

**SECRETARIAT TO THE PROTOCOL ON WATER AND HEALTH**  
**UNECE –WHO/EURO PROTOCOL ON WATER AND HEALTH TO THE**  
**1992 CONVENTION ON THE PROTECTION AND USE OF TRANSBOUNDARY**  
**WATERCOURCES AND INTERNATIONAL LAKES**  
**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

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

**The document is under the consideration of Water Resources Management Agency (WRMA), Ministry of Nature Protection.**

**A proposal for supporting the development of a programme of action under the Protocol on Water and Health was submitted in 2009 to the Ad Hoc Project Facilitation Mechanisms, mechanisms established by the Parties to the Protocol to facilitate access to sources of finance for non-infrastructure projects related to the Protocol (article 14 of the Protocol).**

**The Steering Committee of the FinWaterWEI, the Programme for Finland's water sector support to the EECCA countries under the Wider Europe Initiative, at its meeting in February 2012 decided that the project would be financed under the umbrella of FinWaterWEI.**

**The overall objective of the project is:**

**To improve the ability of the Government of Armenia to comply with provisions of the Protocol on Water and Health and to develop targets, target dates and measures to assist Armenian authorities in implementing requirements of the Protocol, thus to promote at national level the protection of life and health of the public both in terms of individual and collective aspects, as well as to improve the management and use of water resources, including the protection of ecosystems, to improve safe water supply and discharge, and to control and reduce water-related diseases.**

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 is coordinated by the WRMA.**

**The project implementation bodies are WRMA, the Ministry of Health (State Hygiene and Anti-Epidemiological Inspectorate) and State Committee of Water System of the Ministry of Territorial Administration and other relevant bodies as necessary.**

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

**The Government of Armenia has adopted a range of regulations ensuring the provisions of the Protocol.**

- **RA law "On Provision for Sanitary-Epidemiological Safety of RA Population"**
- **RA Government of Armenia Protocol Session Decisions – On approval of the content of the model basin management plan, 3 February, 2011**
- **RA Government Decree – On defining application of modern technologies, improve monitoring of water resources and pollution reduction and prevention measures - 14 January 2010, 118-N**
- **RA Government Decree – On defining assessment for water demand of drinking, domestic, agricultural, as well as of environmental flows according to the water basin areas of the Republic of Armenia, 30 June 2011, 927-N**
- **RA Government Decree – On defining water quality norms for each water basin management area taking into consideration the peculiarities of the Locality, 27 January 2011, 75-N**
- **Sanitary protection zones for household drinking-water, water supply and water sources No.2-III-A2-2 sanitary rules and norms (registered in 28.12.2002), which define the sanitary-hygiene and anti-epidemiological requirements for organization and operation of sanitary protection zones for household drinking- water supply sources,**
- **Drinking water. Requirements imposed on water quality for centralized systems. Quality enforcement sanitary rules No. 2-III-A2-1 and norms (registered in 28.12.2002), which defines the hygiene requirements for drinking-water quality, as well as the drinking-water quality enforcement rules provided to settlements, etc.**

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

**In progress.**

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?

**Armenian Women for Health and Healthy Environment (AWHHE) is a non-governmental organization (NGO) which has been involved in the Steering Committee of the National Policy Dialogue (NPD) on water-related issues in Armenia since 2007.**

**According to the Order of 12 March, 2013 of the Minister of Nature Protection an Inter-governmental Advisory Committee on NPD on IWRM was established and AWHHE became the member of it.**

**In the framework of the FinWaterWEI/UNECE project AWHHE will organize and steer the consultation process on target setting with other Armenian NGOs.**

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

**The draft report has been circulated within competent authorities for comments and suggestions. WRMA as the main responsible authority for this project organize meetings, discussions between competent authorities. The draft report was sent to the AWHHE for the comments as an active representative of the civil society.**

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).

**N/A.**

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.

**In progress.**

## 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?

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

**Both.**

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

**All - treatment plant outlet, distribution system and point of consumption.**

4. In the reports, the standards for compliance assessment signify the national standards. If national standards for reported parameters deviate from the WHO guideline values, provide information on the values (standards) used for calculation. <sup>1</sup>

The Ministry of Health through its State Hygiene and Anti-Epidemiological Inspection (SHAEI) is responsible for safeguarding the sanitary/epidemiological safety of the population. It develops and supervises the implementation of sanitary/epidemiological regulations and standards, including those for the drinking water sector. The SHAEI controls through inspections the quality of water sources that are used for drinking purposes. 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.

Annex 2

### 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/
<b>Summarized indices</b>				
Hydrogen ion concentration	pH values	within the limits 6-9		
Total mineralization (solid residue)	mg/l	1000 (1500) 2/		

<sup>1</sup> In order to ensure consistency and quality of the data sets resulting from sampling programmes, countries may wish to consider ensuring compliance with appropriate international standards for sampling programmes. Examples of such international standards are the ISO 5667 family of standards, in particular:

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

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		
<b>Inorganic substances</b>				
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-)				
<b>For climatic zones</b>				
-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

1/ The property limiting the hazard of the substance according to which the following standards are determined: s.-t.– sanitary-toxicological, s.d. – sense defining

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

3/ The values are established in accordance with proposals of World Health Organization.

### 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
<b>Chlorine 1/</b>				
- residual free	mg/l	within the limits of 0.3-0.5	s.d.	3
- residual <u>bound</u>	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	mg/l	0.05	s.-t.	2

ozone treatment)				
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 than 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-epidemic 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-epidemic 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 6

#### REQUIREMENTS ESTABLISHED FOR SAMPLING FREQUENCY OF DRINKING WATER FOR LABORATORY INVESTIGATIONS FROM WATER SUPPLY UNDERTAKINGS

Parameter	Quantity of samples taken during one year, not less than:	
	For underground water sources	For surface water sources
Microbiological	4 (seasonably)	12 (monthly)
Parasitological	Not taken	-//-
Organoleptic	4 (seasonably)	12 (monthly)
Summarized parameters	-//-	-//-
Inorganic and organic substances	1	4 (seasonably)
Radiological	1	1

## 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:

- 1<sup>st</sup> class – extremely hazardous
- 2<sup>nd</sup> class – very hazardous
- 3<sup>rd</sup> class – hazardous
- 4<sup>th</sup> 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
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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*.

<i>WatSan_S2</i>	<i>Baseline value (please specify the year)</i>	<i>Current value (please specify the year)</i>
E. coli	<b>Should not be present</b>	<b>2012 - 70 522 samples, from which 13730 (19.5%) not meet the standards</b>
Enterococci	<b>Not established</b>	

#### DRINKING WATER MICROBIOLOGICAL AND PARASITOLOGICAL PARAMETERS

Parameter	Units of measurement	Norms
Thermotolerant coliform bacteria 1/	Bacteria quantity in 100 ml	Absence
Total coliform bacteria 2/	Bacteria quantity in 100 ml	Absence
Bacteria total amount 2/	Content of colony-forming bacteria in 1 ml	Not more than 50
Coliphages 3/	Content of shield-forming units in 100 ml	Absence
Sulphite-reducing clostridia spores 4/	Content of spores in 20 ml	Absence
Lambliа cysts 3/	Content of cysts in 50 ml	Absence

1/ Triple investigation is carried out for the analysis of 100 ml water sample

2/ Norms exceeding is not allowed in 95% of samples taken from exterior and interior distributing points of water-supply system during 12 months, in case of analysis of not less than 100 samples, during one year.

3/ Analysis is carried out only in water-supply systems fed by surface water sources, before entering the water-distribution system

4/ Analysis is carried out for evaluation of technological effectiveness of water treatment

### C. Chemical quality

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

- Fluoride;
- Nitrate and nitrite;<sup>2</sup>
- Arsenic;
- Lead;
- Iron.

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

<i>Substance</i>	<i>Baseline value (please specify the year)</i>	<i>Current value (please specify the year)</i>
Fluoride	<b>1.2-1.5</b>	<b>0</b>
Nitrate and nitrite	<b>45</b>	<b>0.47%</b>
Arsenic	<b>0.05</b>	<b>0</b>
Lead	<b>0.03</b>	<b>0</b>
Iron	<b>0.3</b>	<b>0.51 %</b>
Additional physico-chemical <sup>3</sup>	<b>0.3-0.5</b>	<b>22.9%</b>

<sup>2</sup> As defined in the WHO Guidelines for drinking-water quality.

<sup>3</sup> It is recommended to take into account new and emerging pressures such as climate change or agriculture practices.

parameter 1: ___residual chlorine free		
Additional physico-chemical parameter 2: _____Chlorid's	<b>350</b>	<b>0.05%</b>
Additional physico-chemical parameter 3: ___Sulfat's	<b>500</b>	<b>0.12%</b>
Additional physico-chemical parameter 4: _____Total hardness	<b>7.0</b>	<b>1.1%</b>
Additional physico-chemical parameter 5: _____Ammonia	<b>3.0</b>	<b>2.04%</b>

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

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

	<i>Incidence</i>		<i>Number of outbreaks</i>	
	<i>Baseline (specify the year)</i>	<i>Current value (specify the year)</i>	<i>Baseline (specify the year)</i>	<i>Current value (specify the year)</i>
<b>Cholera</b>	0 (2010r.), 0 (2011r.), 0 (2012r.)	0 (2013 Jan- Feb)	0 (2010r.) 0 (2011r.) 0 (2012r.)	0 (2013 Jan- Feb)
<b>Bacillary dysentery (shigellosis)</b>	<i>All cases</i> 1241 (2010r.) 1041 (2011r.) 733 (2012r.),	84 (2013 Jan- Feb)	1 outbreak, 8 cases, 1 outbreak, 76 cases (2010r.), 0 (2011r.) 0 (2012r.)	0 (2013 Jan- Feb)
<b>EHEC<sup>a</sup></b>	No monitoring in the 2010 11(2011r.), 15 (2012r.)	3 (2013r. Jan- Feb)	0 (2010r.) 0 (2011r.) 0 (2012r.)	0 (2013r. Jan- Feb)
<b>Viral hepatitis A</b>	379 (2010r.), 143 (2011r.) 98 (2012r.)	100 (2013r. Jan- Feb)	0 (2010r.) 0 (2011r.) 0 (2012r.)	0 (2012r. Jan- Feb)
<b>Typhoid fever</b>	0 (2010r.), 0 (2011r.), 0 (2012r.)	0 (2013r. Jan- Feb)	0 (2010r.), 0 (2011r.), 0 (2012r.)	0 (2013r. Jan- Feb)

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

<sup>4</sup> If possible, please distinguish between autochthonous and imported cases



### III. Access to drinking water \*

<i>Percentage of population with access to drinking water</i>	<i>Baseline value ( 2008)</i>	<i>Current value (2011)</i>
Total	97.0	97.5
Urban	99.4	99.5
Rural	92.4	93.7

***The table shows the proportion of population with sustainable access to an improved water source, %, and percentage of households with access to centralized water supply.***

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

The WHO/UNICEF<sup>5</sup> Joint Monitoring Programme (JMP) for Water Supply and Sanitation defines access to water supply in terms of the types of technology and levels of service afforded. Access to water-supply services is defined as the availability of at least 20 litres per person per day from an “improved” source within 1 kilometre of the user’s dwelling. An “improved” source is one that is likely to provide “safe” water, such as a household connection, a borehole, a public standpipe or a protected dug well.

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

### IV. Access to sanitation\*

<i>Percentage of population with access to sanitation</i>	<i>Baseline value ( 2008)</i>	<i>Current value ( 2011)</i>
Total	66.7	69.6
Urban	91.1	96.4
Rural	19.0	17.0

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

***The table shows the proportion of population with access to improved sanitation %, and percentage of households with access to flush toilet.***

***\* Data are available on <http://www.armstat.am/en/>, National Statistical Service of the Republic of Armenia.***

<sup>5</sup> United Nations Children’s Fund.

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

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

### Water quality

On the basis of national systems of water classification, the percentage of the number of water bodies or the percentage of the volume (preferably) of water<sup>6</sup> falling under each defined class (e.g., in classes I, II, III, etc. for non-EU countries; for EU countries, the percentage of surface waters of high, good, moderate, poor and bad ecological status, and the percentage of groundwaters/surface waters of good or poor chemical status).

### For non-European Union Countries

#### Status of surface waters

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

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

**The Water Framework Directive (WFD) was adopted in October 2000 and came into force in December 2000. The purpose of the WFD is to establish a framework for the protection of surface water (including rivers, lakes, transitional and coastal waters) and ground waters. The main environmental objectives are to achieve and maintain good status for all surface and ground waters by the target date of 2015, and to prevent deterioration and ensure the conservation of high water quality where it still exist.**

According to the WFD the main information needed to assess water body ecological status and to classify water bodies (in high, good, moderate, poor and bad ecological status) comes from biological monitoring, while chemical and hydro-morphological monitoring provide supporting data to interpret biological information.

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.

#### Status of groundwaters

<i>Percentage of groundwater classified as:</i>	<i>Baseline value M3/sec, %</i>	<i>Current value (specify the year)</i>
I Medium fresh water, 1g/l	113.6 that is 83.2 %	-
II Low mineralized, 1-3 g/l	21.2 that is 15.5 %	-

<sup>6</sup> Please specify.

III Medium mineralized, 3-5 g/l	1.6 that is 1.1 %	-
IV high mineralized and more high, 5g/l and high	0.2 that is 0.2 %	-

**\*Notice: Due to limited observation points of HMC it is impossible to make quantitative assessment.**

Article 8 of the EU WFD also deals with monitoring of groundwater status and requires that for groundwater resources the monitoring program covers the chemical and quantitative status. Groundwater quantity and quality monitoring does not take place in Armenia since 1993. With the support of USAID Water Program the assessment of the condition of previously used groundwater monitoring wells started in 2006. In parallel, the hydrogeology of Armenia was studied, described and mapped. Subsequently, an inventory was made of the various previously used monitoring networks and their monitoring wells. 69 selected wells and springs were rehabilitated with the support of the USAID

Water Program in 2007-2008 and handed over to Hydro-geological Monitoring Centre (HMC), to comprise the National Reference Groundwater Monitoring Network. Since 2009 groundwater monitoring activities are restarted in Armenia by HMC, which implements groundwater quality and quantity monitoring in 70 springs and boreholes.

According to the National Water Program of the Republic of Armenia (article 10, point 3) the water resources are classified by the natural mineralization:

1. Fresh water
2. Low mineralization or lightly salted
3. Average mineralization or salty
4. High mineralization or salty
5. Salty water
6. Over salty water

In the territory of Armenia is common up to 1 g/l total mineralization of fresh water. The exploitation of groundwater reserves are estimated 136.6m<sup>3</sup>: 82% of fresh water , 15.5 % of low mineralization and 0.2% of high mineralization and salty waters.

Ararat valley is a strategic region for Armenia and almost all groundwater reserves are located there. Currently, in Ararat basin is common up to 5 g/l mineralized water. Significant amount of groundwater consumption increases the high mineralization of water. These data are provided by HMC.

## 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.

<b>Water exploitation index *</b>	<b>Baseline value (2008) Mln.m<sup>3</sup>/year</b>	<b>Current value (2011) Mln.m<sup>3</sup>/year</b>
Agriculture (irrigation)	80.0	30.0
Industry <sup>a</sup>	43.0	44.0
Domestic use <sup>b</sup>	5.0	128.0

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

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

*\*Notice: The water exploitation index for industry includes only water use for manufacturing industry. Domestic use includes both public water (non-competitive drinking water supply companies) supply and individual (in those cases communities) supply systems.*

## **Part Three**

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

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

For each target set in this area:

**Targets and target dates under the Protocol of Water and Health are assumed to be set at the end of 2013.**

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.

## **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:

**The target does not set yet and it is under development.**

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.

**Sanitary norms “Surveillance on intestinal diseases”, “Surveillance on viral hepatitis” and national programme on “Surveillance and prevention of viral hepatitis” are under development.**

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:

**The Ministry of Health through its State Hygiene and Anti-Epidemiological Inspection (SHAEI) is responsible for safeguarding the sanitary/epidemiological safety of the population. It develops and supervises the implementation of sanitary/epidemiological regulations and standards, including those for the drinking water sector. The SHAEI controls through inspections the quality of water sources that are used for drinking purposes.**

**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**

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. The only partly operational WWTP is the Yerevan "Aeration" WTP, where only partial mechanical treatment of waste water is implemented.**

**Anyway, funds have been provided by the Government of France for rehabilitation of the "Aeration" WWTP and renovation of a number of sewerage networks. Within the frameworks of the "Lake Sevan Environmental Project" funded by the European Bank for Reconstruction and Development, WWTPs will be built in the towns of Gavar, Martuni and Vardenis. These works have been initiated in 2010 and are envisioned to be completed in 2013. It is in process.**

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.

## **V.5 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:

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.

**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.**

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:

**Over the past decade Government of Armenia has strived to improve access, reliability and quality of drinking water and its infrastructure with increased use of public-private partnerships (PPPs), which have changed the way it manages the sector and brought about improvements in quality and service to customers.**

**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\*\*\***

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*

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

For each target set in this area:

**Over the past decade Government of Armenia has strived to improve access, reliability and quality of drinking water and its infrastructure with increased use of public-private partnerships (PPPs), which have changed the way it manages the sector and brought about improvements in quality and service to customers.**

**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**

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 waste water 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.

**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:

**The only partly operational WWTP is the Yerevan “Aeration” Waste Water Treatment Plant, where implemented only partial mechanical treatment of waste water.**

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:

### **Sewage sludge is not use for any purposes, it is removed to appropriate places.**

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.\***

***Notice: The wastewater which comes from fishing industry free transfer for irrigation purposes in accordance with each area by serviced by Water Users Association.***

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.
  1. Assess the progress achieved towards the target.
  
  2. 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.
  
  3. If you have not set a target in this area, please explain why.

***\*Water Code of the RA, Chapter 9, Article 72, June 4<sup>th</sup>, 2002.***



**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:

**Implemented by Decree of 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**

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.

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

For each target set in this area:

**The quality of water using for bathing implemented by order the Ministry of Health of the RA – On approving sanitary and epidemiological norms and rules N 2-III-2.2.4 “The hygienic requirements to the structure, exploitation and water quality of swimming pools”, 17 May 2006, 534N.**

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:

**Implemented by the order of the Ministry of Health of the RA – On approving sanitary and epidemiological norms and rules N 2-III-2.2.4 ‘The hygienic requirements to the structure, exploitation and water quality of swimming pools’, 17 May 2006, 534N.**

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 (I))**

For each target set in this area:

**It is under control by relevant state bodies, because monitoring is carried out regularly, as well as the public alarms are always the center of attention.**

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

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

For each target set in this area:

**In the recent years Armenia has taken a leading position in terms of water sector reforms in order to precisely manage, protect and use of water resources. Legal basis and appropriate policy has been developed for implementation of effective management and regulatory mechanisms based on the existing institutional and legislative framework. In this phase of the reforms it is important to pay a specific attention to the following:**

- **Implementation of short-, medium-, and long-term measures prescribed in the National Water Program,**
- **Strengthening the Basin Management Organizations**
- **Decentralization of water resources management**
- **Increased public participation and enhancement of the public's role in the water resources management**
- **Strengthening water resources management instruments.**

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

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

3. Assess the progress achieved towards the target.

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

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

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

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

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

**Currently, in Armenia water supply companies face with problems of water losses. It is approximately 80%. 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.**

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

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

**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 National Policy Dialogue is the most appropriate coordination mechanism.**

**Thanks to the Government of Finland and UNECE, Armenia started 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 Steering Committee comprises some of the key ministries and agencies as well as the most competent NGOs and other partners. A specific Working Group is established that helps the Steering Committee in setting and approving the targets, targets dates and proposed measures.**

**The following are the basic steps of the target setting process: improving wastewater treatment, increasing the access of the rural populations to improved sources of drinking water, establishing water safety plans, integrated water resources management plans, safeguarding the relative good status of the existing response systems on water-related diseases.**

**Within the framework of the Protocol a workshop has been organized by the key stakeholders:**

- **The regional workshop on “Raising awareness about the Water Convention and its Protocol and strengthening the role of the civil society organizations in their promotion and implementation”, 09 November 2012 , Armenia. The regional workshop aimed to increase awareness and involve a group of NGOs in the activities under the Water Convention and the Protocol with the view to giving the public the opportunity to express its concerns and enabling public authorities to take due account of public concerns.**

**The regional workshop aimed to increase awareness and involve a group of NGOs in the activities under the Water Convention and the Protocol with the view to giving the public the opportunity to express its concerns and enabling public authorities to take due account of public concerns.**

**The workshop provided the opportunity to strengthen cooperation and coordination between regional and national NGOs on the issues of transboundary water cooperation in specific water basins, such as Kura-Araz and increase cooperation between NGOs on the issues of national water management; and to contribute to the exchange of experience among NGOs in these issues and implementation of the Protocol.**

- **Ninth meeting of the Steering Committee<sup>1</sup> of the National Policy Dialogue on IWRM in Armenia and first international coordination committee meeting of the "Environmental Protection of International River Basin" project, 12 December, 2012.**



During the meeting discussed many issues, taking into consideration two main directions OECD working in Armenia within the NPD process (a) development of a national strategy on sustainable sanitation; and (b) launching of a comprehensive assessment of selected economic instruments in the water sector of Armenia and stressed the importance EU funded regional projects “Transboundary River Management for the Kura River Basin – Phase III” and “Environmental Protection of International River Basins”, to which Armenia is actively participating.

The results of meeting are as follows:

- Steering Committee welcomes the launching of the new project and stresses its importance for Armenia. Steering Committee expresses its readiness to oversee the project implementation in Armenia and organize discussions at key stages of the project implementation;
- Steering Committee stresses the importance of the issue for Armenia and the need to develop national strategy for sustainable sanitation within the OECD component of the NPD process in Armenia;
- Steering Committee approves the idea of having recommendations for a policy package on the introduction of the economic instruments in water sector of Armenia as final outcome of the OECD component of the NPD process in Armenia;
- Steering Committee approves the proposed tentative workplan of the EPIRB project activities in Armenia, and called EPIRB project to try to get some basic hydrological data from the Turkish part of Akhuryan River Basin, given the fact over 70% of the basin is located in the territory of Turkey.
- Steering Committee express its readiness to continue serving as forum to coordination of all water –related national and regional projects implemented in Armenia.

Moreover, AWHHE<sup>2</sup> organized a regional workshop on “Raising awareness about the Water Convention and its Protocol and strengthening the role of the civil society organizations in their promotion and implementation” financed by UNECE and implemented in partnership with Women in Europe for a Common Future (WECF), which took place on 09 November 2012 in Yerevan, Armenia.

The regional workshop aimed to increase awareness and involve a group of NGOs in the activities under the Water Convention and the Protocol with the view to giving the public the opportunity to express its concerns and enabling public authorities to take due account of public concerns.

The conference was attended by 30 representatives of different organizations, ministries and international and regional programs from Armenia and Georgia: the Ministry of Nature Protection of RA, the Ministry of Health of RA, the Ministry of Territorial Administration of Armenia, Office of Economic Growth - USAID Armenia, UNDP Climate Change Program, UNDP/GEF Project Transboundary Degradation in the Kura - Araks River Basin, Environmental Protection of International River Basins project, Scientific Center of Zoology and Hydroecology of NAS Armenia, Armenian and Georgian NGOs, the International Center for Environmental Research Georgia, WECF, and Caucasus Environmental NGO Network. AWHHE was supported by the UNECE Secretariat with information materials related to the Water Convention and the Protocol in English and Russian.

<sup>1</sup>[http://www.unece.org/fileadmin/DAM/env/water/meetings/NPD\\_meetings/AM\\_SC\\_2012-12-12\\_Minutes\\_Eng.pdf](http://www.unece.org/fileadmin/DAM/env/water/meetings/NPD_meetings/AM_SC_2012-12-12_Minutes_Eng.pdf)

<sup>2</sup> [http://www.awhhe.am/eng/meeting\\_unece2010.html](http://www.awhhe.am/eng/meeting_unece2010.html)

## **Part Five**

### **Information on the person submitting the report**

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

#### **Name of officer responsible for submitting the national report:**

**Dr. Volodya Narimanyan**

Head of Water Resources Management Agency

Ministry of Nature Protection of the RA

**E-mail:** narimanyan59@mail.ru

**Telephone number:** /374 10/ 54-08-67

#### **Name and address of national authority:**

Water Resources Management Agency, Ministry of Nature Protection of the Republic of Armenia  
3<sup>rd</sup> Government Bldg, Republic Square, 3750010, Yerevan, Republic of Armenia

#### **The contact persons are:**

**Armine Arushanyan**

Chief specialist in Water Use Permits Division

Water Resources Management Agency, Ministry of Nature Protection of the RA

3<sup>rd</sup> Government Bldg, Republic Square, 3750010, Yerevan, Republic of Armenia

**Telephone number:** /374 10/ 54-08-75

**E-mail:** arushanyanarmine@list.ru

**Nune Bakunts, MD**

Head of Legal Instruments and Document Flow Management Division

State Hygiene and Anti-Epidemic Inspectorate of Ministry of Health of the RA

10, G. Hovsepyan street, Norq-Marash

0047 Yerevan, Republic of Armenia

**Telephone number:** /374 10/ 65 16 60

**mobile:** /374 91/ 42 31 85 or /374 94/ 42 31 85

**E-mail:** n.bakunts@gmail.com, n\_bakunts@moh.am, n.bakunts@yahoo.com

**Emma Anakhasyan, MD MPH**

Head of the Environmental Health Department

Project Coordinator, "Armenian Women for Health and Healthy Environment" NGO

**Telephone number:** /374 10/ 52 36 04

**mobile:** /374 93/ 83 38 13

**E-mail:** emmaanakhasyan@mail.ru, office@awhhe.am