASPECTS

1. Provide brief information on the process of target-setting in your country, e.g. which public authority (ies) took the leadership and coordinating role, which public authorities were involved, how coordination was ensured, which existing national and international strategies and legislations were taken into account, how cost-benefit analysis of target sets was performed.

In Germany, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Health have taken the leadership and the coordination role. The ministries are supported by the Federal Environment Agency (FEA) and the Robert-Koch-Institute (RKI), principal government agencies working under the umbrella of both ministries. The water and health ministries of the 16 federal states responsible for water and sanitation have been involved via the existing coordination and working groups. Germany as an EU member state has to implement several EU directives, which deal with drinking-water and sanitation as well as water management issues. Therefore the relevant national approaches, achievements, legal provisions etc. with regard to these directives have been taken into account.

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

The target setting process in Germany is still ongoing. Experience has shown that it will be challenging to create public interest and therefore public participation in an area where there is limited potential for setting major national targets. The public participation process with regard to the implementation of the EU Water Framework Directive was finalized in June last year. Germany currently explores options of public participation in the target setting process according to the Protocol's requirements.

3. 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.

As the target setting process in Germany is still ongoing, Germany fills in the first two parts of this questionnaire, based on existing information in the two ministries (mentioned under section 1 above) as well as the FEA and RKI. Other stakeholders have not been involved.

4. 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).

Not applicable because the target setting process has not been finalized yet.

5. 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.

For drinking-water, both naturally occurring uranium as well as occurrence of legionella and leglegionellosis are emerging issues which will be considered in the target setting process.

Potential impacts of climate change to water management and health issues in Germany are currently being evaluated at the national level, including the formulation of adaptation strategies and research needs. As trends and impacts on water and health still need to be better understood, this issue will not be considered in the current cycle of the target setting process.

PART TWO: COMMON INDICATORS[1]

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:

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 m³/day, respectively. In 2007, 65.49 million people (79.9 % of the population) were supplied with central water supplies of this size. A consolidated overview of water quality data for supplies serving less than 5,000 inhabitants is currently not available.

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. 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.
(follow link to Comment no. 1)

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	240 mg/l
Turbidity	No health-based GV established	1 NTU

[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.

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 2007)
E. coli	water works: 0.2 % consumers' taps: 0.2 %	water works: 0.1 % consumers' taps: 0.2 %
Enterococci	water works: 0.4 % consumers' taps: 0.4 %	water works: 0.3 % consumers' taps: 0.3 %

C. Chemical quality

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

- Fluoride,
- Nitrate and nitrite[2],
- Arsenic,
- Lead
- Iron.

Parties shall also identify five additional health-relevant chemical parameters that are of special concern in their national or local situation (e.g. pesticides).
(follow link to Comment no. 2)

Substance	Baseline value (year 2005)	Current value (year 2007)
Fluoride	water works: 0.0 % consumers' taps: 0.0 %	water works: 0.0 % consumers' taps: 0.0 %
Nitrate and nitrite	water works: Nitrate: 0.2 % Nitrite: 0.0 % consumers' taps: Nitrate: 0.1 % Nitrite: 0.1 %	water works: Nitrate: 0.1 % Nitrite: 0.0 % consumers' taps: Nitrate: 0.0 % Nitrite: 0.0 %
Arsenic[3] *(follow link to Comment no. 3)*	water works: 0.1 % consumers' taps: 0.1 %	water works: 0.0 % consumers' taps: 0.0 %
Lead	water works: 0.0 % consumers' taps: 2.1 %	water works: 0.0 % consumers' taps: 1.0 %
Iron	water works: 1.7 % consumers' taps: 2.6 %	water works: 0.8 % consumers' taps: 1.5 %

[2] As defined in the WHO Guidelines.
[3] If relevant for the country.

Substance	Baseline value (year 2005)	Current value (year 2007)
Additional chemical[4] parameter 1: Copper	water works: 0.0 % consumers' taps: 2.0 %	water works: 0.0 % consumers' taps: 0.9 %
Additional chemical parameter 2: Total pesticides	water works: 0.3 % consumers' taps: 0.1 %	water works: 0.5 % consumers' taps: 0.2 %
Additional chemical parameter 3: THM	water works: 0.0 % consumers' taps: 0.0 %	water works: 0.2 % consumers' taps: 0.4 %
Additional chemical parameter 4: Sulphate	water works: 0.4 % consumers' taps: 0.3 %	water works: 0.2 % consumers' taps: 0.7 %
Additional chemical parameter 5: Turbidity	water works: 0.8 % consumers' taps: 1.0 %	water works: 0.2 % consumers' taps: 0.4 %

If your country calculates an integrated value reflecting overall compliance with chemical quality of drinking water, please report it below:

(follow link to Comment no. 4)
Standard value exceedances for physico-chemical and indicator parameters covered by the national drinking-water ordinance:

	Baseline value (year 2005)	Current value (year 2007)
Integrative chemical failure rate	water works: 0.2 % consumers' taps: 0.4 %	water works: 0.1 % consumers' taps: 0.2 %

[4] 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

For incidence, please report the total number of cases per year from all exposure routes.
For the number of outbreaks, please report cases that could be potentially related to water.

It was assumed that imported infections were not relevant within the scope of reporting under the Protocol, and therefore the number of autochthonous infections / outbreaks is given for pathogens often imported as well (based on nationally collected surveillance data). There is no confirmation for any of the outbreaks that these were actually caused by drinking water.
(follow link to Comment no. 5)

	Incidence		**Number of outbreaks potentially related to water**	
	Baseline (year 2005)	**Current value (year 2009)**	**Baseline (year 2005)**	**Current value (year 2009)**
Cholera	0	0	0	0
Bacillary dysentery (shigellosis)	1,170, thereof 416 autochthonous	614, thereof 202 autochthonous	4, thereof 1 autochthonous	4, thereof 0 autochthonous
EHEC[5]	1,161, thereof 995 autochthonous	837, thereof 757 autochthonous	5, thereof 4 autochthonous	1, thereof 1 autochthonous
Viral hepatitis A	1,218, thereof 771 autochthonous	925, thereof 631 autochthonous	3, thereof 2 autochthonous	5, thereof 1 autochthonous
Typhoid fever	80, thereof 15 autochthonous	63, thereof 9 autochthonous	0	0

III. ACCESS TO DRINKING WATER

In 2007, approximately 99.2% of the German population was connected to a central water supply, whereas approximately 700.000 inhabitants operate their own small-scale water supplies (wells which also comply with the definition of an 'improved' water supply, e.g. protected dug wells, boreholes etc.). The number does not vary significantly, and it is not considered feasible for hygienic and economic reasons to significantly reduce the number of these small-scale water supplies.

Percentage of population with access to improved drinking water	**Baseline value (2005)**	**Current value (2007)**
Total	100%	100%
Urban	100%	100%
Rural	100%	100%

The Joint Monitoring Programme (JMP) 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

[5] Enterohaemorrhagic *E. coli*.

availability of at least 20 liters per person per day from an "improved" source within 1 kilometer 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 "improved" drinking water from which the above percentages are calculated differs from the JMP, please provide the definition and describe your means of calculation.

IV. ACCESS TO SANITATION

Percentage of the population with access to improved sanitation, including small decentralized sewerage systems, septic tanks and safe excreta disposal.

Percentage of population with access to improved sanitation	Baseline value (2005)	Current value (2008)
Total	100%	100%
Urban	100%	100%
Rural	100%	100%

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

V. EFFECTIVENESS OF MANAGEMENT, PROTECTION AND USE OF FRESHWATER RESOURCES

Water quality

On the basis of national systems of water classifications, the percentage of the number of water bodies or the percentage of the volume (preferably) of water[6] falling into 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

Percentage of surface water falling into class[7]	Baseline value (specify the year)	Current value (specify the year)
I		
II		
III		
IV		
V		

[6] Please specify.
[7] Rename and modify the number of rows as requested by the national classification system.

Status of groundwaters

Percentage of groundwaters falling into class[8]	Baseline value (specify the year)	Current value (specify the year)
I		
II		
… to be completed in accordance with national groundwaters classification systems		

For European Union countries:

(follow link to Comment no. 6)

Ecological status of surface water

Percentage of surface water classified as of	Baseline value (2009)	Current value (specify the year)
High status	2%	
Good status	8%	
Moderate status	30%	
Poor status	34%	
Bad status	23%	
Not classified	3%	

Chemical status of surface water

Percentage of surface water classified as of	Baseline value (2009)	Current value (specify the year)
Good status	88%	
Poor status	8%	
Not classified	4%	

Status of groundwaters

Percentage of ground-waters classified as of	Baseline value (2009)	Current value (specify the year)
Good status	63%	
Poor status	37%	

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 no related to all water resources).

[8] Rename and modify the number of rows as requested by the national classification system

Water use

Water exploitation index at the national and river basin levels for each sector (agriculture, industry, domestic): mean annual abstraction of freshwater by sector divided by the mean annual total renewable freshwater resource at the country level, expressed in percentage terms.

In Germany data based on this calculation are not collected and therefore not available. The amount of water gained and used by certain sectors or industries is collected and available. The German federal statistics agency collects different data (water gained, water used, water provided etc.) in different years, some examples see below in the table.

Water gained or used	Baseline value (see below)	Current value (see below)
Agriculture	309 million m³ (2001)*	-
Industry[9]	27.2 billion m³ (2007) **	-
Domestic use[10]	3.8 billion m³ (2004) ***	3.6 billion m³ (2007)***

* *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.*

[9] Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.

[10] 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

I. QUALITY OF THE DRINKING WATER SUPPLIED, (ARTICLE 6, PARAGRAPH 2 (a))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

II. REDUCTION OF THE SCALE OF OUTBREAKS AND INCIDENTS OF WATER-RELATED DISEASE (ARTICLE 6, PARAGRAPH 2 (b))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

III. ACCESS TO DRINKING WATER (ARTICLE 6, PARAGRAPH 2 (c))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

IV. ACCESS TO SANITATION (ARTICLE 6, PARAGRAPH 2 (d))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

V. LEVELS OF PERFORMANCE OF COLLECTIVE SYSTEMS AND OTHER SYSTEMS FOR WATER SUPPLY (ARTICLE 6, PARAGRAPH 2 (e))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

VI. LEVELS OF PERFORMANCE OF COLLECTIVE SYSTEMS AND OTHER SYSTEMS FOR SANITATION (ART. 6 (2) (e) continued)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

VII. APPLICATION OF RECOGNIZED GOOD PRACTICES TO THE MANAGEMENT OF WATER SUPPLY, (ARTICLE 6, PARAGRAPH 2 (f))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

VIII. APPLICATION OF RECOGNIZED GOOD PRACTICE TO THE MANAGEMENT OF SANITATION (ART. 6, PARAGRAPH 2 (f)) continued)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

IX. OCCURRENCE OF DISCHARGES OF UNTREATED WASTEWATER (ART. 6, PARAGRAPH 2(g) (i))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

X. OCCURRENCE OF DISCHARGES OF UNTREATED STORM WATER OVERFLOWS FROM WASTEWATER COLLECTION SYSTEMS TO WATERS WITHIN THE SCOPE OF THE PROTOCOL (ART. 6, PARAGRAPH 2 (g) (ii))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XI. QUALITY OF DISCHARGES OF WASTEWATER FROM WASTEWATER TREATMENT INSTALLATIONS TO WATERS WITHIN THE SCOPE OF THE PROTOCOL (ART. 6, PARAGRAPH 2 (h))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XII. DISPOSAL OR REUSE OF SEWAGE SLUDGE FROM COLLECTIVE SYSTEMS OF SANITATION OR OTHER SANITATION INSTALLATIONS (ART. 6, PARAGRAPH 2 (i), first part)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XIII. QUALITY OF WASTEWATER USED FOR IRRIGATION PURPOSES (ART. 6, PARAGRAPH 2 (i), second part)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XIV. QUALITY OF WATERS USED AS SOURCES FOR DRINKING WATER (ART. 6, PARAGRAPH 2 (j), first part)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XV. QUALITY OF WATERS USED FOR BATHING (ART. 6, PARAGRAPH 2 (j), second part)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XVI. QUALITY OF WATERS USED FOR AQUACULTURE OR FOR THE PRODUCTION OR HARVESTING SHELLFISH (ART. 6, PARAGRAPH 2 (j), third part)

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XVII. APPLICATION OF RECOGNIZED GOOD PRACTICE IN THE MANAGEMENT OF ENCLOSED WATERS GENERALLY AVAILABLE FOR BATHING (ART. 6, PARAGRAPH 2 (k))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XVIII. IDENTIFICATION AND REMEDIATION OF PARTICULARLY CONTAMINATED SITES (ART. 6, PARAGRAPH 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 such target.

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XIX. EFFECTIVENESS OF SYSTEMS FOR THE MANAGEMENT, DEVELOPMENT, PROTECTION AND USE OF WATER RESOURCES (ART. 6, PARAGRAPH 2 (m))

For each target set in this area:

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

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

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

XX. ADDITIONAL NATIONAL OR LOCAL SPECIFIC TARGETS

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

1. Describe the target, target date and baseline conditions. Please include information on whether target is national or local, and intermediate targets as relevant.

2. Briefly describe the actions taken (e.g. legal/regulatory, financial/economic and informational/ educational and management measures) to reach the target and, if applicable, the difficulties and challenges encountered.

3. Briefly assess the progress achieved towards the target.

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

PART FOUR: OVERALL EVALUATION OF PROGRESS ACHIEVED IN IMPLEMENTING THE PROTOCOL

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

This analysis or synthesis should provide a succinct overview of the status, trends and threats, 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.

PART FIVE: INFORMATION ON THE PERSON SUBMITTING THE REPORT

The following report is submitted on behalf of Germany in accordance with article 7 of the Protocol on Water and Health. The officer indicated below submits the report on behalf of both the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Federal Ministry of Health.

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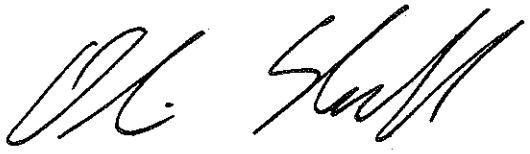
Signature: 

Date: 29 March 2010

Submission

Parties are required to submit their summary reports to the joint secretariat, using the format outlined in these guidelines, by **31 March 2010**. Submission of the reports ahead of this deadline is encouraged, as this would help facilitate the preparation of analyses and syntheses to be made available to the second 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 diskette or 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

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German comments on reporting format

Comment no. 1 At Part Two: Common Indicators, I. Quality of the drinking water supplied, B. Bacteriological quality and C. Chemical quality:
We suggest that the document specifies the point of compliance. In Germany, for example, both quality data for samples taken at the outlet of the treatment works and at the point of consumption are reported (both values given in the tables in sections B and C).

Comment no. 2 At Part Two: Common Indicators, I. Quality of the drinking water supplied, C. Chemical quality: Original text: "Parties shall also identify five additional health-relevant chemical parameters that are of special concern in their national or local situation (e.g. pesticides)."
Please specify what is exactly meant by "health-relevant". Does the term only refer to chemical parameters which have an established health-based guideline or standard value? Or does the term also include parameters which my influence consumer acceptability of drinking-water (e.g. turbidity, electrical conductivity, color, taste, sulphate etc.) and therefore may cause rejection of the water source or use of alternative, potentially unsafe water sources? We prefer the latter definition. If this is agreeable then the wording in the chapeau text and in the table needs to be changed to "physico-chemical parameters".

Comment no. 3 At Part Two: Common Indicators, I. Quality of the drinking water supplied, C. Chemical quality: Arsenic:
Please specify what is exactly meant by the footnote, i.e. "if relevant for the country". It appears unclear why this footnote refers to arsenic only. This footnote should either apply to all core parameters or to none.

Comment no. 4 At Part Two: Common Indicators, I. Quality of the drinking water supplied, C. Chemical quality: "Integrated value reflecting overall compliance with chemical quality of drinking water":
Please clarify if the term "compliance with chemical quality" is referring to compliance with national standards or WHO guideline values, for example.

Please also clarify what is exactly meant by "integrative chemical failure rate" in the table. The term "chemical failure" seems not adequate. We assume that a percentage figure for overall chemical non-compliance is referred to. However, also the coverage of parameters to be considered remains unclear. Does it, for example, refer to the 5 core parameters suggested in section C, to the list of 10 parameters chosen by the country or generally to all chemical parameters for which national legislation provides standard values?

Comment no. 5 At Part Two: Common Indicators, II. Reduction of the scale of outbreaks and incidence of infectious diseases potentially related to water:
The pathogens queried purposely represent a mix of different types of pathogens. However, there are problems with the indicators and in the way information on cases and outbreaks is queried:

Cholera and typhoid fever should be very rare in countries with a high standard of (especially drinking) water quality. However, at some point of development - when imported infections explain all, or almost all cases - their number will stabilize at a low level instead of reaching zero. Imported infections are also frequent for hepatitis A and shigellosis. Thus, to enable comparisons between countries, it appears essential to either ask only for non-imported cases (autochthonous cases) or for both imported and autochthonous cases separately.

Incidence of cryptosporidiosis and giardiasis may be better indicators than shigellosis, hepatitis A or EHEC, as for the former water is well established as an important vehicle of infection - even in highly developed countries. In contrast, shigellosis and hepatitis A have a strong component of human-to-human transmission, and EHEC is frequently (solid) food borne.

There are some technical inaccuracies in the way the table is formulated. In infectious disease epidemiology and surveillance, "incidence" is most commonly used to describe relative disease occurrence, e.g. "cases per 100,000 population". This enables direct comparison between populations/countries of different size. Incidence measures are easy to calculate on the country level as total population should be a known figure. However, in the current version of the table absolute case numbers appear to be queried.

Regarding outbreaks, it remains ambivalent in both the column headings and the introductory text whether the number of outbreaks, or the number of cases in these outbreaks is queried. Both could be valid indicators, but for comparison purposes the data request ought to be precise. For the purpose of this reporting cycle it was assumed that for this query the number of possibly waterborne outbreaks, and not the number of people involved, was to be reported.

As for the overall case number, for some of the indicator pathogens, outbreaks frequently will have an imported component (at least the index case had a travel history, secondary cases follow in the home country, frequently in the household with water an unlikely vehicle). Thus the table should either ask for only fully autochthonous outbreaks, or "imported" and fully autochthonous outbreaks separately.

Finally, there should be a precise definition of the outbreaks considered to be likely related to water. Instead of "all outbreaks of all diseases, potentially transmitted by water" or "only outbreaks where water was a proven route of infection" we suggest the middle ground along the lines of "outbreaks, in which there is epidemiological or microbiological evidence for water to have facilitated infection" (EFSA's criteria for the reporting of food borne outbreaks may be good guidance for the exact wording).

Comment no. 6 At Part Two: Common Indicators, V. Effectiveness of management, protection and use of freshwater resources, Water quality for European Union countries: *According to the EC Water Framework Directive (WFD), the first river basin management plans had to be established until 22 December 2009. The status of water bodies has been defined on the basis of these plans for the first time. Therefore there are only baseline values (if "value" is the right term anyway). The current value can not be filled in yet. The next phase is 2013/2015, when the next river basin management plans will have to be established and then a development in status can be demonstrated.*

It should read "water bodies", not "water" in all the three tables above. That is the term of the EC WFD. With regard to groundwater classification terminology should differentiate between "good quantitative" and "good chemical status" (as in the EC WFD).

In the tables giving information on the status, a line has been added for water bodies which have not been classified.