Summary report under the Protocol on Water and Health

Republic of Armenia

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 **X**

If targets have been revised, please provide details here.

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

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

In order to facilitate the target setting process, as required by Article 6 of the Protocol, and foster experience in the implementation of the Protocol in Armenia, UNECE initiated an assistance project in close cooperation with the Ministry of Nature Protection and Ministry of Health of Armenia and with the financial support of Finland through its FinWaterWei programme. Out of 20 target areas of the Protocol, 9 target areas were considered by the EUWI National Policy Dialogue Steering Committee members as priority for Armenia, and thus the UNECE/FinWaterWei project experts in consultation with national stakeholders and beneficiaries developed respective 26 targets for these priority areas.

These targets and target dates have not officially been approved yet.
Brochure on the draft targets and target dates in three languages were developed and posted on the website of the NGO "Armenian Woman for Health and Healthy Environment" and are available at *http://awhhe.am/target-setting-process-under-the-protocol-on-water-and-health-in-armen*. Furthermore, the draft targets and target dates were communicated to the secretariat of the Protocol in 2014.

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

The project was implemented by UNECE jointly with the following main partners: the Ministry of Nature Protection, the Ministry of Health, the Ministry of Territorial Administration and the NGO Armenian Women for Health and a Healthy Environment (AWHHE), which coordinated the inputs of the NGO community and provided logistical support.

The project was guided by regular meetings of the Steering Committee of European Union Water Initiative (EUWI) National Policy Dialogue (NPD) in Armenia, which was chaired by the Head of the Water Resources Management Agency (WRMA) under the Ministry of Nature Protection, and included representatives of key Armenian entities covering issues of water resources management, water supply and sanitation, health issues, as well as non-governmental organizations (NGOs). Various independent experts and representatives of donors and

international partners working on water resources management issues were also invited to participate.

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

1. Water Code of RA(2002)

2. The Law "On the National Water Programme" (NWP) (2006);

3. Government Decision No.4of February 3, 2011 "OnApproval of the Content of Model Basin ManagementPlans";

4. The Government Decision No.75 –N of January27, 2011"On defining standards for ensuring the water quality of each water basin management depending on the locality characteristics"

5. RA Government Decree- On defining further development of public-private partnership aimed to the establishing an action plan for drinking water sector reforms in Armenia, 14 August 2014, N883-N

6. RA Government Decree – On defining form and period of public-private partnership in areas serviced by Close Joint Stock Companies: <<Yerevan Djur>>, <<Armenian Water and Sewerage>>, <<Lori Water and Sewerage>> , <<Shirak Water and Sewerage>> and <<Nor Akunq>> CJSCs, 14 August 2014, 888-N

7. RA Protocol Decree at the session N38, Appendix – Financial plan and strategy of water supply and sanitation, 13 August 2014

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

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

Alternatively, please explain to what extent financial implications were taken into account when setting targets.

Detailed cost-benefit analysis was not performed. The Action Plan was developed which roughly estimated the costs for implementing targets, and identified possible sources of funding, taking into consideration the focus and sectors of the work of the water related projects and initiatives in Armenia, funded and supported by international multi- and bi-lateral donors. For each of the proposed measure responsible agency for implementation was also indicated.

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 NGO community was involved in the target setting process through stakeholder consultation meetings. Three consultation meetings, led by NGO AWHHE were held in Gyumry (northern Armenia, (2013), Gavar (central Armenia, 2014) and Yerevan (2014). They provided an opportunity to NGOs and communities to voice their concerns and priorities and to convey their comments and suggestions to the Steering Committee. In addition, this mechanism facilitated a coherent input of NGOs to the work of the Working Group. As a voting member of the Steering Committee, NGO AWHHE facilitated the communication of the results of the stakeholders meeting directly to the key ministries and organizations on behalf of the participants of the consultation meetings.

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.

Each competent authority submitted the draft completed report with relevant to their area sections to the Ministry of Nature Protection. Water Resources Management Agency of the MNP, as the leading and coordinating body for the Protocol, compiled the inputs from the Ministry of Health and the State Committee on Water Systems. The draft report was then sent to the AWHHE NGO for their comments and additions. The final version has been shared with all the involved parties. 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).

NA.

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.

A Working Group, chaired by UNECE and the Head of the WRMA, was established to facilitate the overall project management by UNECE. The coordinator of the project appointed by the Minister of Health also provided valuable inputs to the project. This Working Group was responsible for substantive work under the project, including the baseline analysis. The baseline analysis included an analysis of the existing legal framework (national and international) and the environmental and health situation considering emerging issues as well.

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 below:

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

The rationale of this question is to understand the population coverage of the water quality data reported under sections B and C below. Please describe the type of water supplies for which data is included in the following tables, and the population share covered by these supplies. Please also clarify the source of the water quality data provided (e.g., data from regulatory authorities).

98.3% of population is connected to public water supply.

Bacteriological quality 90 % (the individual wells are not included)

Chemical quality 90 % (the individual wells are not included)

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

[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.

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

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

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.

The drinking water quality requirements are set by Order of the Minister of Health of the RA - On approving sanitary norms and rules N2-III-A 2-1 ''Drinking water: the hygienic requirements to water quality of centralized water supply systems'', 25 December, 2002, N876, which by law is obligatory to meet for every water supply system in country.

Norms of maximum allowable concentrations are introduced below.

NORMS OF MAXIMUM ALLOWABLE CONCENTRATIONS OF HAZARDOUS CHEMICAL SUBSTANCES WITH SUMMARIZED INDICES, ABUNDANT IN NATURAL WATER AND SUBSTANCES OF ANTHROPOGENIC ORIGIN

Parameters	Units of measurement	Parameter values or maximum allowable concentration MAC), not more than:	Hazard index	Hazard class 1/
Summarized indices				
Hydrogen ion concentration	pH values	within the limits 6-9		
Total mineralization (solid residue)	mg/l	1000 (1500) 2/		
Total hardness	mmol/l	7,0 (10) 2/		
Permanganate oxidation	mg/l	5.0		
Petroleum products, summarized	mg/l	0,1		
Surface-active substances (SAS), anion-active	mg/l	0.5		
Phenol index	mg/l	0.25		
Inorganic substances				
Aluminum (Al 3+)	mg/l	0.5	s.-t.	2
Barium (Ba 2+)	mg/l	0.1	s.-t.	2
Beryllium (Be 2+)	mg/l	0.0002	s.-t.	1
Boron (B, summarized)	mg/l	0.5	s.-t.	2
Iron (Fe, summarized)	mg/l	0.3 (1.0) 2/	s.d.	3
Cadmium (Cd, summarized)	mg/l	0.001	s.-t.	2
Manganese (Mn, summarized	mg/l	0.1 (0.5) 2/	s.d.	3
Copper (Cu, summarized)	mg/l	1.0	s.d.	3
Molybdenum (Mo, summarized)	mg/l	0.25	s.-t.	2
Arsenic(As, summarized)	mg/l	0.05	s.-t.	2
Nickel (Ni, summarized)	mg/l	0.1	s.-t.	3
Nitrates (by NO-3)	mg/l	45	|s.d.	3

Mercury (Hg, summarized)	**mg/l**	**0.0005**	**s.-t.**	**1**
Lead (Pb, summarized)	**mg/l**	**0.03**	**s.-t.**	**2**
Selenium (Se, summarized)	**mg/l**	**0.01**	**s.-t.**	**2**
Strontium (Sr 2+/)	**mg/l**	**7.0**	**s.-t.**	**2**
Sulphates(SO4 2-)	**mg/l**	**500**	**s.d.**	**4**
Fluorides(F-)				
For climatic zones				
-I and II	**mg/l**	**1.5**	**s.-t.**	**2**
III	**mg/l**	**1.2**	**s.-t.**	**2**
Chlorides (Cl-)	**mg/l**	**350**	**s.d.**	**4**
Chromium (Cr 6+)	**mg/l**	**0.05**	**s.-t.**	**3**
Cyanides (CN-)	**mg/l**	**0.035**	**s.-t.**	**2**
Zinc (Zn 2+)	**mg/l**	**5.0**	**s.d.**	**3**
Organic substances	**mg/l**			
Lindane	**mg/l**	**0.002 3/**	**s.-t.**	**1**
DDT Total of isomers	**mg/l**	**0.002 3/**	**s.-t.**	**2**
2,4-D	**mg/l**	**0.03 3/**	**s.-t.**	**2**

Annex 3

VALUE OF MAXIMUM ALLOWABLE CONCENTRATIONS OF HAZARDOUS CHEMICAL SUBSTANCES, INTRODUCED AND ORIGINATED DURING DRINKING WATER TREATMENT IN WATER-SUPPLY SYSTEMS

Parameters	**Units of measurement**	**Standards of maximum allowable concentration (MAC), not more than:**	**Hazard index**	**Hazard class**
Chlorine 1/				
- residual free	**mg/l**	**within the limits of 0.3-0.5**	**s.d.**	**3**
- residual bound	**mg/l**	**within the limits of 0.8-0.12**	**s.d.**	**3**
Chloroform (in case of water chlorination)	**mg/l**	**0.2 2/**	**s.-t.**	**2**
Residual ozone 3/	**mg/l**	**0.3**	**s.d.**	
Formaldehyde (in case of water ozone treatment)	**mg/l**	**0.05**	**s.-t.**	**2**
Polyacrylamide	**mg/l**	**2.0**	**s.-t.**	**2**
Activated silica-acid (by Si)	**mg/l**	**10**	**s.-t.**	**2**
Polyphosphate (by PO 4 3-)	**mg/l**	**3.5**	**s.d.**	**3**
Residual quantities of aluminum and iron containing coagulants	**See "aluminum" and "iron" parameters, Table 2**			

1/ In case of water disinfection by free chlorine, its contact with the water should last for not less that 30 minutes, in case of fixed chlorine: not less than 60 minutes. The control of residual chlorine is exercised before water enters the water-distribution network. In case when both free and fixed chlorines are present in water, their total concentration should not exceed 1.2 ml/g. In particular cases higher concentration of chlorine in drinking can be allowed by approbation of Hygiene and Anti-epidemical Inspection center.

2/ The parameter value is established in accordance with proposals of World Health Organization

3/ The control of residual ozone is exercised after mixing chamber, ensuring a contact for not less than 12 minutes.

Annex 4

DRINKING WATER ORGANOLEPTIC PARAMETER VALUES

Parameter	Units of measurement	Values, not more than:
Odor	**Points**	**2**
Taste	**--"--**	**2**
Coloration	**Degrees**	**20/35/l)**
Turbidity	**turbidity unit (by formalin) or ml/g (by kaolin)**	**2.6/35/1) 1.5/2/1) |**

The value noted parenthetically can be determined by the decision of State Chief Sanitary Doctor of the region, for the given water-supply system, reasoning from the evaluation of sanitary anti-epidemical situation of the area, as well as from water processing technology.

Annex 5

DRINKING WATER RADIATION SAFETY PARAMETER VALUES

Parameter	Units of measurement	Norms	Hazard index
Total a-radiation activity	**Bq/l**	**0.1**	**radiation**
Total B-radiation activity	**Bq/l**	**1.0**	**radiation**

Annex 10

HYGIENIC VALUES OF HAZARDOUS SUBSTANCES CONTAINED IN DRINKING WATER

1. The present list includes hygienic values of hazardous substances in drinking water. This list includes those chemical substances that can be present in drinking water in the mentioned type and can be identified by modern analytical methods.
2. Chemical substances are arranged in the list corresponding to compositions of organic and inorganic substances. Every subsection presents an extended version of the corresponding section. In the subsections, the substances are arranged according to value increase. Organic acids, including pesticides, are standardized by anion, regardless of the kind this organic acid is presented in the list (as an acid, as its anion, or its salt). Elements and cations, the first point of "inorganic substances" section, are standardized for all degrees of summarized oxidation, unless otherwise mentioned.
3. The list has the following vertical columns:
3.1 The first column presents the most common nominations of chemical substances.
3.2 The second column presents the synonyms of chemical substances and some customary nominations.
3.3 The third column presents values of MAC and OAL in mg/l, where MAC - maximum allowable concentrations, in case of which substances do not have direct or indirect influence on human health and do not worsen hygienic conditions of water consumption, OAL (marked with an asterisk) - orienting allowable levels that are developed on the basis of toxicological prognosis based on assessment and express–experimental methods.
If "absence" is stated in the column of values, it means that the concentration of this compound in drinking water should not exceed the detectable limit of the applied investigation method.
3.4 The fourth column presents the hazard limiting index of the substance, according to which the

value is established.

- **s-t. – sanitary-toxicological**
- **s.d. – sense defining, including odor (changes the water odor), color (causes the water coloration), f. (originates foam), fl. (originates film on water surface), taste (imparts taste to water), op. (originates opalescence), trb. (causes turbidity).**

3.5 The fifth column presents the hazard class of substances:

- 1st class – extremely hazardous
- 2nd class – very hazardous
- 3rd class – hazardous
- 4th class – moderately hazardous

The base of classification is consisted of those parameters that characterize water pollutant chemical substances that present different degrees of hazard for people, depending on origination property of long-term factor of the identification of toxicological, accumulation, hazard limiting index.

The hazard classes of substances take into consideration:

- **In case to choose compounds present in drinking water that are subject of priority control,**
- **In case to establish the consecution of water protection measures requiring additional financial investments,**
- **In case to make proposals for substitution of very hazardous substances by less hazardous ones in technological processes,**
- **In case to determine the priority of selection methods development for analytical control of substances in water.**

Note: Hygienic values (MAC) of hazardous substances content in water apply also to water resources used for drinking-economical and recreational purposes.

HYGIENIC VALUES OF HAZARDOUS SUBSTANCES CONTENT IN DRINKING WATER

Substance nomination	**Synonyms**	**Parameter value,mg/l**	**Hazard index**	**Hazard class**

More than 700 chemicals.

B. Bacteriological quality

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

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

WatSan_S2	***Baseline value (specify the year)***	***Value reported in the previous reporting cycle (specify the year)***	***Current value (specify the year)***
E. coli	**Should not be present**	**2012 - 70.522 samples, from which 13730 (19.5%) doesn't meet the standards**	**2015** **124.984 samples-from which 14289 (11.4%) doesn't meet the national standards**
Enterococci	**Not established**		

C. Chemical quality

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

(a) Fluoride;

(b) Nitrate and nitrite;[2]

(c) Arsenic;

(d) Lead;

(e) Iron.

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

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

Substance	*Baseline value (specify the year)*	*Value reported in the previous reporting cycle (specify the year) 2012*	*Current value (specify the year) 2015*
Fluoride	**1.2-1.5**	**0%**	**1346 samples/0 (0%)**
Nitrate	**45**	**0.47%**	**24610 samples/0 (0%)**
Nitrite	**3.0**	**0%**	**27958 samples /0 (0%)**
Arsenic	**0.05**	**0%**	**588 samples/0 (0%)**
Lead	**0.03**	**0%**	**404 samples/0 (0%)**
Iron	**0.3**	**0.51 %**	**4935 samples/4 (0.08%)**
Additional physico-chemical parameter 1: residual chlorine free	**0.3-0.5**	**22.9%**	**34872 samples/3912 (11.2%)**
Additional physico-chemical parameter 2: Chlorides	**350**	**0.05%**	**15616 samples/3 (0.01%)**
Additional physico-chemical parameter 3: Sulphates	**500**	**0.12%**	**2447 samples/0 (0%)**
Additional physico-chemical parameter 4: Total hardness	**7.0**	**1.1%**	**6335 samples/69 (1.1%)**
Additional physico-	**3.0**	**2.04%**	**25361 samples/154**

[2] As defined in the WHO Guidelines for drinking-water quality.

Substance	*Baseline value (specify the year)*	*Value reported in the previous reporting cycle (specify the year) 2012*	*Current value (specify the year) 2015*
chemical parameter 5: Ammonia			**(0.6%)**

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

In filling out the following table, please consider the following points:

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

(b) For reporting incidents:

(i) Please report cases per 10,000 persons;

(ii) Please differentiate between zero incidents (0) and no data available (-);

(iii) If possible, please distinguish between autochthonous and imported cases.

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

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

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

	Incidence			*Number of outbreaks*		
	Baseline (specify the year)	*Value reported in the previous reporting cycle (specify the year)*	*Current value (specify the year)*	*Baseline (specify the year)*	*Value reported in the previous reporting cycle (specify the year)*	*Current value (specify the year)*
Cholera	**0(2010г.), 0 (2011г.), 0 (2012г.).**	**0 (2013 Jan-Feb)**	**0 (2016Jan-Feb)**	**0(2010г.), 0 (2011г.), 0 (2012г.).**	**0 (2013 Jan-Feb)**	**0 (2016 Jan-Feb)**

Bacillary dysentery (shigellosis)	**1241 (38.3) (2010г.)** *1041 (32.0)* **(2011г.)** *733(22.4)* **(2012г.),**	**84 (2013 Jan-Feb)**	**99 (3.3) (2016 Jan-Feb)**	**1 *outbreak*8 *случаев*, 1 *outbreak*, 76 *случаев*- (2010г), 0 (2011г.) 0 (2012г.)**	**0 (2013 Jan-Feb)**	**0(2016 Jan-Feb)**
Enterohaemorrhagic E. coli.	**No monitoring in the 2010 11 (0.36) (2011г.) 15 (0.5) (2012г.)**	**3 (2013г. Jan-Feb)**	**0 (2016 Jan-Feb)**	**0 (2010г.) 0 (2011г.) 0 (2012г**	**0 (2013 Jan-Feb).)**	**0 (2016 Jan-Feb)**
Viral hepatitis A	**379 (11.7) (2010г.), 143 (4.4) (2011г.) 98(2.3) (20**	**100 (2013г. Jan-Feb)**	**5 (1.66) (2016 Jan-Feb)**	**0 (2010г.) 0 (2011г.) 0 (2012г.)**	**0 (2013 Jan-Feb).**	**0 (2016 Jan-Feb)**
Typhoid fever	**0 (2010г.), 0 (2011г.), 0 (2012г.)**	**0 (2013г. Jan-Feb)**	**0 (2016 Jan-Feb)**	**0 (2010г.) 0 (2011г.) 0 (2012г.)**	**0 (2013 Jan-Feb).**	**0 (2016 Jan-Feb)**

III. Access to drinking water

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

Percentage of population with access to drinking water	*Baseline value specify the year)* ***(2008)***	*Value reported in the previous reporting cycle (specify the year)* ***(2011)***	*Current value (specify the year)* ***(2014)***
Total	**97**	**97.5**	**98.3**
Urban	**99.4**	**99.5**	**99.7**
Rural	**92.4**	**93.7**	**95.5**

The table shows the percentage of population connected to public water supply by indicators and years.*

*** Data and indicator description and methodology are available on http://armstatbank.am/Table.aspx?rxid=002cc9e9-1bc8-4ae6-aaa3-40c0e377450a&px_db=ArmStatbank&px_type=PX&px_language=hy&px_tableid=ArmStatbank\8+Environment+and+energ\Environment\%28C%29+Water+resources\C6-2014.px&layout=tableViewLayout**

Please specify if the above data is based on national estimates or estimates provided by the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation.

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

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

IV. Access to sanitation

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

Percentage of pop ulation with access to sanitation	*Baseline value (specify the year)* ***(2008)***	*Value reported in the previous reporting cycle (specify the year)* ***(2011)***	*Current value (specify the year)* ***(2014)***
Total	**66.7**	**69.6**	**68.5**
Urban	**91.1**	**96.4**	**94.9**
Rural	**19.0**	**17.0**	**16.5**

The table shows the percentage of population connected to wastewater treatment by indicators and years.**

Footnote: Percentage of residents connected to a wastewater collecting system in the total number of households, only (primary) treatment is available.

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

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

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

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[3] 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).

[3] Please specify.

For non-European Union Countries

Status of surface waters

Percentage of surface water falling under class[a]	*Baseline value (specify the year)*	*Value reported in the previous reporting cycle (specify the year)*	*Current value (specify the year)*
I			
II			
III			
IV			
V			
Total number/volume of water bodies classified			
Total number/volume of water bodies in the country			

[a]Rename and modify the number of rows to reflect the national classification system.

Although the WFD largely relies on biological monitoring data in order to assess the ecological status and to classify water bodies (high, good, moderate, poor and bad ecological status), there is no biological monitoring in place yet and chemical monitoring is the main indicator for the quality of surface waters.

Thus, on January 27, 2011 the Government of the Republic of Armenia adopted a Resolution N 75-N ''On Defining Water Quality Norms for Each Water Basin Management Area taking into Consideration the Peculiarities of the Locality'' According to the resolution 5 classes of surface water quality are defined: high, good, moderate, poor and bad – I, II, III, IV and V accordingly..However, there are no such norms defined for lakes and reservoirs. Thus, there is no data available regarding the percentage of surface waters falling under specific quality class.

Environmental Impact Monitoring Center SNCO of the Ministry of Nature Protection is responsible for surface water quality monitoring in Armenia. Since 2007, the Environmental Impact Monitoring Center has beenin full operation, with 1,200 samples gathered from 131 observation posts(6–12 samples per year). At these posts, about 50 variables are measured. Thisincludes pH, biological oxygen demand, chemical oxygen demand, conductivity,major ions, and some metals. Analysis is being conducted according to ISOstandards or other international standards. The center publishes monthly and annual printed bulletins containing data on surface water quality.According to the 2015 annual report, the following water classes have been identified in the water basin districts of Armenia:

The quality class of water in the Northern basin management area

1. **II class – in 8 observation points**
2. **III class – in 9 observation points**
3. **IV class – in 2 observation points**
4. **V class – in 3 observation points**

The quality class of water in the Akhuryan basin management area

1. **II class – in 2 observation points**
2. **III class – in 6 observation points**
3. **IV class – in 2 observation points**
4. **V class – in 1 observation points**

The quality class of water in the Hrazdan basin management area

1. **II class – in 7 observation points**
2. **III class – in 5 observation points**
3. **IV class – in 2 observation points**
4. **V class – in 4 observation points**

The quality class of water in the Sevan basin management area

1. **II class – in 13 observation points**
2. **III class – in 4 observation points**
3. **IV class – in 1 observation points**

The quality class of water in the Ararat basin management area

1. **II class – in 3 observation points**
2. **III class – in 6 observation points**

The quality class of water in the Southern basin management area

1. **II class – in 10 observation points**
2. **III class – in 3 observation points**
3. **IV class – in 1 observation points**
4. **V class – in 3 observation points**

Status of groundwaters

Percentage of groundwaters falling under class[a]	*Baseline value (specify the year)*	*Value reported in the previous reporting cycle (specify the year)*	*Current value (specify the year)*
I			
II			
III			
IV			
V			
Total number/volume of groundwater bodies classified			
Total number/volume of groundwater bodies in the country			

[a]Rename and modify the number of rows to reflect the national classification system.

Due to lack of monitoring there is no information available regarding the groundwater classification. According to the EU Water Framework Directive groundwater bodies are classified as either "good" or "poor". National legislation does not provide such classification. The Hydrogeological Monitoring Center SNCO under the Ministry of Nature Protection measures some major ions with some overlapping analysis done by the Environmental Impact Monitoring Center. These elements can only provide the basic characterization of the origin of groundwater and a gross indicator of pollution (not persistent pollutants).

According to the RA Protocol Resolution N43 of October 16, 2014 on "Approving the Groundwater Resources National Monitoring Network Development Program", starting 2015 hydrogeological monitoring is conducted in 128 observation posts instead of the previously used 70 posts. Monitoring budget has also been increased. Groundwater quality monitoring needs to further be improved to provide adequate information on the status of groundwater in the country.

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.

Sector / Water exploitation index	*Baseline value (specify the year)* ***2008 Mln.m^3/year***	*Value reported in the previous reporting cycle (specify the year)* ***2011 Mln.m^3/year***	*Current value (specify the year)* ***2014 Mln.m^3/year and %***
Agriculture	**80.0**	**30.0**	**1388 / 67**
Industry[a]	**43.0**	**44.0**	**168 / 8**
Domestic use[b]	**5.0**	**128.0**	**522 / 25**

Source: National Statistical Service of the Republic of Armenia

[a]Please specify whether the figure includes both water abstraction for manufacturing industry and for energy cooling.
[b]Please specify whether the figure only refers to public water supply systems or also individual supply systems (e.g., wells).

As of 2014,renewable freshwater resources in Armenia are 5 532 mln. m^3 Water abstraction for industrial (including mining), irrigation and drinking-domesticneeds was 2 078mln. m^3. 67% was used for irrigation, 8% - for industrial and 25% - for drinking-domestic purposes..

Water withdrawal for industrial purposes includes: mining and quarrying; manufacturing; electricity, steam and air conditioning supply. These data are provided by the National Statistical Service of Armenia.

Part Three

Targets and target dates set and assessment of progress

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

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

Suggested length: one page (330 words) per target area.

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

For each target set in this area:

The water quality requirements are set by Decree the Minister of Health of the RA - On approving sanitary norms and rules N2-III-A 2-1 ''Drinking water: the hygienic requirements to water quality of centralized water supply systems'', 25 December, 2002, N876, which by law is obligatory to meet for every water supply system in country.

In general, Armenia is rich in potable water resources due to the numerous natural springs existing on the territory. Most of them have a capacity of 2 000 litres per second.Armenian Water and Sewerage Company CJSC is in charge of supplying this water to the population. The company controls the technical services and the exploitation of the water supply, the wastewater treatment plants (state property) and the inter-communal networks (community property) in the company's service area. The company provides water supply to customers with required quantity and quality of drinking water as well as the company implements the disposal of wastewater. The disinfection of drinking water is implemented by liquid chlorine and chlorine tablets in 64 operating chlorine stations, and water quality control is done by means of chemical bacteriological laboratories by cooperating with hygienic and epidemiological centers.

The "Yerevan Djur" company founded a water quality testing laboratory with modern equipment for developing the quality control. The water, supplied to our customers, totally corresponds to the N2-III-A2-1 sanitary norms and standards. The "Healthcare, safety and ecology" directorate of the "Yerevan Djur" CJSC realizes physical-chemical and biological testing of water quality for insuring the safety of this important food. The control frequency:

- **Every two hours: all the daily regulatory reservoirs (DRR),**
- **Every day: all the DRRs and 15-18 points of the water distribution network,**
- **Every quarter: all the 9 water sources,**
- **After renovating the water pipes and the water distribution network, washing the DRRs or other technical interventions.**

The Company chlorinates the water with the automatic chlorination stations constructed near the water sources for insuring the water quality. The accepted norms of chlorine existence in the water are: 0.3-0.5 mg/dm3

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.**

- **Compliance of drinking water quality with national standards for chemical parameters (F, NO_2, NO_3, As, Fe, Pb) at least 99% starting from 2014 (national)**
- **Reduction of non-compliance of drinking water quality with national standards for microbiological parameters: to not more than 18% by 2016; and to not more than 15% by 2020 (national)**
- **Development and implementation of Water Safety Plans (WSP) in 5 communities by 2020 (regional)**

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.

   Targets and target dates officially are not adopted.

3. Assess the progress achieved towards the target.

   N/A

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. N/A

6. N/A

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.

Legislative field

This field is regulated by:

- **RA Law "On Provision of Sanitary and Epidemiological Security of the Population of the Republic of Armenia" and RA Law "About medical care, population servicing".**

- **RA Government Decision No 1286 of 27 December 2001 "On approval of the list of diseases presenting danger to the surroundings "includes all kinds of infectious diseases transmitted by water: intestinal infectious diseases(all forms), viral hepatitis, tularemia, etc. The number of people to be treated is included in the state order approved for each year with regard to infectious diseases.**

- **RA Government Resolution No. 1913 –N of 29 December 2011"On approval of the Strategic Plan for 2012 - 2016 on preventing and combating infectious diseases in Armenia and its implementation". The objectives of the plan include: formation of an integrated system of epidemiological surveillance, capacity building of response systems, laboratory system of diagnosis and building of responding capacity to emergency situations caused by diseases.**

- **By RA GovernmentDecision No. 1285-N of 10 October 2012 "On making amendments and changes into RA Government Decision No. 46-N of 14 January 2010" a newnational vaccination calendar was**

approved, according to which vaccination against rotavirus was introduced fromNovember2012. The coverage of the vaccinated children was 90% as of 20 December 2012.

- **RA Government Decision No. 1138-N of 26 August 2010 "On approval of mechanisms for cooperation of the national coordinating body on international health regulations and other interested agencies and approval of coordination procedures" regulates the information exchange and cooperation issues related to public health emergencies, including water-related infectious diseases.**

- **Joint Order of the Minister of Health and the Chairman ofthe State Committee of Water Economy of the Ministry of Territorial Administration of Armenia (MoH Order No. 24-N of 6 December 2011 and MTA SCWE Order No. 163-N of 12 December 2011) "The standard procedures for cooperation between the Ministry of Health and the State Committee of Water Economy of the Ministry of Territorial Administration in case of emerging public health problems related to reported waterborne infectious diseases in a community" defines the standard procedures for implementing response actions by the Ministry of Health and the State Committee of Water Economy, as well the procedures for cooperating in case of recording water-related infectious diseases.**

Institutional frameworks

The local outbreaks in Armenia occur from time to time, but do not turn intoan epidemic. Generally, water–related and food–related intestinal infections are being recorded(mainly due to accidents occurring occasionally in the water and sewerage networks).

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
2.1	Maintain a zero level of outbreaks and incidents of cholera, typhoid fever and hepatitis A related to water	continuous	Ministry of Territorial Administration Water supply companies
2.2	Maintain the vaccination of children against rotavirus	at least 90% annual coverage	Ministry of Health

PROPOSED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	Strengthen systems for surveillance of, and response to, water-related diseases in accordance with Government Decision 1913-N of 29 December 2011		Ministry of Health

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.

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

For each target set in this area:

Access to drinking water implemented by order the Ministry of Health of the RA - On approving sanitary norms and rules N2-III-A 2-1 ''Drinking water: the hygienic requirements to water quality of centralized water supply systems'', 25 December, 2002, N876

Yerevan Djur (CJSC) was established to provide services Yerevan city and 31 communities nearby.

Armenian Water and Sewerage Closed Joint Stock Company (AWSC) carries out its activities through 3 regional branches: North West, Center West and South, and in 17 sectors and 16 subsectors. The Company jointly with its subdivisions provides technical operation, exploitation, and maintenance of water supply and wastewater systems to 37 towns and 280 rural communities in the Republic of Armenia. Shirak Water and Sewerage Company (2 cities and 36 rural communities), Lori Water and Sewerage Company (one city and 16 rural communities), and Nor Akung Water and Sewerage Company (2 cities and 10 rural communities) are small regional service providers for towns and villages in their respective regions. Also, there are communities, which are providing drinking water; otherwise they are considered as an individual/independent water supply systems.

There are currently 579 villages not served by water supply and sanitation companies. Instead, local communities are responsible for such services. Water supply systems are in critical condition due to lack of financial sources, required technical skills, and proper maintenance.

CURRENT SITUATION AND ISSUES

According to WHO and UNICEF Joint Monitoring Program (JMP) data, in 2011, 100% of the urban population of Armenia had access to an improved water supply while for the rural population this figure stood at 98%, which results in 99% coverage for the total population.

Although Armenia is rich in high-quality underground water sources, at present residents of 250townsandruralareas use surface water following its treatment.

One of the serious challenges with water supply in Armenia is the need to find a solution to the problem relating to water supply of 560 rural communities that are not provided with the centralized water supply services and not serviced by water companies.

There are settlements that do not have their own sources of water and carry it from the main channels located at great distances or in which water is supplied 2-3timesdaily. In some areas people have to carry water themselves, while in others water is transported by water tank trucks.

Water supply is also a significant problem in educational facilities in rural areas, because they rely on scarce state funds for the operation and maintenance of the infrastructure.

According to the data provided by the Ministry of Education and Science (2011), there are 868schoolsinruralcommunities. Schools, especially in rural areas, often have a drinking water supply and sanitation system in place, but many of them are not operational.

Table 7. The number of secondary educational institutions in Armenia by the state of buildings and facilities (infrastructure) in the 2011-2012 school year

Province	School conditions							
	buildingcondition			water supply		sanitation		
	adequate	needs capital repair	needscurrentrepair	available	lacking	centralized	individual	lacking
Yerevan	123	111	21	255	0	245	10	0
Aragatsotn	37	54	32	103	20	28	89	6
Ararat	35	59	18	102	10	48	38	26
Armavir	50	54	19	109	14	51	72	0
Gegharkunik	30	75	22	99	28	37	48	42
Lori	75	51	42	154	14	82	65	21
Kotayk	46	46	13	102	3	72	29	4
Shirak	78	50	46	150	24	96	51	27
Syunik	44	49	28	105	16	57	44	20
VayotsDzor	33	14	5	48	4	24	26	2
Tavush	35	25	21	73	8	32	23	26
Total	586	588	267	1300	141	772	495	174

One of the main factors in the effective functioning of the drinking water supply sector is a proper tariff policy. Accounting for centralized water supply is carried out by water meters or some other accounting procedures, taking into account the desirability of promoting the installation of water meters.

The coverage by water meters was 1.5% in 2001, 5% in 2002, 45% in 2003, 57% in 2004, 65% in 2005, 68.8% in 2006, 72.4% in 2007, 75% in 2008, 83.9% in 2009, 86.7% in 2010, 86.9% in 2011 and 87.1% in 2012.

Table 8.Water metersinstalled inthe areas covered by the drinkingwater supply companies

N	Name of organization	Number of customers,	Number of customers with water meters	Installation Percentage (%)
1	YerevanDjur CJSC	351,935	329,089	93.5
2	Armenian Water and Sewerage CJSC	285,579	213,970	74.9
3	Nor Akunk Water and Sewerage CJSC	17,916	17,700	98.8
4	Lori Water and Sewerage CJSC	39,910	37,548	94.1
5	Shirak Water and Sewerage CJSC	55,601	40,152	72.2

Total	**750,941**	**638,459**	**85.0**

There are some areas in Armenia, where for drinkingand domesticpurposes, water is supplied immediately from the upper stream of a river without undergoing any treatment process.

Water losses in the 5 operating companies currently range from74% (Nor Akunq) to 84% (Yerevan Djur). This magnitude of losses is due to the technical condition of the systems, a high number of accidents, illegal water connections, tampering with water meters, etc.

In the past, all drinking water treatment plants in Armenia had their sanitary zones both for the water intake structures and water sources, as well as for the treatment plant building. However, the majority of the sanitary zones have been destroyed.

TARGETS AND TARGET DATES

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
3.1	**Improve the access of the rural population to safe drinking water by constructing and rehabilitating water supply systems**	**in 15 communities by 2016** **in a further 20 by 2020**	**Ministry of Territorial Administration** **Water supply companies**
3.2	**Improve the quality of services provided by water supply companies**	**- reduction of losses in water supply systems by 5% by 2016; by 7% by 2017; and by 10% by 2020 (compared to 2013)** **- ensure 24-hour water supply for the urban population: for 90% by 2020; and 95% by 2025**	**Ministry of Territorial Administration** **Water supply companies**
3.3	**Improve access to safe drinking water in educational facilities (facilities include kindergarten through senior school and boarding facilities)**	**in 20 facilities by 2016** **in a further 30 by 2020**	**Ministry of Education and Science** **Ministry of Territorial Administration**
3.4	**Enact a law on water supplies**	**by 2016**	**Ministry of Territorial Administration** **National Assembly of Armenia**

PROPOSED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	**Assess the drinking water supply situation in the 560 communities not served by water companies**	**by 2015**	**Ministry of Territorial Administration** **Water supply companies**
2	**Rehabilitation of 5 drinking water treatment plants**	**by 2018**	**Ministry of Territorial Administration** **Water supply companies**
3	**Construction of 5 plants to treat surface water for drinking purposes**	**by 2020**	**Ministry of Territorial Administration** **Water supply companies**
4	**Development and implementation of programmes to improve drinking water supplies in educational facilities**	**by 2020**	**Ministry of Education and Science** **Ministry of Territorial Administration**

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.

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

For each target set in this area:

All urban and industrial waste waters in the country are discharged through the sewage collectors and networks. About 20 waste water treatment plants (WWTP) were built in residential areas 30-40 years ago, but are currently not operational and deteriorated due to the absence of investments.

Currently, there are six WWTPs: Vardenis, Martuni and Gavar WWTPs (the coast of Lake Sevan), Jermuk and Dilijan WWTPs. And the ''Aeration'' WWTP, which is located in Yerevan. All these WWTPs carry out only mechanical treatment.

Domestic and industrial waste waters of almost all Armenian cities are discharged through wastewater centralized networks and main collectors by providing 60-80 % disposal (97% in capital cities).

In some villages, water is supplied without disinfection once every 3–4 day. Only 5% of these communities are connected to the central sewerage system. The rest of the communities make their own provision for sanitation such as latrines and septic tanks. The quality and types of institutional, operational, and technical arrangements are extremely variable. A coordinated approach is

required to develop this part of the sector. An approach could be a consolidated service provider seeking economics of scale. *

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.

CURRENT SITUATION AND ISSUES

Overall,thereare about620 km of main sewers and some 3200km of sanitation networks in Armenia.

In larger cities (where 60-65% of the population lives) the coverage of centralized sanitation systems is as follows: Yerevan 96%, Gyumri 50%, Vanadzor 70%, Sisian 41%, Ashtarak 100%, Alaverdi 37%, Ararat 38%, Artashat 55%, Vagharshapat 62%, Gavar 49%, Vardenis 48%, and Sevan 58%.

The majority of rural communities of Armenia have no access to centralized sanitation systems. Some 75% of rural households are not provided with main water supply and sanitation facilities.

The existing centralized sanitation systems are often poorly maintained or do not function any longer. No investments for the proper operation and maintenance of the sanitation systems have been made for more than 20 years (except for the elimination of accidents in a few large cities), and the systems have slowly broken down. The lack of wastewater treatment plants (of the previous 22 wastewater treatment plants only the "Aeratsia" plant and three newly built plants operate, which only carry out mechanical treatment), has become the reason for many human settlements to become major environmental polluters. Domestic sewage and industrial effluent in some cities flow into the surface water facilities, polluting the water resources and degrading aquatic and terrestrial ecosystems.

The sanitation facilities in many rural educational facilities are in a very poor state or are completely lacking. In rural areas which have no centralized sanitation systems, eco-san toilets could be applied as an alternative solution. A urine-diverting ecosan toilet is an alternative way to improve the sanitary and hygienic conditions of people, especially of children, and to protect the soil and ground water from the penetration of faeces.[4]

TARGETS AND TARGET DATES

**Armenia water supply and sanitation: Challenges, achievements, and future directions. Mandaluyong City, Philippines: Asian Development Bank, 2011.*

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
4.1	Improve access to sanitation	- Construction of new sanitation systems, including alternative wastewater disposal and treatment systems: by 2018 in 10 communities; by 2025 in additional 40 communities -Rehabilitation and expansion of existing centralized sanitation systems: in at least 2 cities by 2016; in a further 3 by 2020	Ministry of Territorial Administration Water supply companies
4.2	Improve sanitation in educational facilities	- Construction of new sanitation systems, including Ecosan toilets: 10 by 2018; and a further 25 by 2025	Ministry of Education and Science Ministry of Territorial Administration

PROPOSED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	Reconstruction and upgrading of "Aeratsia" wastewater treatment plant in Yerevan	by 2016	Ministry of Territorial Administration Yerevan Municipality
2	Construction of wastewater treatment plants and improvement of sanitation networks	by 2016 in Dilijan and Jermuk; by 2020 in additional 3 cities	Ministry of Territorial Administration Water supply companies
3	Development and approval of a national strategy for sanitation and wastewater treatment	by 2015	Ministry of Territorial Administration
4	Assess situation in 560 rural communities not covered by water supply companies	by 2015	Ministry of Territorial Administration
5	Development and implementation of programs to improve sanitation in educational facilities	by 2020	Ministry of Education and Science Ministry of Territorial Administration

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:

Currently the majority of the population of Armenia is served by three water and wastewater utilities under public-private partnership arrangements: Yerevan Djur, Armenia Water and Sewerage Company (AWSC) and 3 Regional Utilities (Nor Akunq, Lori and Shirak).

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.

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:

As an alternative solution to the sanitation issue the ecological/sanitation approach was produced by the Armenian NGOs AWHHE and Ecolore in rural areas in Armenia. That was a pilot project: school- and household ecosan toilets were constructed in selected regions.

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.

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

For each target set in this area:

In 2004, the World Bank appointed Saur to transform the state-owned AWSC water supply and wastewater treatment company into a private service provider. Under the terms of its management

contract, Saur Sevan Services is responsible for providing water supply and wastewater management services to all of Armenia, with the exception of its capital city.

On the 14th December, 2005, Veolia Water and the RA Territorial Administration Ministry, represented by the State Committee for Water Economy, signed a 10-year Lease Contract for Yerevan water supply and wastewater systems. In Armenia Veolia Djur is represented by Yerevan Djur CJSC.

Currently in Armenia there are two forms of Public-Private-Partnership (PPP) operators. The main difference in the two forms of PPP arrangement is the level of risk taken by each PPP operator. Under the management contract, the PPP operator takes the management and operations risk only. It does not invest in working capital to meet operational expenses. The PPP operator also provides services for management of the investment programs financed by international financial institutions. Under the lease contract, the PPP operator takes all the responsibilities and risks of the management contractor but takes additional commercial risks: adequate collection and revenue generations.

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.

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

For each target set in this area:

Currently the majority of the population of Armenia is served by three water and wastewater utilities under PPP arrangements:

- **Yerevan Djur – serving 1 million population under a Lease Arrangement with Veolia***
- **Armenia Water and Sewerage Company (AWSC) – serving 0.62 million population under a Management Contract with SAUR****
- **3 Regional Utilities (Nor Akunq, Lori and Shirak)- serving 0.32 million population under a Management Contract with MVV***Domestic and industrial waste waters of almost all Armenian cities are discharged through wastewater centralized networks and main collectors by providing 60-80 % disposal (97% in capital cities) .****

The general document of the juridical relationship with the "Yerevan Djur" CJSC concerning the water supply and sewerage services is the N 130-N Resolution of the Government of RA established on the 22nd of January 2004. The technical conditions' definition procedure of the connections to the water supply and sewerage systems is also described in that resolution.*

N 130-N Resolution of the Government of RA is available on http://www.scws.am/am/legal-acts/decisions[5]

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.

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

For each target set in this area:

All urban and industrial waste waters in the country are discharged through the sewage collectors and networks. 70-80% of waste water discharge in urban areas is implemented through the existing systems and rural communities generally do not have wastewater discharge systems.

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.

**International Private Operator, owner of Yerevan Djur*

***The Saur Group is one of the three leading and established providers of outsourced services for local authorities in the water and waste management industries in France. The 19th of August 2004 Saur has signed a Management Contract with the Government of Armenia represented by the State Committee of Water Economy, the purpose of this Contract is the Management of the Armenian Water and Sewerage Company (AWSC).*

****Private Operator for the three Regional Utilities Management Contract*

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:

There is one common sewerage network.

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.

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:

At present there are only six operating treatment plants: ''Aeration'' plant in Yerevan and newly build plants in the towns of Vardenis, Gavar, Martuni, Dilijan and Jermuk. Moreover, the existing wastewater treatment plants carry out only mechanical treatment.

Notice: Generally, in Armenia wastewater is classified as a domestic wastewater in terms of biological pollution. When domestic wastewater discharged into the water resources, self-purification processes occur over time as hazardous substances in wastewater classified as non-conservative.

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.

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:

In Armenia existing wastewater treatment plants carry out only mechanical treatments.

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.

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

For each target set in this area:

In Armenia irrigation the water users' companies and union are non-profit persons having status of a legal person that operates in the public interest to carry out the operation and maintenance of irrigation system. The water users' companies supply water to the water users in the territory of their services and the unions of water users' companies in the territory of their services.*

Generally, wastewaters do not use for irrigation, but there are watercourses which are used for irrigation, where possible wastewater is discharged from the upper streams.

Notice: The wastewater which comes from fishing industry usually transfer for irrigation, such as secondary water use.

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.

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.

Legislative field

With the view of preventing and eliminating the pollution of sourcesofwater intended for population use, sanitaryprotectionzoneswitha specialregime of use aredefined in accordance withthe legislation ofthe Republic ofArmenia.The general requirements are set out inthe Water Code andtheLand Code of Armenia, the RA Law on "Ensuring Sanitary-Epidemiologic Securityof the Population of the Republic of Armenia",other laws ofthe Republic ofArmenia, governmentdecisions anda number ofinter-agencylegal acts. The sanitary-hygiene and anti-epidemiological requirements for organization and operation of sanitary protection zones for household drinking water supply systems and water supply sources are defined in No.2-III-A2-2 Sanitary Rules and Norms "On sanitary protection zones for household drinking water supply and water sources" (registered on 28 December 2002).

Institutional frameworks

Most drinking water sources supplying water to the population of Armenia through centralized water supply systems use groundwater with sustainable chemical composition and low bacterial contamination. However, there are 22 surface water sources (rivers), which provide water for approximately 150,000 inhabitants. Surface and groundwater must be disinfected before reaching the network, and surface water must be treated, but as some of the treatment equipment is outdated, treatment plants need to be upgraded.

The strictregimesanitary protection zones for water mains and water supply sources used for drinking and domestic needs often do not exist, andhydrogeologicalcalculations of the secondand thirdzonesare not currently carried out due to the absence of methodology andlack ofresources. There are no well-established procedures to limit economic activitiesin the second-and third-level sanitary zones that could causebacterialandchemicalpollution ofwater.

Water qualityrequirements for drinkingwater sources need to bereviewedin accordance with the European Union (EU) requirements.

TARGETS AND TARGET DATES

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
14.1	**Enforce the delimitation of the first-level sanitary zones to protect drinking water sources**	**60% of sources by 2018; at least 95% by 2020**	**Ministry of Territorial Administration** **Water supply companies**
14.2	**Review and upgrade methodologies for the delimitation of the second- and third-level sanitary zones to protect drinking water sources**	**by 2020**	**Ministry of Territorial Administration** **Water supply companies**

PROPOSED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	**Construction and rehabilitation of treatment facilities of drinking water supplied from drinking water sources**		**Ministry of Territorial Administration** **Water supply companies**
2	**Ensure the quality of waters, which are used as sources of drinking water for communities not served by water supply companies, in compliance with national standards**		**Ministry of Territorial Administration** **Water supply companies**

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.

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:

In this case is used freshwater.

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.

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.

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.

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

The MonitoringCenter of the Ministry of Nature Protection is responsible for monitoring surface waterquality. In 2012 surfacewater was sampled at 157observation points on 47 water bodies. Some 44-49 indicators were analyzed for each of 1080samples, for a total of 48,600 indicators.

The National *Statistical*Service (NSS) presents data on pollutants, on the number of cases of the maximum permissible concentration (MPC) being exceeded,on the level by which average annual concentrations exceed the MPC, and other associated data.

***Lake Sevan*. Lake Sevan is located in Gegharkunik province, at the elevation of 1900 m above sea level. The total area of the basin was 1275 km^2, as of 31 December 2011[6] (National Statistical Service, 2012). It is fed by 28 rivers and streams.**

According to the NSS the concentration of heavy metals and contaminants in many rivers flowing into Lake Sevan exceeds the permissible standard.

In 2012 the cases of heavy metals and pollutants in Lake Sevan greatly exceeding MPC were:

- **the number of cases in Lesser Sevan: vanadium 104, manganese 84, selenium 85;**
- **the number of cases in Greater Sevan: vanadium 59, manganese 39, copper 19, selenium 37;**
- **the level by which average annual concentrations exceeded the MPC in Lesser Sevan: vanadium 6.4, manganese1.2, and selenium 2.6;**
- **thelevel by which average annual concentrations exceeded the MPC in Greater Sevan: vanadium 6.2, manganese 1.1, copper 2.1, and selenium 2.1.**

The pollution of the Masrik, Dzoraget, Voghji, Akhtala, Vorotan and other rivers are linked to mining activities.

TARGETS AND TARGET DATES

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
PRO 18.1	Assess and map particularly contaminated sites, including around water bodies	in1 pilot marz by 2018; in a further 3 marzes by 2020	Ministry of Nature Protection
POS 18.2	Implement the monitoring system of water resources quality	by 2017	Ministry of Nature Protection

ED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	Optimize the network of monitoring points for the quantity and quality of water resources		Ministry of Nature Protection

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

Legal framework

Reforms in water resources management in Armenia began in 1999-2000 with implementation of the "Integrated Water Resources Management Plan" developed with the support of the World Bank. On the basis of the proposals of the"Integrated WaterResources ManagementPlan"in 2001 the Government initiateda programme toupgrade the country'swater sectormanagement, reviewed theexisting legalframework and clarified the institutional framework. All this was regulated by

[6]http://armstat.am/file/doc/99471428.pdf

Government DecisionNo.92 of February 2001 “On the Concept of Water Sector Reforms in Armenia”.

Thiswas followed by the adoption ofa newWaterCode on 4 June 2002,whichserved as the basisfor manylegislativereforms: the Law "On National Water Policy" (2005); the Law "On the National Water Programme” (NWP) (2006); the Government Decision No.4of February 3, 2011 “OnApproval of the Content of Model Basin ManagementPlans"; and the Government Decision No.75 –N of January27, 2011"On defining standards for ensuring the water quality of each water basin management depending on the locality characteristics".

Institutional frameworks

With the adoption of the newWater Codea newinstitutionalsystem was introduced, in accordance with which the sector would be managed bythe following authorities:

- **The Water ResourcesManagementAgencyof the Ministryof Nature Protection (MNP),whichconsists of6 regional water basinmanagement departments;**
- **The State Committee of Water Economy of the Ministry of Territorial Administration;**
- **The Public Services Regulatory Commission.**

The monitoring of water resources is implemented by the Armenian State Hydrometeorological and Monitoring Service of RA Ministry of Emergency Situations, the Environmental Impact Monitoring Centre of RA Ministry of Nature Protection, the Hydrogeological Monitoring Center of RA Ministry of Nature Protection, the State Health Inspectorate of RA Ministry of Health, and the State Environmental Inspectorate of RA Ministry of Nature Protection.

In addition to the monitoring agencies a number of other organizations also include aspects of water management in their activities, such as: the Disputes Resolving Commission of the National Water Council, the Ministry of Agriculture, the Ministry of Energy and Natural Resources, the Ministry of Finance, and the Ministry of Emergency Situations. In 2004 the group of 42 Water Users Associations was created, which are responsible for operating irrigation systems.

The Government Decision No.1060-N of 2003approved the procedure for registering documents and providing information to the State WaterCadastre (SWC). In addition to the regulatory act defining the SWC'soperating procedures,the Decision No.514 of 30 December 2003 of the Ministerof Nature Protection approved the“Forms of registers for dataentryandmaintenance procedure in the State WaterCadastre", which in 2006 was amendedand supplementedby theOrder No.260-N of the Ministerof Nature Protection.

The State Water Cadastre is governed by the Water Resources Management Agency (WRMA) of RA Ministry of Nature Protection that collects, compiles and stores all information on water resources in an official database.

During the period 2004-2008 theUSAID-funded project "Strengthening the legalandinstitutional field in the water sector of Armenia" helped theGovernmentset upthe StateWaterCadastreInformation System(SWCIS), pursuant to the WaterCodeandthe provisions of theGovernment Decision No.1060-N.

The SWCIS consists of a centralized Data Warehouse operated and maintained by the WRMA, which compiles tabular and spatial data on water resources at the national level, as well asthree databases inthe interestedinstitutions thathavethe ability toexportdata to thedatabase/data warehouse.

In 2008-2012 with the support of USAID, EU,GEFandotherdonors the river basinmanagementplans were developedfor the basins ofMarmarik, Meghriget, Debed, and Aghstev.

TARGETS AND TARGET DATES

No.	Targets	Target dates and indicators (by the end of the years indicated)	Proposed responsible organizations
19.1	Development of river basin management plans	for Araratyan, Akhuryan, and Hrazdan water basins by 2017; for the Northern, Southern and Sevan water basins by 2020	Ministry of Nature Protection
19.2	Development of bio-monitoring guidelines	by 2018	Ministry of Nature Protection
19.3	Classification of water resources by water bodies	by 2018	Ministry of Nature Protection
19.4	Establishment of River Basin Management Councils for the River Basin Management Authorities and ensuring their lawful activities through the creation of a legislative and institutional framework	2 by 2019; the remaining 4 in 2021	Ministry of Nature Protection
19.5	Develop a strategy for managing the quality of water resources	by 2016	Ministry of Nature Protection

PROPOSED MEASURES TO ACHIVE TARGETS AND TARGET DATES

No.	Measures and activities	Time frame	Responsibility
1	Clarify the roles and responsibilities of water sector institutions	by 2016	Government
2	Ensure a unified legal basis and mechanisms for information exchange among the stakeholder institutions in order to strengthen the State Water Cadastre system	by 2015	Ministry of Nature Protection
3	Establish the legislative basis for the mandate and operations of the River Basin Management Councils	by 2018	Ministry of Nature Protection
4	Strengthen the management functions of the River Basin Management Authorities by building their capacities	by 2017	Ministry of Nature Protection

5	**Conduct hydro-geological studies and analyses of groundwater resources and classify these resources by national water reserve and usable water resources**	**for Ararat valley by 2016** **for the whole country by 2018**	**Ministry of Nature Protection** **Ministry of Energy and Natural Resources**
6	**Develop an action plan to improve aquatic ecosystems**	**by 2020**	**Ministry of Nature Protection**
7	**Establishment of a registry for water management systems**	**by 2018**	**Ministry of Territorial Administration**

River Basin Management plans have been developed for Ararat, Southern and Akhuryan Basin Management Areas in 2016.

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

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

Currently, in Armenia water supply companies face with problems of water losses. It is approximately 75%. The problem related to both water supply and sanitation systems. It is necessary and important also to regulate wastewater treatment system, quality and quantity of wastewater. Anyway, is important to notice that Armenia continuous implements reforms for drinking water through public-private partnership. Since 2017 in Armenia, drinking water will be provided by one operator under the Lease Contract. The core attention will be paid on quality and quantity of drinking water, losses of water supply and sewerage systems, duration of water supply, wastewater disposal and wastewater purification, etc.

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

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

3. Assess the progress achieved towards the target.

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

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

Part Four

Overall evaluation of progress achieved in implementing the Protocol

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

(a) Response systems (article 8);

(b) Public awareness, education, training, research and development and information (article 9);

(c) Public information (article 10);

(d) International cooperation (article 11);

(e) Joint and coordinated international action (article 12);

(f) Cooperation in relation to transboundary waters (article 13);

(g) International support for national action (article 14).

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

Suggested length: up to 3 pages

The Protocol on Water and Health is the first international agreement adopted specifically to ensure, by linking water management and health issues, the adequate supply of safe drinking water management and health. The existing Steering Committee for the EUWI National Policy Dialogue is the most appropriate coordination mechanism.

Thanks to the Government of Finland and UNECE, Armenia implemented the UNECE-FinWaterWEI project "Protocol on Water and Health – Improving Health in Armenia through target setting to ensure sustainable water management, access to safe water and adequate sanitation". The baseline analysis of legal, institutional and technical aspects of water and health situation in Armenia was finalized in December 2013. Based on this analysis and on outcomes of NGO coordination meeting, the project Steering Committee selected 9 target areas for the subsequent work on target setting and elaboration of measures for their achievement.

The draft targets and target dates were presented at the Steering Committee meeting in May 2014.

A Roadmap was prepared in 2014 tobecome aParty tothe Protocol describing the commitments of the competent authorities ofArmenia in the process ofratification and the steps to be undertakenin thatperiod.

An Action Plan was developed to support the implementation of the targets and targets dates with the overall aim to ensure sustainable water management, access to safe drinking water and adequate sanitation in Armenia.

The publication Target Setting Process Under The Protocol on Water and Health in Armenia in 3 languages, Roadmap to ratification of the Protocol on Water and Health by Armenia, Action Plan to support the implementation of targets and target dates, Brochure on the Protocol on Water and Health and Brochure on the draft targets and target dates are available at the AWHHE's website: http://awhhe.am/target-setting-process-under-the-protocol-on-water-and-health-in-armenia-4/.

Armenia announced its intention to apply the Equitable Access Score-card at the national level during the seventh meeting of the Working Group on Water and Health in November 2014. Thanks to the French Government Armenia started the project "Self-assessment of equitable access to water and sanitation in Armenia: in 2015. A national consultation workshop for launching the self-assessment exercise of equitable access to water and sanitation and for identifying challenges and improvement needs related to management and surveillance of small-scale water supply and sanitation was organized back-to-back with the 14th meeting of the Steering Committee of the National Policy Dialogue on Integrated Water Resources Management (Yerevan, 14 December 2015). The project will be finalized in October, 2016. Main implementing partners are the State Committee on Water economy of the Ministry of Agriculture, Ministry of Health and AWHHE.

AWHHE presented cases on the implementation of the UNECE/WHO Protocol during different international events, such as High-Level International Conference on Implementation of International Decade for Action "Water for Life" (Tajikistan, 2015), World Water Forum (South Korea, 2015), Water and Sustainable Development: From vision to Action" (Spain, 2015), etc. Moreover, these cases were included in the publications, such as Women as Agents of Change in Water (WfWP, UN Water and UNW-DPAC) and Report of the 2015 UN-Water Zaragoza Conference.

Part Five
Information on the person submitting the report

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

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