



U K R A I N E

Summary Report

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

For submission to

The Secretariat of the Protocol on Water and Health

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Part 1

General aspects

1. Were the time-bound targets set in your country under Article 6 of the Protocol?

YES NO BEING SET

YES. Ukraine is a Party of the Protocol on Water and Health since 2003, when the Protocol was ratified by Law of Ukraine # 1066-IV of 09.07.2003. According to Article 6 of the Protocol, with support of the Ukraine - Norway International Assistance Project, 15 national targets were set, as well as indicators and terms of meeting the targets. On September 14, 2011, the Ministry of Environment approved the National Targets of Ukraine (NTs) to the Protocol on Water and Health by its Order # 324 and submitted them to the UN ECE Secretariat.

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

1500 Ukrainian copies and 200 English copies were published with finance support of Ukraine - Norway International Assistance Project for setting NTs in Ukraine. Later on, 3000 additional Ukrainian copies were published with finance support of WSSCC (Water Supply and Sanitation Collaborative Council) and disseminated in the framework of Water, Sanitation and Hygiene for All (WASH) Campaign of Ukrainian National Environmental NGO (UNENGO) "MAMA-86".

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.

According to Assignment # 46963 of the Cabinet of Ministers of Ukraine of 06.10.2003 on implementation of the Action Plan for Implementation of the Law on Ratification of the Protocol, since 2004 the Ministry of Ecology and Natural Resources of Ukraine (MoE) is the sole authorised central executive body (CEB) that supervises implementation of the Plan, fulfils function of the Focal Point in Ukraine to coordinate and maintain the contacts with the Secretariat of the Protocol.

In October 2003, the Cabinet of Ministers of Ukraine (CMU) approved the Action Plan for Implementation of Law of Ukraine on Ratification of the Protocol on Water and Health to the Convention on Protection and Use of Transboundary Watercourses and International Lakes of 1992, (CMU Assignment # 46963 of 06.10.2003), drafted by MoE.

In 2006, according to a MoE Order, the Inter-agency Working Group for implementation of the Protocol was established - the WG incorporated representatives of CEBs, academic community, R&D institutes and NGOs.

In 2008, on behalf of Ukraine, MoE applied for international assistance in development of NTs via the mechanism for facilitation of implementation of the Protocol. From 2008 to 2010, with support of the Ukraine - Norway project, draft NTs were developed and discussed by the Inter-agency WG. In August 2010, MoE officially released draft NTs for public consultations.

In September - November 2010, draft NTs underwent public consultations process, including the public hearings organised by UNENGO "MAMA-86", in cooperation with MoE, the State Sanitary and Epidemiological Service (SSES) and with participation of the Ukraine - Norway Project. In the course of three sessions of the Inter-agency WG for implementation of the Protocol (in December 2010 - February 2011), public comments on the draft NTs were duly accounted for.

The National Targets were approved by MoE Order # 324 of September 14, 2011.

On September 29, 2011, the Cabinet of Ministers of Ukraine instructed the Ministry of Ecology and Natural Resources, the Ministry of Regional Development, Construction, Housing and Utilities, the Ministry of Agricultural Policy, the Ministry of Education and Science, the Ministry of Public Health, the Ministry of Finance, and the State Water Agency to implement measures for meeting the National Targets and report to MoE annually on their activities (by March 1 of the next year).

On April 12, 2013, the MoE re-nominated the Inter-agency Working Group on coordination of Protocol implementation by its Order #165.

In 2013, with MoE support and with involvement of SSES and UNENGO “MAMA-86”, jointly with France and Portugal, Ukraine participated in a pilot project for self-assessment of the ensuring equitable access to water and sanitation in the country, based on the test tool developed to assist Parties of the Protocol to achieve the Protocol goal on ensuring equitable access to water and sanitation in the Pan European region. In the framework of implementation of the pilot, SSES organised collection of official data with application of the self-assessment tool, with involvement of all CEBs in charge of provision of water and sanitation services to Ukrainian residents, as well as oblast SES units. On March 1, 2013, the Draft Self-assessment developed by project experts on the base of the information collected, was presented to a national seminar with participation of all stakeholders, including CEBs, international institutions, NGOs, representatives of the Protocol Secretariat and experts from France and Portugal. The pilot was implemented with support of the French Government and UN ECE. See the Baseline Study on ensuring equitable access to water and sanitation in Ukraine in Annex 1 to this Report.

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

According to the Millennium Development Goals, Ukraine developed relevant MDGs on water for urban and rural residents that were accounted for in the course of discussions on National Targets under the Protocol.

In the course of NTs setting, framework and specialised legal acts were accounted for: the Constitution of Ukraine, laws of Ukraine on Ensuring Sanitary and Epidemiological Wellbeing of the Population (Law # 4004-XII of 24.02.1994); on Drinking Water and Drinking Water Supply (Law # 2196-IV of 18.11.2001), as well as national programs: National Target-specific Program "Drinking Water of Ukraine" for 2006 - 2020 (# 2455-IV of 03.03.2005); National Target-specific Program for Reforms and Development of the Housing and Utilities Sector for 2009 - 2014 (# 1869-IV of 25.06.2004), National Target-specific Program for Development of Water Management and Environmental Improvement of the Dnieper River Basin up to 2021 (# 4836-VI of 24.05.2012); National Target-specific Social Program for Priority Provision of Centralised Water Supply in Rural Settlements that Rely on Truck Transported Water up to 2015 (# 741 of 27.09.2008), the Strategy of National Environmental Policy up to 2020, and the National Environmental Action Plan for 2011 - 2015 (approved by CMU Decree # 577 of 25.05.2011), Health of the Nation Inter-agency Comprehensive Program for 2002 - 2011 (approved by CMU Decree # 14 of 10.01.2002), etc.

Besides that, new state sanitary norms and rules of relevance to drinking water supply were also accounted for, in particular: DSanPiN 2.2.4-171-10 (Hygiene Requirements to Drinking Water for Human Consumption), DSTU 4808:2007 (Sources of Centralised Water Supply. Hygiene and Environmental Requirements to Water Quality and Water Intake Rules), SanPiN 4630-88 (Sanitary Norms and Rules of Protection of Surface Waters from Pollution).

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

A cost-benefit analysis was not conducted in the course of NTs development. In the course of target-setting, relevant agencies in charge of a particular target and associated indicators relied on already existing measures in state programs and finance allocations stipulated.

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?

Public consultations on draft NTs were conducted - the consultations were organised and conducted by UNENGO “MAMA-86” from September 1 to November 10, 2010, with finance support of Women for Water Partnership (WfWP) and WSSCC. Draft NTs were disseminated by UNENGO “MAMA-86” by e-mail to subscribers of its mailing list and via partners' networks and by distribution of hardcopies in the course of different events. In the course of public hearings in the draft NTs (Kyiv, October 20 - 21, 2010), the comments, collected during the public consultations, were presented and discussed. The hearing were attended by representatives of the Ukraine - Norway project, MoE, MPH, interested public and authorities (including 11 representatives of authorities, 17 representatives of NGOs and mass media from 14 cities of Ukraine). In the course of public consultations and hearings, UNENGO “MAMA-86”

received 23 written materials with numerous comments from authorities of different levels, NGOs and individual experts. All the comments were compiled into a comparative table and submitted to the Coordination Group of the Ukraine - Norway Project, MoE and other CEBs (MPH, the Ministry of Regional Development, Construction, Housing and Utilities and the State Water Agency). Conclusions on results of the public hearings were also presented by UNENGO "MAMA-86" at 4th session of the Steering Committee of the National Policy Dialogue on IWRM (with support of UN ECE, EU WI, OECD).

All the comments collected during public consultations were presented by UNENGO "MAMA-86" at 3 sessions of the Interagency WG chaired by MoE. The majority of these comments and amendments were accounted for and incorporated into the final NTs document.

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.

In order to produce this Summary Progress Report on Implementation of the Protocol on Water and Health in Ukraine, the Ministry of Ecology and Natural Resources of Ukraine collected information on progress in meeting the National Targets of Ukraine under the Protocol and general indicators as defined by the Guideline Principles. The information was submitted by the Ministry of Public Health, the Ministry of Regional Development, Construction, Housing and Utilities; the Ministry of Finance; the Ministry of Education and Science, Youth and Sport; the Ministry of Social Policy, the State Water Agency and the State Statistics Service.

The Report was drafted by the Inter-agency WG chaired by the Ministry of Ecology and Natural Resources of Ukraine. The Draft Report was posted officially on MoE's web-site on 12 April 2013. There were 52 comments and amendments received from the representatives of stakeholders, 41 of these comments were taken into due account

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).

Substantial finance obstacles exist for implementation of the measures intended to meet the targets. Since 2010, the administrative reform continues - as a result, MoE and MPH had already lost some their subordinate units. In particular, now, a department with 5 staff members deals with protection of water resources of Ukraine, while in 2003, when the Protocol was ratified, the relevant Directorate had 15 officials and 3 departments.

According to the Decree of the President of Ukraine on December 9, 2010 № 1085 "On the optimization of central executive authorities" the State Sanitary and Epidemiological Service (SSES) of Ukraine was established as a separate central executive authority. Thirty Main Directorates of SSES Ukraine were established as separate legal entities, including 1 in Crimea Autonomous Republic, 24 in the regions (oblasts), 2 in the cities of Kyiv and Sevastopol, and 3 bodies for the appropriate form of transport (water, railway and air). In addition, due to creation of inter-district bodies now the number of territorial SSES structural units is nearly halved at local level (in urban and rural districts). The number of these units is about 400. The SSES staff was decreased more than on 40%, since 2013 it is 29,996 people.

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.

When installing NTs all scientific aspects available at that time were taken into account.

As for emerging issues, accounted for in the course of setting the targets in Ukraine and being of major importance to making the problem of water and health more socially significant, the following target was suggested - Awareness raising of representatives of central executive bodies and local authorities, academia, organisations and the general public. Raising awareness of best international water supply and sanitation technologies, raising public responsibility for protection of water resources.

Part Two

Common indicators¹

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?

By the moment of entry of the Protocol into force (2005), centralised water supply services covered 76% of the population of Ukraine, including 95% coverage of urban residents and about 27% coverage of rural residents.

Due to lack of official statistical data on percentage shares of residents covered by centralised water supply services, the estimates were made for every particular year based on reports of the State Statistics Service of Ukraine on actual numbers of residents in cities/villages and data of the Ministry of Regional Development on numbers of households connected to centralised water supply networks. The reported indicators are estimates.

According to the State Statistics Service of Ukraine, in 2011, the country's population reached 45,633.6 thousand (46,143.7 thousand in 2009), including 31.381 million urban residents (or 68.77% of the overall population), and 14.253 million rural residents (or 31.23%). In 2009, the overall population of Ukraine included 31,524.8 thousand urban residents (or 68.45%) and 14,438.1 thousand rural residents (31.55%).

Estimates suggest that in 2011, centralised water supply covered 71.2% residents of Ukraine, comparatively to 70.6% in 2009.

In terms of water supply systems the situation varies in different regions of the country.

The highest coverage of settlements and population by centralised water supply services is observed in Khersonska oblast (97 and 99%, respectively) and in AR Crimea (96 and 84%, respectively). These regions are followed by Zaporizka oblast (56.3%) and Mykolaivska oblast (50.2%), while in other oblasts coverage of settlements does not exceed 30%. The coverage figures almost did not change comparatively to 2009.

In terms of residents covered by water supply services, 100% coverage is registered only in Kyiv, followed by Khersonska oblast (99%), Donetsk oblast (95%), Zaporizka oblast (91.3%), AR Crimea (84%), and Odeska oblast (83.4%). In other oblasts relevant figures do not exceed 80%.

In 2011, 24 hours per day (without interruption) water supply for 100% of settlements and residents was available in three oblasts (Ternopil'ska, Kharkiv'ska and Chernihiv'ska) and in Kyiv (in 2009, it was available in Kharkiv'ska oblast and in Kyiv).

In 2011, truck water supply was provided to settlements and residents in 10 oblasts: Zaporizka (37.4 and 7.1%, respectively), Mykolaivska (16 and 0.5%), Dnipropetrov'ska (11.4 and 1.9%), Kirovohrad'ska (3.1 and 3.1%), Kherson'ska (3 and 1%), Odeska (2.5 and 2.1%), Poltav'ska (0.4 and 0.1%), Ivano-Frankiv'ska (0.3 and 0.1%), Vinnitska (0.1 and 0.5%) and Donetsk, comparatively to 12 oblasts in 2009 (Zaporizka, Mykolaiv'ska, Dnipropetrov'ska, Kirovohrad'ska, Kherson'ska, Odeska, Poltav'ska, Ivano-Frankiv'ska, Zhytomyr'ska, Vinnitska, Donetsk and AR Crimea).

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.

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

Centralised water supply services are provided to urban and rural residents, however centralised water supply networks cover only a quarter of all villages in Ukraine. Other rural residents rely on wells and individual deep water wells (predominantly of poor technical quality).

In 2011, SSES of Ukraine supervised 18875 sources (19126 sources in 2009) of centralised residential water supply: 1603 municipal (1583 in 2009) water supply networks, 4954 agency-run water supply networks (5171 in 2009), 7640 rural water supply networks (7676 in 2009) and 174314 decentralised water supply sources (175607 in 2010, 85426 in 2009), including 169734 shallow wells (171048 in 2010, 80862 in 2009), 3371 artesian wells (3371 in 2010, 3378 in 2009), 1209 captured streams (1171 in 2010, 1186 in 2009).

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

Water sampling covers the whole system: water intakes, water treatment facilities, distribution networks and end users' taps.

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.²

The standards used in Ukraine are different from the WHO standards.

SSES of Ukraine runs regular laboratory control of the water quality in places of water intake, water plant and networks of centralized drinking water supply in accordance with national standards: DSanPiN 2.2.4-171-10 "Hygienic requirements for drinking water intended for human consumption", DSTU 4808:2007" Sources of centralized drinking water supply. Hygienic and environmental requirements to water quality and selection rules"; SanPiN 4630-88" Sanitary rules and norms of surface water protection from pollution" and takes relevant respond measures to respond in case of violations of sanitary laws. However, most of the standards used in Ukraine differ from the WHO standards.

However, state sanitary norms and rules "Hygienic requirements for drinking water intended for human consumption" DSanPiN 2.2.4-171-10 approved by the Ministry of Health of Ukraine from May 2, 2010 № 400 and registered by the Ministry of Justice of Ukraine on July 1 2010 # 452/17747, are harmonized with the European legislation, they consistent with requirements for quality and safety of drinking water of countries such as Russia and the United States and meet today demands to prevent morbidity of residents of Ukraine and provide firstly the hygienic requirements for bottled drinking water.

This national standard defines measures to prevent drinking water pollution during its production, as well as the European practice of step by step introduction of safety and quality of drinking water standards, which will allow increasing the level of public security due to the possibility of planning and financing of measures for water supply and sewage upgrading.

According to DSanPiN a step by step implementation approach stipulates that the majority of the safety and quality of drinking water parameters are set immediately after the introduction of the document, the some of them will be applied in 5 years, and the most complicated parameters - in 10 years.

² 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.

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*.

According to DSanPiN 2.2.4-171-10 (*Hygiene Requirements to Drinking Water for Human Consumption*), Section "Epidemiological Safety Parameters for Drinking Water" (Annex 1), *E.coli* and *enterococci* should not be present.

National Statistical Reports do not contain data on microbiological water contamination by *E. Coli* and other microorganisms. According to Statistical Reporting Form # 18 "Reporting on SSES Control of Environmental Objects and Factors that Influence Human Health", reports should provide percentage shares of samples that fail to meet applicable chemical and bacteriological standards. This Report provides a summary table with an integral assessment of bacteriological quality of drinking water in centralised water supply systems.

WatSan_S2	Baseline level (2009)	Current level (2011)
<i>E. coli</i>	<i>Is not provided separately in official statistical forms</i>	
<i>Enterococci</i>	<i>Is not provided separately in official statistical forms</i>	
Integral indicator* (shares of drinking water samples failing to meet bacteriological standards)	3.1	2.9

*The share of understandard water samples from centralised water supply sources

Understandard water samples from centralised water supply sources are mainly registered in rural areas (see Table 1).

Table 1. Shares of understandard drinking water samples (bacteriology) (%)

WatSan_S2	Baseline level (2009)	Current level (2011)
Shares of understandard drinking water samples, failing to meet bacteriological sanitary requirements, sampled in:		
centralised water supply facilities, %	3.1	2.9
including:		
municipal water supply systems, %	2.1	2.0
rural water supply systems, %	5.0	4.7
water distribution networks, %	3.2	3.0
sources of decentralised water supply, %	16.8	16.4

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;³
- 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).

³ As defined in the WHO Guidelines for drinking-water quality.

According to Statistical Reporting Form # 18 "Reporting on SSES Control of Environmental Objects and Factors that Influence Human Health", reports should provide percentage shares of samples that fail to meet applicable chemical and bacteriological standards. This Report provides a summary table with an integral assessment of sanitary chemical quality of drinking water in centralised water supply systems.

<i>Substances</i>	<i>Baseline level (2009)</i>	<i>Current level (2011)</i>
<i>Fluorides</i>	<i>Is not provided separately in official statistical forms</i>	
<i>Nitrates and nitrites</i>	<i>Is not provided separately in official statistical forms</i>	
<i>Nitrates (decentralised water supply):</i>		
<i>Community wells/captured streams</i>	-	12.2/6.3
<i>Individual wells/captured streams</i>	-	14.5/33.2
<i>Arsenic</i>	<i>Is not provided separately in official statistical forms</i>	
<i>Lead</i>	0.5	0.9
<i>Iron</i>	5.0	2.9
<i>Additional physical/chemical parameter⁴ 1: Manganese</i>	2.7	1.5
<i>Additional physical/chemical parameter 2: Cadmium</i>	2.2	1.1
<i>Additional physical/chemical parameter 3: Carbon tetrachloride</i>	1.8	0.4
<i>Additional physical/chemical parameter 4: Chloroform</i>	23.6	21.6
<i>Additional physical/chemical parameter 5: Bismuth</i>	1.4	0.0

Table 2. Shares of understandard drinking water samples (sanitary chemical parameters) (%)

<i>WatSan_S2</i>	<i>Baseline level (2009)</i>	<i>Current level (2011)</i>
<i>Shares of understandard drinking water samples, failing to meet physical/chemical sanitary requirements, sampled in:</i>		
<i>centralised water supply facilities, %</i>	12.9	14.7
<i>including:</i>		
<i>municipal water supply systems, %</i>	9.2	11.8
<i>rural water supply systems, %</i>	17.9	18.3
<i>water distribution networks, %</i>	10.8	12.1
<i>sources of decentralised water supply, %</i>	28.6	32.0

⁴ New and emerging factors are recommended to be accounted for (e.g. climate change or specific agricultural practices).

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

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

	Incidence (the number of patients)		Number of outbreaks	
	Baseline level (2009)	Current level (2011)	Baseline level (2009)	Current level (2011)
<i>Cholera</i>	-	33/33**	-	1/1
<i>Bacillary dysentery (shigellosis)</i>	365/0	25/0	5/0	1/0
<i>Enterohemorrhagic E.coli*</i>	<i>Is not provided separately in official statistical forms</i>			
<i>Yersinia enterocolitica induced enteritis</i>	0	0	0	0
<i>Rotaviral enteritis</i>	35/0	120/23	4/0	7/1
<i>Viral hepatitis A</i>	0	77/64	0	3/2
<i>Typhoid fever</i>	0	0	0	0

* *enterohemorrhagic Escherichia coli*.

** ratios of data for outbreaks in general to relevant figures for the water infection route

Incidence data for cholera, shigellosis, enterohemorrhagic E.coli, viral hepatitis A and enteric fever are compiled at the base of state statistic forms ## 1 and 2, that provide information of numbers of patients. Waterborne nature is identified only for data on outbreaks.

In 2012, no outbreaks were registered in connection with use of understandard drinking water.

In 2011, two outbreaks of viral hepatitis A were registered, associated with the water infection route (64 persons were affected, including 37 children who used understandard drinking water from a centralised supply network in Bakhchisarai of AR Crimea and in Sinelnikove of Dnipropetrovsk oblast), 1 outbreak of rotaviral infection in Rovenki of Luhanska oblast at "Kosmonavtiv" coal mine (23 persons were affected), 1 cholera outbreak in Donetsk oblast (33 persons were affected, including 1 child).

In 2010, one outbreak of viral hepatitis A was registered, associated with consumption of understandard drinking water - in Yasenytsa village of Drohobychsky district of Lvivska oblast (10 adults were affected).

In 2009, no outbreaks of diseases were registered in connection with consumption of drinking water of poor quality.

In 2008, one outbreak of rotaviral enteritis was registered in Chervonohrad of Lvivska oblast (30 persons were affected, including 24 children), as well as one outbreak of viral hepatitis A in Boryslav of Lvivska oblast (92 persons were affected, including 37 children). The outbreaks were associated with consumption of understandard drinking water. Relevant disease prevention and counter-epidemic measures were implemented.

Table 3. General population morbidity data for specific infections

	Cases (patients)		Cases (per 100 thousand residents)	
	Baseline level (2009)	Current level (2011)	Baseline level (2009)	Current level (2011)
<i>Cholera</i>	-	33	-	0.07
<i>Bacillary dysentery (shigellosis)</i>	2826	1627	6.12	3.55
<i>Yersinia enterocolitica induced enteritis</i>	130	101	0.28	0.22
<i>Rotaviral enteritis</i>	5747	8684	12.44	18.97
<i>Viral hepatitis A</i>	2629	1797	5.69	3.93
<i>Typhoid fever</i>	6	16	0.01	0.03

⁵ If possible, please distinguish between autochthonous and imported cases

III. Access to drinking water

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

<i>Percentage of population with access to drinking water</i>	<i>Baseline value (2009)</i>	<i>Current value (2011)</i>
<i>Total</i>	70.6	71.2
<i>Urban residents</i>	93.2	93.4
<i>Rural residents</i>	22.1	22.2

Access to drinking water is mainly defined by availability of centralised water supply, as the due legislation does not provide for obligations of owners of drinking water supply sources (i.e. wells) at private lands to register these sources.

The shares of urban and rural residents with access to drinking water are based on data of the Ministry of Regional Development, while the overall population of the country was estimated at the base of demographic statistical data.

The WHO/UNICEF⁶ 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

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

<i>Percentage of population with access to sanitation</i>	<i>Baseline value (2009)</i>	<i>Current value (2011)</i>
<i>Total</i>	53.3	53.9
<i>Urban residents</i>	76.8	77.2
<i>Rural residents</i>	2.6	2.6

*Access to sanitation is mainly defined by availability of **centralised sewerage systems**.*

The shares of urban and rural residents with access to sanitation are based on data of the Ministry of Regional Development, while the overall population of the country with access to sanitation was estimated at the base of demographic statistical data.

⁶ United Nations Children’s Fund.

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 water⁷ 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

Percentage of surface water falling under class ^a	Baseline value (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.

According to Art. 36 of the Water Code of Ukraine, water use environmental safety standards are set to assess possibilities to use water bodies for meeting residential and economic water needs: maximal acceptable concentrations of substances in water bodies used for drinking, household and other residential needs; MACs for substances in water bodies used of fishing; limits for levels of radioactive substances in water bodies used for drinking, household and other residential needs. In necessary cases, stricter water use environmental safety norms may be set for water bodies used for healing and recreational purposes.

In order to ensure gradual attainment of environmental quality standards for water bodies, limits for pollution discharges are set according to Art. 38 of the Water Code of Ukraine. The Cabinet of Ministers of Ukraine regulates procedures of development and approval of discharge limits and relevant lists of pollutants controlled. To this end, CMU Decree # 1100 of 11.09.1996 was enacted on the Procedures of Development and Approval of Discharge Limits and the List of Pollutants Regulated. The list consists of 4 sub-lists of pollutants under control in the course of discharge to water bodies: List A incorporates pollutants that are controlled in all discharges. The list included 10 substances: dissolved oxygen, suspended solids, mineralisation, sulphates, chlorides, ammonia nitrogen, nitrates, nitrites, phosphates, oil derivatives. Besides that, the following physical/chemical parameters are always controlled: BOD₅, COD (dichromate, permanganate), water toxicity (bio-testing), bacteriological contamination and water radioactivity (overall radioactivity), as well as pH and temperature; List B incorporates 132 substances whose discharges are to be gradually eliminated in the nearest future and are subject to regulation if present in wastewater flows; List C includes 155 substances whose discharges are to be reduced and are subject to regulation if present in wastewater flows; List D includes pollutants from Table 11 of SanPiN 4630-88 (Sanitary Norms and Rules of Protection of Surface Waters from Pollution) that are not listed in B and C lists.

According to the Regulation on the State System of Environmental Monitoring (CMU Decree # 391 of 30.03.1998), assessment of quality of surface water bodies belongs to the sphere of competence of four governmental bodies in charge of use and protection of natural resources: 1) MoE - laboratories of

⁷ Please specify.

Environmental Inspectorates monitor wastewater discharges to water bodies; 2) the State Water Agency - laboratories of basin and oblast-level Water Resources Directorates monitor quality of surface water bodies in areas of multi-purpose water use, within impact zones of NPPs and at transboundary water bodies; 3) MPH - oblast and district-level SSES laboratories monitor water quality in centralised water supply systems and in recreational areas; 4) the State Meteorological Service of Ukraine maintains monitoring of water quality in surface water bodies (background monitoring).

The overwhelming majority of the above laboratories are poorly equipped, particularly in terms of modern equipment.

The state monitoring system lacks a uniform database on surface water bodies that could be applied by the above agencies in charge of water monitoring. Some data are not available in electronic form. The system also lacks a systematic approach to regular reporting on water resources use, pollution and status. No common methodologies are available for quality assessment and classification of surface and groundwater bodies (such as the one provided for in EU WFD).

So far, environmental water quality standards for water bodies have not been developed yet. Water quality classes may be assessed with application of the Methodology for Environmental Assessment of Surface Water Quality by Relevant Categories (developed in 1998 and approved by a MoE Order). However, the methodology lacks a relevant legal status and is not an official document for application. Sometimes, surface water monitoring agencies apply the Methodology to assess surface water quality in terms of 7 quality categories: I class (excellent - 1st category); II class (good with 2 subcategories - very good and good - 2nd and 3rd); III class (moderate - with 2 subcategories - moderate and satisfactory - 4th and 5th); IV class (poor - 6th); and V class (very poor - 7th).

However, application of the Methodology is not mandatory, as a result, it is impossible to collect information on shares of water bodies of relevant quality classes from monitoring agencies. The same is true for overall numbers of water bodies under the categories and associated water volumes.

National Standard DSTU 4808:2007 (Sources of Centralised Water Supply. Hygiene and Environmental Requirements to Water Quality and Water Intake Rules) was approved by Order # 144 of July 5, 2007 of the State Committee of Ukraine for Technical Regulation and Consumption Policy. Regulation # 279 of 10.08.2012 of the National Commission for State Regulation in the Sphere of Housing and Utilities refers to the above National Standard. Therefore, the standard is applied.

According to the above standard, the hygiene and environmental quality classification of surface water bodies (sources of centralised water supply) is based on 80 parameters for assessment of drinking water quality in terms of compliance with the sanitary legislation. The classification relies on seven separate data groups (blocks): I group (4 organoleptic indicators); II group (17 general sanitary chemical parameters); III group (6 hydrobiological parameters); IV group (6 microbiological parameters); V group (2 parasitological parameters); VI group (9 radiation safety indicators); VII group (36 priority toxicological parameters - chemical substances present in water, including 25 inorganic and 11 organic pollutants).

The range of water quality parameters is subdivided into 4 quality classes: 1st class (excellent, desirable water quality); 2nd class (good, acceptable water quality); 3rd class (moderate, acceptable water quality); 4th class (satisfactory, tentatively acceptable and undesirable water quality).

Now, in Ukraine, almost all surface water bodies (and groundwater bodies in some regions) do not meet sanitary requirements to drinking water sources. At the same time, existing technologies/facilities for drinking water treatment and disinfection are unable to ensure water treatment to the level of applicable safety requirements. Drinking water supply systems rely mainly (more than 70%) on surface water sources. Environmental quality of surface water bodies and quality of water in these water bodies are decisive factors of sanitary and epidemiological wellbeing of the country's population. Potential stocks of surface water resources in Ukraine are estimated at the level of 209 km³/year, including 25 per cent of water resources of local formation. At the same time, according to the hygiene classification, the majority of river basins are categorised as polluted and heavily polluted.

Results of monitoring of surface water bodies suggests that, notwithstanding a substantial production decline in recent years (and associated wastewater discharges), there is a marked trend of declining sanitary chemical and sanitary biological quality of water bodies of 1st and 2nd categories in the

country. Shares of understandard water samples taken in 1st category water bodies reached 16% in 2011 (vs. 18% in 2009) for sanitary chemical standards and 14% in 2011 (vs. 22.9% in 2009) for sanitary biological standards.

Fishing water bodies or their separate water areas in Ukraine are classified under 3 categories: **highest category** (breeding and spawning areas of valuable fish species, habitats of aquatic mammals and protection zones of all types of facilities dealing with artificial breeding of valuable fish species, aquatic mammals and plants); **I category** (water bodies used for protection and reproduction of valuable fish species of particular sensitivity to dissolved oxygen levels); **II category** (water bodies used for other fishery purposes).

In 2011, in terms of sanitary chemical parameters, highest shares of understandard water samples were observed in Luhanska oblast (100%), Dnipropetrovska oblast (63.4%), and Chernihivska oblast (51.5%) - these figures substantially exceed Ukrainian national averages; while in terms of bacteriological parameters highest shares of understandard water samples were observed in Odeska (37%), Ivano-Frankivska (33.9%), Chernihivska (21.4%) and Kharkivska (18.2%) oblasts.

In 2011, in the case of 2nd category water bodies, the share of understandard water samples reached 22.5% for sanitary chemical standards (vs. 22.9% in 2009), and 15.6% (vs. 16.4% in 2009) for bacteriological standards.

In 2011, highest shares of understandard water samples were observed in Dnipropetrovska oblast (81.5%), Luhanska oblast (70.4%), Donetsk (57.3%) and Zaporizka (65.1%) oblasts for sanitary chemical standards (the figures substantially exceeded national averages), while in the case of bacteriological standards, highest shares of understandard samples were observed in Donetsk oblast (41%), Luhanska (39.3%) and Kirovohradska (35.9%) oblasts.

Key pollutes of surface water bodies include overloaded wastewater treatment facilities and sewers that are poorly maintained and need capital repairs and reconstruction.

At the same time, due to underfunding, in the majority of cases, construction and reconstruction works at water supply and sanitation systems are almost stalled, notwithstanding that these works are stipulated by national and local programs for water management, protection of water resources and improvement of drinking water quality.

Status of groundwaters

Percentage of groundwaters falling under class ^a	Baseline value (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.

In the case of groundwater bodies, their quality classification in Ukraine was developed for sources of centralised water supply, relying on hygiene and environmental criteria. Relevant ranges of indicators (criteria) are listed in National Standard DSTU 4808:2007 (Sources of Centralised Water Supply. Hygiene and Environmental Requirements to Water Quality and Water Intake Rules) that was approved by Order # 144 of July 5, 2007 of the State Committee of Ukraine for Technical Regulation and Consumption Policy.

According to the above standard, the hygiene and environmental quality classification of groundwater bodies (sources of centralised water supply) is based on 71 parameters for assessment of drinking water quality in terms of compliance with the sanitary legislation. The classification relies on seven separate

data groups: I group (4 organoleptic indicators); II group (14 general sanitary chemical parameters); III group (6 hydrobiological parameters); IV group (6 microbiological parameters); V group (2 parasitological parameters); VI group (9 radiation safety indicators); VII group (34 priority toxicological parameters - chemical substances present in water, including 27 inorganic and 7 organic pollutants).

The range of water quality parameters is subdivided into 4 quality classes: 1st class (excellent, desirable water quality); 2nd class (good, acceptable water quality); 3rd class (moderate, acceptable water quality); 4th class (satisfactory, tentatively acceptable and undesirable water quality).

A regulation in force - Regulation # 279 of 10.08.2012 of the National Commission for State Regulation in the Sphere of Housing and Utilities refers to DSTU 4808:2007. Therefore, the standard is applied, but it is not considered mandatory.

A state-run R&D facility - the State Geological Information Fund of Ukraine or Geoinform of Ukraine - annually publishes its yearbook - Status of Groundwater in Ukraine. The yearbook provides information on changes in groundwater abstraction, quality and levels.

Monitoring results on groundwater resources in Ukraine are compiled and processed according to laws and regulations of Ukraine, including the Water Code of Ukraine enacted by Decree # 214 of the Verkhovna Rada of Ukraine of 6.06.1998., Procedures of State Water Monitoring (approved by CMU Decree # 815 of 20.07.1996) and Regulation on the State Environmental Monitoring System (approved by CMU Decree # 391 of 30.03. 1998).

Bodies of the State Geological and Mineral Resources Service of Ukraine maintain state monitoring of groundwater resources.

Groundwater status is mainly assessed for 7 groundwater basins of Ukraine: the hydrogeological province of the infolded area in the Ukrainian part of the Carpathian mountains (5 aquifers are monitored); Volyn-Podillya artesian basin (7 aquifers are monitored); the area of groundwater in fissured rocks of the Ukrainian crystalline shield (6 aquifers are monitored); Dniprovsky-Donetskiy artesian basin (8 aquifers are monitored); the hydrogeological province of Donetsk infolded area (8 aquifers are monitored); Prichernomorskiy artesian basin (6 aquifers are monitored) and the hydrogeological province of the infolded area of the Crimean mountains (2 aquifers are monitored).

According to a regional assessment of 1975-1980, estimated groundwater resources of Ukraine reach 61,689.2 thousand m³/day (including 57,499.9 thousand m³/day of water with mineralisation under 1500 mg /l).

As the country lacks a methodology for classification of groundwater quality (such as the one provided for in EU WFD), it is impossible to estimate shares of waters of different classes, as well as total numbers and volumes of classified groundwater bodies in the country.

However, status of groundwater may be assessed based on monitoring data. In particular, for a large part of Ukraine, main sources of unconfined groundwater pollution include municipal wastewater discharges, wastewater flows of animal breeding sites, fertilisers, agrochemicals, lead, manganese and oil derivatives. Areas of contamination of confined artesian groundwater are mainly located within impact areas of local sites (mining, oil processing, etc.). Stable groundwater pollution areas were already developed - in 2011, they included 199 spatial and 188 point ones. In impact areas, main groundwater contaminants include chlorides, sulphates, nitrates, ammonia, thiocyanates, phenols, oil derivatives, manganese, lead, strontium - in some cases their levels exceeded applicable MACs. In the case of point contamination, relevant pollutants mainly included nitrates, ammonia, iron, etc. In 2011, 21 new local areas of organic and chemical pollution were identified.

In 2009, at the territory of Ukraine, 198 spatial and 145 point groundwater pollution areas were registered. In 2009, 30 new local areas of organic chemical pollution were identified.

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.

<i>Water exploitation index (WEI)</i>	<i>Baseline level (2009)</i>	<i>Current level (2011)</i>
<i>Agriculture</i>	<i>2.16 %</i>	<i>2.44 %</i>
<i>Industry^a</i>	<i>4.70 %</i>	<i>5.04 %</i>
<i>Household water use^b</i>	<i>1.78 %</i>	<i>1.70 %</i>

^a Including water abstraction for manufacturing industries and cooling systems in power industry.

^b Only for municipal water supply systems.

Tables 4, 5 and 6 contain detailed data on water use at the national level and water use data for major rivers of the country in 2009, 2010 and 2011

Table 4. Water abstraction and use at the national level (million m³)

<i>WEI parameters</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<i>Water abstraction from natural water bodies (total)</i>	<i>14478</i>	<i>14846</i>	<i>14651</i>
<i>including from groundwater bodies</i>	<i>2007</i>	<i>2023</i>	<i>1961</i>
<i>Freshwater use including for:</i>	<i>9513</i>	<i>9817</i>	<i>10086</i>
<i>industrial purposes</i>	<i>5149</i>	<i>5511</i>	<i>5514</i>
<i>household and drinking needs</i>	<i>1956</i>	<i>1917</i>	<i>1860</i>
<i>Irrigation</i>	<i>1411</i>	<i>1377</i>	<i>1638</i>
<i>Agricultural water supply</i>	<i>204</i>	<i>189</i>	<i>180</i>
<i>Aquaculture</i>	<i>754</i>	<i>781</i>	<i>853</i>
<i>Water losses in transportation</i>	<i>2285</i>	<i>2158</i>	<i>2236</i>
<i>Recycled and reused water supply</i>	<i>41379</i>	<i>43138</i>	<i>45209</i>
<i>Capacity of treatment facilities</i>	<i>7581</i>	<i>7425</i>	<i>7687</i>
<i>Overall discharge of wastewater, mining water and drainage water including</i>	<i>7692</i>	<i>8141</i>	<i>8044</i>
<i>into surface water bodies including</i>	<i>7381</i>	<i>7817</i>	<i>7725</i>
<i>polluted return water including untreated</i>	<i>1766</i>	<i>1744</i>	<i>1612</i>
<i>treated to standards</i>	<i>270</i>	<i>312</i>	<i>309</i>
<i>meeting standards without treatment</i>	<i>1711</i>	<i>1760</i>	<i>1763</i>
<i>Wastewater discharges</i>	<i>3904</i>	<i>4313</i>	<i>4350</i>
	<i>6548</i>	<i>7012</i>	<i>6923</i>

Table 5. Water use - for major rivers (million m³)

<i>Rivers</i>	2009			2010			2011		
	<i>Used</i>	<i>Discharged</i>	<i>inc. polluted</i>	<i>Used</i>	<i>Discharged</i>	<i>inc. polluted</i>	<i>Used</i>	<i>Discharged</i>	<i>inc. polluted</i>
<i>Water volume in the main flow (km³)</i>									
<i>Siverskiy Donets</i> 4.5	803	649	176	785	672	180	812	674	162
<i>Dnieper</i> 53.9	6424	4279	793	6593	4434	714	6750	4308	659
<i>Dniester</i> 10.0	458	248	50	443	241	47	467	246	37
<i>Danube</i> 214	207	172	46	208	181	51	211	172	45
<i>Southern Bug</i> 3.4	279	190	29	286	205	30	303	215	13

Table 6. Groundwater abstraction and use in the main river basins (thousand m³/day)

<i>Rivers</i>	2009			2010			2011		
	<i>Abstrac- ted</i>	<i>Used</i>	<i>Dischar- ged</i>	<i>Abstrac- ted</i>	<i>Used</i>	<i>Dischar- ged</i>	<i>Abstrac- ted</i>	<i>Used</i>	<i>Dischar- ged</i>
<i>Siverskiy Donets</i>	1056.7	655.4	401.3	1127.9	663.0	464.9	1119.6	643.3	476.3
<i>Dnieper</i>	2117.4	1588.6	528.8	1964.4	1454.0	510.4	1921.9	1413.5	508.4
<i>Dniester</i>	474.4	466.1	8.3	473.7	462.6	11.1	433.5	429.0	4.5
<i>Danube</i>	144.5	118.0	26.5	126.6	101.5	25.1	136.3	107.9	28.4
<i>Southern Bug</i>	243.2	202.8	40.4	231.0	190.0	41.0	220.0	180.4	39.6

Part Three

Targets and target dates set and assessment of progress

National targets were adopted by MoE Order #324 of 14.09.2011 and Instruction of 29.09.2011. (Cabinet of Ministers of Ukraine). The executive authorities responsible for targets implementation are to report on its progress by March, 1 every next nearest to the reporting period year. As approved by the Inter-agency WG, 2009 is considered to be a launch year.

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

For each target set in this area:

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

National targets ##1-2 “Improving the safety of drinking water for microbiological parameters and by chemical composition”.

National Target #1 ‘Improving the safety of drinking water for microbiological parameters’.

The percentage of probes that do not meet the state sanitary norms and regulations for microbiological parameters of E coli and enterococcus make indicators for rural and urban water pipelines.

Target dates: intermediate deadline - 2015. The relevant state sanitary norms variability ratio is anticipated to make 3% for rural and 2% for urban water supply systems, correspondingly. Final deadline – 2020. The percentage of probes that do not meet the state sanitary norms for the microbiological parameters of E. coli and enterococci is anticipated to make 2% for rural water supply systems and 0.5% for urban water supply systems.

National targets as to § 2, article 6 were adopted based on the deteriorated conditions of the surface and ground waters, which make the major sources of drinking water supply. In Ukraine surface waters provide household water supply for 70 %.

Their ecologically threatening state has been provoked by the following factors:

- *considerable economic decay following 1990 that resulted in the decrease of investment into environmental protection;*
- *blatant violation of environmental legislation and water protection, in particular, on the areas of water reserves, in the coastal shelter belts which in most cases lack delineation; construction of lines of terraced houses; providing man-made alluvium without assessment of its environmental implications; fixing sanitary fills and other objects hazardous for water resources;*
- *environmental problems that accumulated in the soviet period and worsened in the last 20 years of the independence of Ukraine, such as military waste, disused pesticides and fertilizers, radioactive and toxic waste, which utilization requires considerable costs;*
- *water bodies contamination by sewage water of disposal and purification plants that operate at halved capacities, which results in eutrofication for their being inefficient to purify the disposed water to meet safety norms.*

Executive authorities having responsibility: Ministry of Regional Development, Construction, Housing and Utilities of Ukraine; Local authorities; State Sanitary and Epidemiological Service of Ukraine.)

National Target #2 “Improving the safety of drinking water by chemical composition.”

The indicator is the percentage of probes that do not meet state sanitary norms and regulations for sanitary and chemical parameters (top rated are fluorides, nitrates, nitrites, arsenic, lead, iron, water hardness, residuum, sulphates, chlorides, manganese.)

Target dates: intermediate deadline – 2015. The relevant state sanitary norms variability ratio as to the sanitary and chemical parameters is anticipated to make 15% for rural and 7% for urban water supply systems, correspondingly. Final deadline – 2020. The percentage of probes that do not meet the state sanitary norms as to the sanitary and chemical parameters is anticipated to make 7.5% for rural water supply systems and 3% for urban water supply systems.

Executive authorities having responsibility are Ministry of Regional Development, Construction, Housing and Utilities of Ukraine; Ministry of Agricultural Policy of Ukraine; State Water Agency of Ukraine; Local authorities; State Sanitary and Epidemiological Service of Ukraine.

Improving the quality of the drinking water supplied is defined to be a top priority for a number of state and regional programs run by Ministry of Regional Development, Construction, Housing and Utilities of Ukraine; Ministry of Agricultural Policy of Ukraine; State Water Agency of Ukraine at state expense and the costs of local budgets. The former include the following:

- state social program aimed at providing centralized water supply for rural areas that consumed imported water in 2010 (run for 2008-2015 years; adopted by Cabinet of Ministers of Ukraine, Resolution #741 dated 27.09.2008);
- national program aimed at the development of water economy and environmental enhancement of the Dnieper till 2012 (run for 2012-2021 years; adopted by the Law of Ukraine, #4836-VI dated 24.05.2012);
- national program “Drinking Water in Ukraine” (run for 2012-2021 years; adopted by the Law of Ukraine # 2455-IV dated 03.03.2005).

State target-programs have been poorly funded, which ultimately prevented executive authorities having responsibility from efficient reaching targets set.

State Sanitary and Epidemiological Service of Ukraine is in charge of sanitary inspectorate and laboratory probing of drinking water quality and is liable for monitoring environmental infrastructure and factors affecting people’s health.

State Sanitary and Epidemiological Service of Ukraine conducts random sanitary and epidemiological inspection of sanitary acts abidance and regular sampling of drinking water quality at water intake, facilities, and centralized household water supply for them to comply with “Sanitary standards of drinking water to be consumed by people” (DSanPiN 2.2.4-171-10 and SanPiN 4630-88) as well as for measures to be taken in case of infringement.

Table 1 of Statistical Reporting Form #18 “State Sanitary and Epidemiological Service of Ukraine report on inspecting environmental factors and infrastructure that affect people’s health” gives 2011 versus 2009 year analysis of the drinking water quality at centralized water supply sources, water mains, public decentralized water supply sources into a number of criteria.

Criterion 1. Drinking water quality.

In 2011 sanitary-hygienic laboratories probed 214 629 samples of drinking water for sanitary and chemical indicators (versus 201 139 ones in 2009), and 298 661 samples for bacteriological indicators (in comparison with 290 784 ones in 2009), respectively.

In 2011 the ratio of special tests of the drinking water taken from the sources of the centralized water supply made 14.7% for sanitary and chemical indicators and 2.9% for bacteriological indicators (versus 12.9% and 3.1% in 2009, respectively). The ratio of special tests of drinking water taken from the communal water supply systems made 11.8% and 2.0% (versus 9.2% and 2.1% in 2009); of drinking water taken from rural water supply systems – 18.3% and 4.7% (versus 18% and 5% in 2009).

Special tests of drinking water taken from centralized water supply systems rank first, while those taken from rural water pipes rank last.

Criterion 2. The quality of drinking water taken from water mains.

In 2011 sanitary-hygienic laboratories probed 264,107 samples of the drinking water taken from water mains for bacteriological indicators (versus 256,407 ones in 2009), with 4,906 samples for coli indicator (versus 7,980 ones in 2009). The ratio of special tests of the drinking water taken from water mains for bacteriological indicators made 3% in 2011 (versus 3.2% in 2009) exceeding E-coli index over 20 times to make 34.8% (versus 53.3% in 2009).

In 2011 sanitary-hygienic laboratories probed 183,669 samples of drinking water taken from water mains for sanitary and chemical indicators (versus 170,212 ones in 2009). The ratio of special tests of the drinking water taken from water mains for sanitary and chemical indicators made 12.1% (versus 10.9% in 2009). Of total probes for sanitary and chemical indicators 772 samples (0.4%) were probed for nitrate (versus 1,033 samples making 0.6% in 2009), 15,431 samples (8.4%) for organoleptic properties (versus 13,057 ones making 7.7% in 2009), 5,409 samples (2.9%) for total dissolved substances (TDS) (versus 4,702 ones making 2.8% in 2009).

State Sanitary and Epidemiological Service of Ukraine inspected 18,875 sources of centralized water supply (versus 19,126 ones in 2009) with 1,603 communal sources (versus 1,583 ones in 2009), 4,954 local sources (versus 5,171 ones in 2009), and 7,640 rural water pipes (versus 7,676 in 2009).

Approximately 4.7-5.0 % of the water supply systems are reported not to meet sanitary standards in the last years, with Luhanska, Donetska, Khersonska, Zhytomyrska oblasts to rank first. This makes 9.3% of communal water supply systems, 7.6% of rural ones, and 2.8% of local ones. Of the total water supply systems that don't meet sanitary standards, 67.7% lack sanitary control, 17.5% lack cleaning installations, and 25.4% lack decontamination plants.

The state of the rural water supply is of primary concern comprising 579 rural water supply systems (7.6%) that don't meet sanitary standards (versus 634 ones making 8.3% in 2009) out of 7,640 (versus 7,676 in 2009).

State Sanitary and Epidemiological Service of Ukraine inspected 174,314 sources of decentralized water supply (versus 85,426 ones in 2009), including 169,734 shallow wells (versus 80,862 ones in 2009), 3,371 artesian wells (versus 3,378 ones in 2009), and 1,209 catchments (versus 1,186 ones in 2009). The increase in the number of wells inspected is put down to monitoring nitrite content in water comprising individual wells to enforce Resolution #16 (On measures preventing the outbreak of juvenile methemoglobinemia) of the Chief Medical Officer of Ukraine dated 17.05.2010.

In 2011 the ratio of the probes of the drinking water taken from the sources of decentralized water supply that did not meet sanitary standards made 32% (versus 28.6% in 2009) for sanitary and chemical indicators, and 16.4% for bacteriological indicators (versus 16.8% in 2009); the ratio of the probes of the drinking water taken from the wells made 33.2% for sanitary and chemical indicators (versus 30.3% in 2009), and 17.6% for bacteriological indicators (versus 18.1 in 2009); the ratio of the probes of the drinking water taken from the artesian wells made 19% for sanitary and chemical indicators (versus 15.5% in 2009), and 6.1% for bacteriological indicators (versus 5.4% in 2009).

State Sanitary and Epidemiological Service of Ukraine supervises the enforcement of Resolution # 16 (On measures preventing the outbreak of juvenile methemoglobinemia) of the Chief Medical Officer of Ukraine dated 17.05.2010 up to § 8.3 (Protocol 20, Session of the Cabinet of Ministers of Ukraine, 19.05.2010)

Namely, 5,120 public shallow wells and 54 catchments (making 24% and 22.8% respectively) were found not to meet sanitary standards out of 21,307 and 236 ones totally examined in the 4th quarter of 2011.

There were probed 13,806 samples of the drinking water from the public shallow wells and 441 samples from the catchments, with 1,698 and 28 samples respectively (12.2% and 6.3%) not to meet the hygienic regulations on nitrate content; and with 2,080 and 61 samples respectively (14.8% and 15%) not to meet the hygienic regulations on bacteriological indicators out of 14,027 and 406 samples probed.

The highest percentage of understandard samples of the drinking water taken from the decentralized sources for sanitary and chemical indicators is recorded in Donetsk oblast (77%), to be followed by Luhanska oblast (49.3%), Kharkivska oblast (43%), respectively; and for bacteriological indicators in Luhanska oblast (43.3%), Sumska oblast (40.3%), Zhytomyrska oblast (39,2%).

There were examined 3,464 individual shallow wells and 256 catchments out of which 4,512 and 21 ones (making 13% and 8.2% respectively) were found not to meet sanitary standards.

There were probed 32,364 and 250 samples of the drinking water for sanitary and chemical indicators, out of which 4,722 and 83 ones (making 14.5% and 33.2% respectively) do not meet the hygienic regulations on nitrate content, with 3,851 and 35 samples (making 18.2% and 14.2% respectively) not to meet the hygienic regulations on bacteriological indicators out of 21,114 and 246 samples probed.

The highest percentage of understandard samples of the drinking water taken from individual decentralized sources for sanitary and chemical indicators is recorded in Kirovohradska oblast (55.3%) to be followed by Mykolaivska oblast (51.9%), and Kyivska oblast (48.4%), with Sumska oblast (56.6%), Donetsk oblast (33%), Mykolaivska oblast and Odeska oblast (31.5%) to rank highest for bacteriological indicators.

In 2011 the ratio of the probes of the drinking water taken from the sources of the centralized and decentralized water supply at the atomic absorption photometer made the following indicators: 0.9% for lead content (versus 0.5% in 2009); 2.9% for iron content (versus 5% in 2009); 1.5% for manganese (versus 2.7% in 2009); 1.1% for cadmium content (versus 2.2% in 2009); 1.3% for other metals content (versus 0.3% in 2009). There is registered carbon 4-chloride standards overriding by 0.4% (versus 1.8% in 2009) and chloroform standards overriding by 21.6% (versus 23.6% in 2009).

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

In 2010 May, 12 Ministry of Public Health of Ukraine approved of sanitary regulations (Decree # 400 on DSanPiN #2.2.3-171-10) running "Hygienic standards in drinking water meant for consumption" that was registered in Ministry of Justice of Ukraine in 2010 July, 01. The introduction of a standard sanitary act is a significant step toward Protocol implementation.

According to the Laws of Ukraine "On the State Budget of Ukraine for 2009", "On the State Budget of Ukraine for 2010", "On the State Budget of Ukraine for 2011", "On the State Budget of Ukraine for 2012" the Ministry of Regional Development, Construction, Housing and Utilities was allocated 1 bl 200 million hryvnas (approximating 116 million Euros) for the development of water supply and sanitation under different budgeting programs, with 152 million hr. in 2009, 146 million hr. in 2010, 573 million hr. in 2011, and 336 million hr. in 2012, in particular.

Executive bodies should be noted to have been underfinancing state target sets mentioned above.

Thus, the run of the program "State social project targeted at providing rural areas that consumed imported water in 2010 with centralized water supply" was frozen in 2009-2010. While needing the lowest capital costs worth 110.5 million hryvnas, the State Water Agency of Ukraine received budgeted funds worth 0.042 million hryvnas, with further - 0.020 million hryvnas in 2009. These allocations went into providing technical certification of the sources and plants of water supply in the draughty rural areas in Donetsk oblast.

Having the state program "Drinking water of Ukraine" underfinanced, the regions managed to launch and run a number of large-scale projects costing over 10 million hryvnas. Thus, there were restored 24 free-flow filters of "Aulskiy Conduit", a public utility company, which ultimately facilitated the improved quality of drinking water for over 2 million residents of Dnipropetrovska oblast, the reduction of the discharge of drinking water for filter flushing, and dumping flushing/wash water in the Dnieper.

State Sanitary and Epidemiological Service of Ukraine is authorized to impose fines, to pass resolutions on the facilities operation termination, to penalize executives under administrative law, to submit the cases to investigating bodies for breaking norms of sanitary legislation.

For breaking norms of sanitary legislation as to providing population of the country with high quality drinking water by centralized water supply in 2011, State Sanitary and Epidemiological Service of Ukraine penalized 4,803 executives under administrative law (versus 4,224 ones in 2010), submitted 92 cases (versus 67 ones in 2010) to investigating bodies out of which 64 cases (making 69.9%) were brought a verdict to penalize executives under administrative law (versus 50 ones making 74.6% in 2010); 136 cases were submitted for consideration to management commissions (versus 91 ones in 2010); there were passed 11,031 resolutions on terminating facilities operation, with 2,210 ones (making 20%) on removing facilities out of service (versus 16,744 and 2,452 ones (making 14.6% in 2010, respectively).

For breaking norms of sanitary legislation revealed after inspecting public shallow wells/catchments for the period of October-December 2011 there were imposed 100 fines, there were passed 95 resolutions on removing facilities out of service and 616 resolutions on terminating facilities operation.

For breaking norms of sanitary legislation revealed after inspecting individual shallow wells/catchments for the period of October-December 2011 there were imposed 25 fines, there were passed 633 resolutions on removing facilities out of service and 1,580 resolutions on terminating facilities operation.

3. Assess the progress achieved towards the target.

The assessment of the progress towards national target #1 “Improvement of the drinking water safety for microbiological parameters” revealed a steady decrease in the probes that do not meet sanitary standards for microbiological parameters (E coli and enterococcus) for rural and urban water supply systems in 2005-2010. Thus, percentage of the understandard probes taken from communal water supply systems for microbiological parameters made 3.4% in 2005, 2.8% in 2007, 2.1% in 2009, 2.0% in 2011; and 7.0% in 2005, 6.1% in 2007, 5% in 2009, 4.7% in 2011 from rural water supply systems, respectively. Providing efficient measures are taken, there is a probability to reach the targeted measurements of 2% and 3% for bacteriological parameters in rural and urban areas in 2015, an intermediate deadline.

As to the assessment of progress toward national target #2 “Improving drinking water safety and quality by chemical composition”, expecting the targeted measurements of special probes for sanitary and chemical parameters to make 7% and 15% for urban and rural water supply systems appears ungrounded and premature.

State executive bodies have been heavily underfinancing the target projects for a whole period, which had a toll on the introduction of the targets set.

The progress is evident only concerning the quality of the drinking water for bacteriological parameters, while the indicators of the quality of the drinking water for sanitary and chemical parameters are slightly decreasing. 2015 being an intermediate deadline, there is a chance for a current state to look up and to make targeted 2% and 3% for bacteriological parameters in urban and rural areas as well as 7% and 15% for sanitary and chemical parameters in the areas mentioned, respectively.

The quality of the drinking water is badly affected by the deteriorated sanitation of the water pipe lines and water mainstreams, their utilization coefficient ranging 30%-70% for different regions, delayed complete overhauls, routine repairs, planned maintenance, and breakdown eliminations.

Besides, both scheduled water delivery and its continuous unavailability in the water pipelines and mainstreams provoke bacteriological contamination of the drinking water. The matter gets worse when water facilities are disconnected from the energy supply sources, which is gross violation of the Law of Ukraine “On drinking water and water supply” (article 6, Chapter II).

It should be mentioned that state executive bodies and local self-governments, heads of the enterprises and businesses pay scant attention to providing people with high quality drinking

water, which is a violation of the Law of Ukraine “On ensuring people’s sanitary and epidemiological welfare” (article 18) and the Law of Ukraine “On drinking water and water supply” (article 7).

With a view to modernizing State Sanitary and epidemiological Service of Ukraine and maintaining national policy as to ensuring people’s sanitary and epidemiological welfare, experts of State Sanitary and Epidemiological Service of Ukraine and Ministry of Public Health will be further elaborating Statistical Reporting Form #18 “Progress report of SSES of Ukraine on inspecting facilities and factors of the environment that affect people’s health” and its registration forms. The Protocol on Water and Health National targets set will be included into the tables of Statistical Reporting Form #18, namely: E coli and enterococci measurements as the indicators of the epidemiological safety of the drinking water, fluorides, nitrates, arsenic, lead, iron, cadmium, manganese, chloroform, carbon 4-chloride.

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.

Ukraine reporting on targets set for the first time, it is premature to submit national target indicators for reconsideration.

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

National targets are set.

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

For each target set in this area:

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

National targets ##3-4 are added to paragraph 2b, article 6.

National targets #3 *“The decrease in morbidity rate of cholera, bacillary dysentery (shigellosis), acute enteric infection caused by enterohemorrhagic Escherichia coli (EHEC), viral hepatitis A, typhoid fever, aqueous nitrate methemoglobinemia caused by the use of poor quality drinking water.”*

The indicator is incidence of cholera, bacillary dysentery (shigellosis), acute enteric infection caused by enterohemorrhagic Escherichia coli (EHEC), viral hepatitis A, typhoid fever, aqueous nitrate methemoglobinemia, caused by the use of poor quality drinking water.

Target dates: intermediate deadline - 2015. Incidence per 100 thousand people is likely to be: a) cholera cases – 0; b) shigellosis cases – up to 2500; c) EHEC (enteritis caused by enterohemorrhagic Escherichia coli) cases - up to 100; d) viral hepatitis A cases - up to 2500; e) typhoid fever cases - 0; f) aqueous nitrate methemoglobinemia cases – 0. Final deadline is 2020. It is likely to have such disease incidence per 100 thousand people: a) cholera cases - 0; b) shigellosis cases – up to 2000; c) EHEC (enteritis caused by enterohemorrhagic Escherichia coli) cases – up to 80; d) viral hepatitis A cases – up to 2000; e) typhoid fever - 0; f) aqueous nitrate methemoglobinemia – 0.

Executive authorities having responsibility: The Ministry of Public Health; State Sanitary and Epidemiological Service of Ukraine.

Incidence of cholera, shigellosis, EHEC, viral hepatitis is obtained according to the state Statistical Reporting Forms # 1 and #2, which record the total number of diseases outbreaks. Linkage to water is recorded only when outbreaks data are provided.

There are registered two outbreaks of viral hepatitis A, caused by water (64 people were infected, 37 of whom were children, caused by the use of poor quality drinking water from centralized water supply in Bahchysarai city, the Autonomous Republic of Crimea, Synelnykove city in Dnipropetrovsk region), one outbreak of rotavirus infection in Rovenki city in Luhansk region in "Cosmonavtiv" mine (23 people were infected), one cholera outbreak in Donetsk region (33 people were infected, one of whom was a child) in 2011.

There was registered one outbreak of viral hepatitis A, caused by the consumption of poor quality drinking water, in Yasenytsia village Drohobyt'skyi district, Lvivska oblast (10 adults were infected) in 2010.

In 2009 no outbreaks caused by the use of poor quality drinking water were registered.

In 2008 there was an outbreak of rotavirus enteritis (30 people fell ill, 24 of whom were children in Chervonohrad city, Lvivska oblast) and an outbreak of viral hepatitis A (in Boryslav city, Lvivska oblast, where 92 people were infected, 37 of whom were children) caused by the use of poor quality drinking water. Preventive anti-epidemic measures were carried out.

Morbidity analysis of infections in Ukraine from 1995 to 2011 has discovered its downward trend, in 2011 excluding carriers of influenza and acute respiratory viral infections there were 525.51 registered cases of infections per 100 thousand population compared to 673.27 in 2003 and 1024.76 in 2002.

***Cases of water-related diseases** a) cholera to 0 abs/ 0 per 100 thousand. No cases of cholera were registered in 2009-2010. But in 2011 there was one cholera outbreak in Donetsk region during which 33 sickness cases and 24 cases of vibriocarrriage were registered and there were no cholera-related deaths.*

Different transfer factors caused by:

*b) shigellosis up to **2500 abs/ 6,0 per 100 thousand**. Shigellosis morbidity occurred every 5 years and was also characterized by the downward trend in 1995-1998 from 65.56 to 34.52 per 100 thousand population; in 1999-2011 there was a decrease from 67.10 to 3.55 per 100 million (a decrease by 42% compared to 2009).*

c) acute enteric infection caused by enterohemorrhagic Escherichia coli (EHEC). Enteritis, colitis, gastroenteritis and bacterial food poisonings caused by unidentified causative agents form a significant ratio in acute intestinal infections.

In 2009 morbidity rate was 66.00 per 100 thousand people, in 2010 it was 70.48, and in 2011 – 69.76.

*Enteritis caused by Yersinia enterocolitica, up to **100/0.25**. In 2011 there were registered 101 cases of enteritis caused by Yersinia enterocolitica, that is 0.22 per 100 thousand people (2.9% less than in 2010, 104 cases or 0.23; in 2009 – 0.28).*

In 2011 there were 115 registered cases of campylobacterioses, that is 0.25 per 100 thousand population (32.3% less than in 2010, 170 cases or 0.37; in 2009 it was 0.38).

*d) viral hepatitis A to **2500/5.5** - The ratio of viral hepatitis A (HAV) is on average 16%, hepatitis B (HBV) is 19%, hepatitis C is 6%, the share of other etiologically underciphred hepatitis is 1% and the share of chronic hepatitis is 58% among the total number of acute viral hepatitis.*

HAV has been decreasing in recent years, morbidity rate ranging from 5.69 in 2009 and 6.13 in 2010 to 3.93 per 100 thousand in 2011.

*e) typhoid fever **0/0**. In 2011 there were registered 16 sporadic cases of typhoid fever morbidity that were not related to water factor, that is 0.03 per 100 thousand people (2.3 higher than in 2009-2010; 6 cases in each year or 0.013) .*

f) aqueous nitrate methemoglobinemia does not refer to infections, so it is not included in the list and is not given in the report form.

National target #4 “Providing the laboratories with the modern equipment necessary for testing safety and quality of drinking water”.

The indicator is the number of modernized laboratories.

Target dates: intermediate deadline is 2015. There is anticipated to modernize 20 % of laboratories. There is anticipated to modernize 50 % of laboratories by the final deadline, that is 2020.

Executive authorities having responsibility: State Sanitary and Epidemiological Service of Ukraine; the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine.

National target #4 was set because of the poor material maintenance and provision of laboratories that control safety and quality of drinking water.

The lack of modern equipment is a very serious problem. High quality operation of laboratories involves considerable expenses on premises maintenance, electricity, heating, servicing, the purchase of reagents, high quality reference materials and most importantly, the certification of the laboratory that requires certain funds in Ukraine.

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.

An example of positive activity of State Sanitary and Epidemiological Service of Ukraine to prevent infectious diseases (NT#3) is localization and elimination of cholera outbreak in Donetsk oblast in 2011 during which 33 cases and 24 cases of vibriocarrriage were registered with no cholera-related deaths.

In particular, SSES experts examined: 3,670 objects with increased epidemic risk, 5,954 people exposed to threats of epidemic outbreaks, and 360 people with no fixed residence. 21,851 samples taken from environmental objects were tested in laboratories. 831,226 people were examined, including 437,993 people that were reexamined during the rounds of houses.

Swimming and amateur fishing are prohibited on the coast of the Azov Sea and the Kalchik and the Kalmius rivers.

The range of products was reduced to remove those posing epidemic danger. Selling fresh, dried, salted, smoked fish and fish products without refrigerating machineries was prohibited. Sanitary conditions for fish products at retail outlets were checked at the city markets.

Every case of cholera and vibriocarrriage morbidity was timely revealed, people involved in areas of outbreaks were examined, and taken to probation wards, they were given emergency antibiotic prevention, and final disinfection in loci was carried out.

WHO experts found the measures taken to eliminate and prevent cholera outbreak by State Sanitary and Epidemiological Service of Donetsk oblast timely, efficient, skilled and relevant to epidemic, sanitary and hygienic case.

These conclusions are made on the basis of preventing a large-scale outbreak in Mariupol city, with merely single cases being registered. Moreover, cholera outbreak wasn't spread beyond Donetsk region, and there were no cholera-related deaths either, whereas, 22 people died of cholera in Ukraine in 1994.

In 2011, 4,803 officials responsible (compared to 4,224 ones in 2010) were penalized under administrative law for violating sanitary norms as to providing population with high quality drinking water. In 64 cases (69.6%) out of 92 sent to the investigating authorities verdicts to bring executives to administrative responsibility (compared to 50 out of 67 cases in 2010 (74.6%) were made. 136 cases were submitted to management commissions (compared to 91 in 2010): 11,031

resolutions on terminating facilities operation, including removal of 2,210 (20%) objects out of service were carried (compared to 16,744 and 2,452 (14.6%) in 2010 concerning the sources of decentralized water supply.

According to the law of Ukraine "On State Budget of Ukraine for 2012", the Ministry of Regional Development was allocated 21.0 million hryvnas to fully fund budgeted program "Reconstruction and installation of centralized water supply and sewerage systems in Donetsk oblast".

3. Assess the progress achieved towards the target.

As to the NT#3, acute viral hepatitis morbidity is still urgent for Ukraine. Morbidity of infections with different transfer factor reveals a continuous downward trend. Assessing progress in each of these groups of infectious diseases in the national indicator, progress should be mentioned only in morbidity of shigellosis, enteritis, viral hepatitis A. Morbidity of typhoid fever increased. There were registered 16 sporadic cases of typhoid fever morbidity, which is 0.03 per 100 thousand people (2.3 higher than in 2009 and 2010, 6 cases in each year or 0.013) in 2011. An isolated cholera outbreak was registered in Donetsk oblast during the reporting period in 2011.

Aqueous nitrate methemoglobinemia does not refer to infectious diseases, so it is not included in the list and is not given in the Statistical Reporting Form.

However, this disease should be included in the list of diseases to report on in the government body "The Center for Health Statistics of Ministry of Public Health of Ukraine." SSES will submit this issue for consideration to the Ministry of Public Health of Ukraine.

Concerning modernization of laboratories (NT#4), in 2012 there took place reorganization of the State Sanitary and Epidemiological Service of Ukraine and its local bodies by reducing the number of establishments in the cities and districts as well as staff, reconsideration of tasks, supervisory functions with putting more emphasis on monitoring.

The local laboratory centers of the State Sanitary and Epidemiological Service of Ukraine are to be formed in 2013, which laboratories under the reform will be modernized.

According to the Ministry of Regional Development of Ukraine, 3% of industrial laboratories were modernized in 2009 and 9% in 2011, correspondingly.

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.

No, there is no necessity in either targets set or final deadline revision.

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

National targets are set.

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

For each target set in this area:

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

Paragraph 2c of Article 6 was supplemented with two national targets – NT # 5 "Providing the population with proper quality drinking water" and NT # 6 "Providing children in pre-school institutions and secondary schools with safe drinking water."

National Target # 5 - *"Providing the population with proper quality drinking water."*

The indicator is the share of the population with access to clean drinking water. Target dates: Intermediate deadline – 2015, it is expected to reach the level of proper quality drinking water supply up to 90% in urban areas, and up to 50% in rural areas. Deadline –2020, it is expected to reach the level of proper quality drinking water supply up to 100% in urban areas, and up to 70% in rural areas.

Executive authorities having responsibility: Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, the Ministry of Agricultural Policy, the State Water Agency of Ukraine, State Service of Geology and Mineral Resources in Ukraine, bodies of local self-government.

The access to drinking water is ultimately determined by centralized water supply. Whereas no laws and regulations require owners of drinking water sources (in fact wells) located on private land plots to keep records of them.

The percentage of the population (urban and rural) with access to drinking water is quoted by Ministry of Regional Development, and the total number of the population with access to drinking water was calculated in terms of demographic rates.

The proportion of population with access to quality drinking water in 2009 was 70.6% and in 2011 it amounted to 71.2%.

The overview of the situation in the plumbing sector of the country in 2011, was performed according to the data submitted by the executive bodies of local state administrations in the Autonomous Republic of Crimea, local state administrations in Kyiv and Sevastopol. As in previous years, some oblasts ignored new Statistical Reporting Forms, and completed the previous ones, some oblasts failed to provide information at an appropriate professional level, and a few oblasts submitted data for 2009-2010, just replacing the periods in tables by 2010-2011. Consequently, aggregate records obtained may not be entirely correct. However, this fact is not critical and an assessment can be made of the situation in waste water services during 2011.

National Target # 6 *"Providing children in pre-school institutions and secondary schools with safe drinking water."*

The indicator is an increase in the number of pre-school institutions and secondary schools with access to safe drinking water (%).

Target dates: Intermediate period is set by 2015. It is expected to achieve an increase in the number of pre-school institutions and secondary schools with access to safe drinking water by 15% in urban areas, and by 10% in rural areas. The deadline is set by 2020. It is expected to achieve an increase in the number of pre-school institutions and secondary schools with access to safe drinking water by 25% in urban areas, and by 20% in rural areas.

Executive authorities having responsibility: Local governments, State Sanitary and Epidemiological Service of Ukraine, Ministry of Education of Ukraine, Ministry of Regional Development, Construction and Utilities of Ukraine.

The share of pre-school institutions and secondary schools with access to clean drinking water was 94.8% and 85% in 2011, as compared to 94.8% and 82% in 2010, and 94.4% and 82% in 2009, respectively.

685 (5.2%) pre-school institutions are not connected to centralized and local water supply systems, as compared to 734 (5.6%) in 2009. On account of the lack of centralized water supply sources in settlements or incompliance of local water with standards 268 (2%) pre-school institutions use imported water, which is better compared to 289 (2.2%) of the last year. The largest share of such facilities is in Mykolayivska oblast (75 ones), Odeska oblast, and Dnipropetrovska oblast accounting for 45 ones, correspondingly.

Decentralized water supply (except eating establishments) is available for 2,414 (12.5%) secondary schools (versus 2,987 ones (18.4%) in 2009-2010) (with 220 in Lvivska oblast, and 222 in Volynska oblast, etc.) for August 15, 2012. Imported water is used by 466 secondary schools of the country (versus 423 ones in 2010), including 106 schools in Dnipropetrovska oblast, 87 ones in Zaporizhska oblast, 85 ones in Mikolayivska oblast. Thus, 33 out of 85 institutions, using imported water, are provided with running water by hydrofors in Mykolayivska oblast.

One of the most important issues in terms of inspecting schools standards is the issue of safe water supply. Prior to a start of a new academic year water supply sources undergo laboratory tests. 2,7 % of drinking water samples failed to meet bacteriological standards in 2011, as compared to 2.6% in 2010 and 4.6% in 2009; 2.8% of samples in 2011 against 3.8% in 2010 and 7.8% in 2009 failed to meet both sanitary and chemical standards.

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

The implementation of NT #5 was financed by the state budget during 2009-2012. Ministry of Regional Development was assigned budgetary programs "Drinking Water of Ukraine" and "Reconstruction of water supply and drain systems" financed in accordance with the laws of Ukraine on the State Budget of Ukraine for 2009, 2010 and 2011.

Thus, according to the law of Ukraine "On the State Budget of Ukraine for 2009" Ministry of Regional Development was allocated UAH 6.5 million for modernizing water and sewage utilities under the budget program "Carrying emergency repair and restoration to mitigate consequences of hazards on Kerch water main in AR Crimea". Funds worth 91 million were appropriated for "The reconstruction of water supply in Lviv city". These programs have been financed in full.

In 2010 the Stabilisation Fund resources totalling 137.6 million were assigned to Ministry of Regional Development to implement the reform on housing and utilities sector and to execute the program "Drinking Water of Ukraine". However, these programs were funded by the State Treasury in the amount of UAH 97.69 million (71%).

By the law of Ukraine "On State Budget of Ukraine for 2011" Ministry of Regional Development was assigned UAH 400 million for a budget program "Drinking Water of Ukraine", which was funded equal to 264.7 million (66%). By the Law of Ukraine "On the State Budget of Ukraine for 2012" Ministry of Regional Development was assigned a budget program "Drinking Water of Ukraine" covering UAH 200 million, which was funded equal to 182.5 million (91%).

7 km of a new 20-kilometer water main were laid under the state program "Drinking Water of Ukraine" in Khmelnytska oblast.

Since 1999 the State Agency for Geology and Mineral Resources of Ukraine has been carrying out hydrological observations aimed at locating potable groundwater and well-drilling to supply the population of Ukraine with ecologically clean drinking water.

There were drilled 1,824 exploratory and production wells and 302 prospecting wells, as of January 1, 2012. Most artesian wells are located in the shallow southern regions (AR Crimea, Mykolayivska oblast, Odeska oblast), in eastern regions of Ukraine suffering from anthropogenic environmental threats through excessive extraction of mineral resources (Donetska, Luhanska, Dnipropetrovska, Zaporizhska and Kirovohradska oblasts) and in the areas affected by the Chernobyl disaster (Zhytomyrska and Kyivska oblasts).

There were drilled 76 exploratory and production wells with 20 prospecting boreholes in 2009; 58 exploratory and production wells with 12 prospecting boreholes in 2010; 58 exploratory and production wells with 11 prospecting boreholes in 2011 to be followed by 31 exploratory and production wells with 6 prospecting boreholes in 2012.

National target # 6

In Ukraine the percentage of pre-school and secondary school institutions with access to safe drinking water amounted to 94.8% and 85% in 2011, as compared to 94.8% and 82% in 2010, and 94.4% and 82% in 2009. Planned laboratory tests for quality of drinking water in water pipes are regularly carried out by inspectors of regional bodies, agencies and institutions of the SSES.

As of 01.01.2012 State Sanitary and Epidemiological Service inspected 85,776 educational and health institutions (vs 85,849 ones in 2010), including 13,353 pre-schools, 19,238 secondary schools, 1,007 boarding schools, 17,628 rehabilitation and recreation establishments for children, 6,897 extra schools centres, 18,328 canteens in schools, lyceums, gymnasiums, vocational schools, production-and-training centres, and high educational establishments.

Compared to 2010, the total number of objects remained unchanged, however, the number of pre-schools increased by 184, the number of rehabilitation and recreation establishments for children increased by 501 against the decline in the number of secondary schools by 392 and non-schools by 243.

With a view to ensuring proper sanitary conditions for children, inspectors of SSES imposed 41,636 fines on executives in 2011, as compared to 39,425 in 2010; 40,930 of them were retained (98.3%). The Chief Sanitary Officer made 12,008 decisions on terminating facilities operation (vs 13,435 ones in 2010), with 269 decisions (2.2%) on removal facilities out of service. 81 cases were submitted to investigating authorities, as compared to 127 in 2010; 59 of them (72.8%) (vs 89 (70%) in 2010) were sued.

At 2,298 facilities (vs 2,379 in 2010) the range of goods was cut down, with 31,938 people suspended from work.

As a part of the program "Drinking Water of Ukraine" the funds in 2012 were also spent on building and reconstructing water intake structures using innovative technologies and equipment, particularly in regions with low water quality standards, installing after-purification systems in the communal water supplies for pre-schools, schools and health facilities, installing centres of bottled drinking water.

3. Assess the progress achieved towards the target.

Assessment of the progress achieved towards the national target #5 "Providing public with good quality drinking water."

On account of the increased number of people with access to quality drinking water in 2011, as compared to 2009 (93.4% in 2011 vs 93.2% in 2009 in urban areas and 22.2% in 2011 vs 22.1% in 2009 in rural areas) there has been recorded the absence of regress. However, it should be emphasized that water supply systems need substantial technical re-equipment all over Ukraine, which requires significant investment.

The remaining challenges of communal water supply in rural areas are as follows: incomplete process of transferring rural water conduits to the ownership of local authorities, the lack of specialized organizations dealing with operation and maintenance, the lack of laboratory inspection of the water quality, etc.

Only a quarter of the villages in Ukraine is supplied with communal water. The rest of the rural population consumes water from wells and private wells, most of those being in poor engineering condition.

As a result of being underfunded, executive bodies had no costs to fulfil certain target programs. Therefore, the effect of the "National target social program on primary providing rural settlements using imported water with communal water has actually been suspended. The State Water Agency of Ukraine was funded just worth 0,042 million (vs 0,020 million in 2009), with its minimal need of 110.5 million.

These costs were spent on certifying the sources and water supply facilities in shallow rural areas of Donetsk oblast.

Assessment of the progress achieved towards NT # 6 "Providing children in preschool and secondary educational establishments with quality drinking water."

In Ukraine the share of pre-school and secondary school facilities with access to safe drinking water in 2011 increased to 94.8 % (vs. 94.4%) and 85% (vs. 82%) in 2009. Due to the program "Drinking Water of Ukraine" and initiatives of NGOs, local communities, and the support of international organizations there has been some progress achieved towards NT.

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.

There is no need to revise either NT or target dates.

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

National targets have been set.

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

For each target set in this area:

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

Ukraine has set two national targets (NT # 7 and NT # 8) according to Article 6, Paragraph 2d.

National Target # 7 - "Providing population with access to centralized sewerage systems".

The indicator is the share of urban and rural population with access to centralized sewerage systems.

Target date: Intermediate date - 2015, the share of population provided with access to centralized sewerage systems is expected to reach 80% in towns and large villages and 20% - in rural areas. Final deadline - 2020, the share of population provided with access to centralized sewerage systems is expected to reach 100% in towns and large villages and 50% in rural areas.

Executive authorities having responsibility: the Ministry of Regional Development, Construction, Housing and Utilities, the Ministry of Ecology and Natural Resources of Ukraine, the Ministry of Agricultural Policy, local authorities, State Sanitary and Epidemiological Service of Ukraine.

In 2011, the indicator of the share of population provided with access to centralized sewerage systems in Ukraine, on the whole, showed no significant change and was as follows: the values are highest in Ternopil region, where the share of urban population with access to improved sanitation is 77 % and that of the rural population is 75%. Other regions (oblasts) rank as follows: (large villages) Kherson region (47%), Odessa region (46.5%), Cherkassy region (29.3%) and Crimea (13%); in other regions (those which presented the data) the values were lower than 10%.

The best access to centralized sewerage systems is in Kyiv (97.2%) and Sevastopol (83.6%), Ternopil region (75%), Mykolaiv region (72%), Odessa region (67.5%), Crimea (64%), Zaporizhia region (60.3%), and Vinnitsa region (60%). In other regions the value was lower than 60%.

National Target # 8 - "Providing children in preschools and secondary schools with improved sanitation (improving sanitation and installing sewerage systems in preschools and secondary schools)"

The indicator is the increase in number of preschools and secondary schools with access to sewerage systems and cesspool sanitation systems.

Target date: Intermediate date is 2015; the share of children provided with access to improved sanitation in preschools and secondary schools is expected to increase by 15% in urban areas (towns and large villages) and by 5% in rural areas. Final deadline is 2020. It is expected to provide children in preschools and secondary schools with improved sanitation (the share of children provided with access to improved sanitation in preschools and secondary schools is expected to reach 100% in urban areas (towns and large villages) and 50% in rural areas).

Authorities bearing responsibility for implementation: local authorities, State Sanitary and Epidemiological Service of Ukraine, Ministry of Education and Science of Ukraine, Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, State Water Agency of Ukraine.

Addendum to NT # 8 Indicators

In 2010, 4,309 (32.7%) preschools had access to cesspool sanitation systems, as compared to 4,525 (35%) preschools in 2009, including 3,651 (84.9%) in rural areas; 172 preschools had no access to cesspool sanitation systems in 2011, as compared to 180 (1.4%) preschools in 2009.

The total number of secondary schools with access to cesspool sanitation systems is 8,479 (44%), as compared to 8,573 (45%) secondary schools in 2010 and 8,529 (43%) secondary schools in 2009. However, today the basic problem remains the secondary schools that have no access to cesspool sanitation systems. The number of such institutions was 1,087 (5.6%) in 2011, as compared to 1,551 (8.0%) in 2010 and 1,797 (9.0%) in 2009. Thus, in Rivne region nearly a third (29.8%) of secondary schools has no access to cesspool sanitation systems.

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.

As of 01.01.2012, 85,776 (85,849 in 2010) educational and sanitary institutions, including 13,353 preschools, 19,238 secondary schools, 1,007 boarding schools, 17,628 rehabilitation and recreation centers for children, 6,897 extracurricular activity centers, 18,328 cafeterias in schools, lyceums, gymnasiums, colleges, higher educational Institutions of I-II accreditation degree, were under the supervision of the State Sanitary and Epidemiological Service. As compared to 2010, the total number of institutions did not change, however, there was an increase in the number of preschools by 184 and rehabilitation and recreation centers for children by 501, whilst the number of secondary schools and extracurricular activity centers reduced by 392 and 243 respectively.

In 2011, in order to ensure sanitary and epidemiological safety of children in preschools and secondary schools, experts from the State Sanitary and Epidemiological Service imposed 41,636 sanctions (as compared to 39,425 sanctions in 2010). Regional chief sanitary doctors passed 12,008 resolutions on the closure of objects (13,435 in 2010), including 269 (2.2%) that were closed down permanently (296 (2.2%) in 2010). 81 cases were investigated by authorities, as compared to 127 in 2010, including 59 (72.8%), as compared to 89 (70%) in 2010, that resulted in the cases coming to court. At 2,298 objects the range of manufactured products was reduced (2,379 in 2010), 31,938 people (30,466 in 2010) were temporarily dismissed.

In accordance with the inquiry dated 07.02.2012 on providing schoolchildren with safe drinking water and warm lavatories:

- The number of schools with no access to centralized or local sewerage systems totals 8,545, including 1,576 secondary schools that were equipped with indoor lavatories during 2011;*
- The number of pre-schools with no access to centralized or local sewerage systems totals 4,328, including 539 pre-schools that were equipped with indoor lavatories throughout 2011;*
- The number of schools with no sanitation facilities is 1,551;*
- The number of pre-schools with no sanitation facilities is 172;*
- The number of drinking water samples taken in schools to test the bacteriological parameters is 75,739, including 3.9% (2,958) that did not meet the standards.*
- The number of drinking water samples taken in order to test the sanitary and chemical parameters is 49,155, including 8.7% (4,262) that did not meet the standards*

3. Assess the progress achieved towards the target.

NT # 7 - The indicator of the share of urban and rural population with access to centralized sewerage systems in Ukraine, overall, showed no significant change from 2009 to 2011.

It should be noted that marked progress towards National Target 8 has been made, with the number of secondary schools with no access to sewerage system decreasing to 5.6% in 2011, as compared to 9.0% in 2009. However, the progress is not rapid enough to achieve the intermediate target in 2015.

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

The target indicator and the final deadline need not be revised.

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

National targets are set.

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

For each target set in this area:

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

National targets #9 *“The reduction of length of drainage systems and water supply pipes in emergency state.”*

The indicator is considered to be the percentage of the replaced pipes.

Target dates: intermediate deadline - 2015. The water supply pipes in emergency state are scheduled to be replaced in the towns and cities with the population of more than 500,000 inhabitants. In these localities the replaced water supply pipes will be 30%. In the other localities the total amount will be 15%. The final deadline is the year 2020. The water supply pipes in emergency state are scheduled to be replaced in the towns and cities with the population of more than 500,000 inhabitants (50%). In the other localities the total amount will be 30%.

Executive authorities having responsibility: The Ministry of Regional Development, Construction, Housing and Utilities of Ukraine; local authorities; the Ministry of Ecology and Natural Resources of Ukraine; Ministry of Agricultural Policy of Ukraine.

The National Target #9 has become topical for Ukraine owing to the worn out water supply pipes and drainage systems which are in emergency state. One of the main problems is water supply systems pollution connected with the water supply interruption, low pressure and pipes leakage. Up to 50% of water may be wasted in water distribution systems in many towns and cities. In such conditions there is the possibility of infiltration and repeated contamination of drinking water in water supply systems.

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.

Financial actions taken to reach the target.

According to the Ministry of Finance of Ukraine, as stipulated by the Law of Ukraine “On State Budget of Ukraine for 2009”, the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine was allocated 6.5 million hryvnas for the development of water supply and sewerage systems within the budgeted program “Carrying out of emergency and restoration actions on main water supply in Kerch, the Autonomous Republic of Crimea” and 91.0 million hryvnas within the budgeted program “Reconstruction of water supply systems in Lviv”. These programs were financed in corpore.

Within the scope of the preparation for the 2012 UEFA European Football Championship, the budgeted program “The construction of the second Main municipal sewer in Kyiv within the scope of the preparation for the 2012 UEFA European Football Championship” was scheduled to be allocated 33.8 million hryvnas. But the size of the real financing amounted to 20.0 million hryvnas. In 2010 two budgeted programs “The construction of the second Main municipal sewer in Kyiv within the scope of the preparation for the 2012 UEFA European Football Championship” and “Stowing, reconstruction and overhaul of centralized water supply systems and buildings and water ways in the cities hosting the 2012 UEFA European Football Championship” were scheduled to be allocated 29.0 million and 20.0 million hryvnas respectively.

According to the Law of Ukraine “On State Budget of Ukraine for 2010” the budgeted program “The reconstruction of the centralized water supply systems and waste water for implementing energy-efficient equipment and technologies” was scheduled to be allocated 400.0 million hryvnas for the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine. The Ministry was allocated 308.9 million hryvnas.

According to the Law of Ukraine “On State Budget of Ukraine for 2012” the budgeted programs “The reconstruction and building of the centralized water supply systems and water ways in Odessa” and “The reconstruction and building of the centralized water supply systems and water ways in Donetsk oblast” were scheduled for the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine. The Ministry was allocated 154.0 million hryvnas and 21.0 million hryvnas respectively. These programs were fully financed. The building and the reconstruction of water supply and sewerage treatment plants with the help of implementing new technologies and equipment and equipping laboratories for controlling water and sewage quality with the help of modern analytical controlling equipment were also scheduled.

16.11 (0.04 more) thousand km or 35.9% of the centralized water supply system needed replacing in 2011. 0.26 (0.04 more) thousand km or 1.6% were replaced within the period of the year.

The sewerage system was the worst one in the Autonomous Republic of Crimea. 62.5% of pipes needed replacing. In 2011 only 0.1% of pipes was replaced. In the other regions the percentage was the following: in Donetsk oblast 57.9% of pipes needed replacing and only 0.3 % was replaced; in Kharkivska oblast 55.8% of pipes needed replacing and only 0.6 % was replaced; in Luhanska oblast 51.3% of pipes wanted replacing and only 0.1 % was replaced; in Kirovohradska oblast 40.8% of pipes needed replacing and only 0.7 % was replaced; in Zaporizhska oblast 39.6% of pipes needed replacing and only 0.4 % was replaced; in Sumska oblast 34.9% of pipes wanted replacing and only 1.2 % was replaced; in Khmelnytska oblast 34.9% of pipes wanted replacing and only 1% was replaced; in Odessa oblast 34.1% was to be replaced and only 0.6 % was replaced; in Zhytomyrska oblast 34% of pipes was to be replaced 0.4 % was replaced; in Khersonska oblast 34% needed replacing and only 3.4% was replaced. Other oblasts had less than 34 % of sewerage pipes to be replaced. Only in Sevastopol sewerage pipes were in good condition. Only 7.8% of all pipes needed replacing. In the course of the year 1.3% of pipes was replaced.

The failure rate of the sewerage systems was the following: in Zaporizhska oblast there were 11.4 failures per 1km of the system; the Autonomous Republic of Crimea had 9.9 failures; Zakarpatska oblast had 8.9 failures; Rivnenska oblast had 8.7 failures; Chernihivska had 4.2 failures; Volynska oblast had 3.2 failures; Lvivska oblast had 2.9 failures; Khersonska oblast had 2.5 failures; Khmelnytska oblast had 2.3 failures; Mykolayivska oblast had 2 failures.

3. Assess the progress achieved towards the target.

The progress achieved towards the national target №9 was estimated on the basis of the data given by the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine. Taking into consideration the percentage of the replaced wrecked water pipes that had been replaced in Ukraine which accounted for 37.1% in 2009 and 37.8% in 2011, a slight improvement may be reported. But this sector needs far more substantial annual funding over the next few years.

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.

There is no need of revising the target and the target date. Considering the fact that Ukraine is reporting on the targets for the first time it would be premature to consider the question of revising the national targets.

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

National target has been set.

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.

National targets #9 *“The reduction of length of drainage systems and water supply pipes in emergency state.”*

see pages 31-33.

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:

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.

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target #10 "Reducing the amount of discharged sewage, mining waters, collector and drainage waters without purification or with insufficient purification."

The indicator is the share of the discharge of sewage, mining waters, collector and drainage waters without purification or with insufficient purification into surface water bodies.

Target dates: intermediate deadline - 2015. It is expected to reduce the amount of discharge of sewage, mining waters, collector and drainage waters without purification up to 3%, and discharge of contaminated water with insufficient purification up to 15%. Deadline is 2020. It is expected to reduce the amount of discharge of sewage, mining waters, collector and drainage waters without purification up to 1.5%, and discharge of contaminated water with insufficient purification up to 10%.

Executive authorities having responsibility: Ministry of Ecology and Natural Resources, State Water Agency of Ukraine, local authorities.

According to statistical data published in the official edition "National report on drinking water quality and water supply in Ukraine" in 2010-2011, the amount of discharged wastewater, mining waters, collector and drainage waters without purification was 2103.95 thousand m³/day in 2006, 1866.10 thousand m³/day in 2007; 1809.89 thousand m³/day in 2008; 1648.64 thousand m³/day in 2009; 1822.58 thousand m³/day in 2010; 1800.38 thousand m³/day in 2011.

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.

According to the Ministry of Finance of Ukraine, by the Law of Ukraine "On the State Budget of Ukraine for 2009", the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine was assigned to launch the programme "Carrying out top priority construction work for the system of sewage water pipes from the station of biological purification "Pivnichna" to Odesa" for 35.0 million hryvnas among other programmes concerning the improvement of water supply and sewerage systems management, which were financed in full.

By the Law of Ukraine "On the State Budget of Ukraine for 2012", the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine was assigned to carry out the fiscal programme "Reconstruction and construction of sewage disposal plants and other facilities in order to protect the Azov-Chornomorsk water area and the Dnieper and the Siverskiy Donets Basins from pollution" with the funding arrangement for 640.0 million hryvnas out of which 608.9 million hryvnas was received.

Within the framework of the programme "Drinking water of Ukraine" in 2012 the funding was partially granted for the construction and reconstruction of sewage disposal plants with the use of cutting-edge technologies and equipment and also for outfitting water quality laboratories with up-to-date test equipment.

3. Assess the progress achieved towards the target.

The assessment of progress towards National Target 10 is carried out according to the data submitted by the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine. Since the waste disposal with no purification was 2.5 % in 2009 and 2.7 % in 2011 lack of progress can be reported. This sector needs considerable investment.

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.

No, there is no necessity in target and final deadline revision.

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

National Target has been set.

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

For each target set in this area:

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

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

3. Assess the progress achieved towards the target.

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

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

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target # 11 *"Improving the efficiency of treatment facilities."*

The indicator is the number of newly-built, reconstructed and modernized treatment facilities.

Target dates: Intermediate deadline – 2015; it is planned to build 25 plants and to modernize 30 ones. The final deadline – 2020. It is expected to build 60 treatment facilities and to modernize 70 ones.

Executive bodies having responsibility for implementation: Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, Ministry of Ecology and Natural Resources of Ukraine, State Water Agency of Ukraine, Ministry of Agricultural Policy of Ukraine, bodies of local self-government.

The percentage of facilities to be reconstructed is calculated out of the total number of treatment facilities. During the reporting year both the number of facilities and their engineering condition remained approximately at the same level: 83% in 2009 and 84 % in 2010 of the total amount of

treatment facilities needed to be reconstructed. By 2010 the aggregate number of treatment facilities (amounting to 3,000 ones) were reported about. Since 2011 the facilities achieving efficiency of 5,000 m³/day (totaling 500 ones) have been taken into account.

With reference to data of "The national report on the quality of drinking water and the water supply condition in Ukraine," 54.3% of sewage and treatment facilities needed to be reconstructed in 2011. Large-sized plants are usually in better engineering condition. Consequently, figures shown for 2009 - 2011 will not be compared.

The worst engineering condition of sewage and treatment facilities was recorded in Zakarpatska oblast, where all existing plants need to be reconstructed (similar situation is in the cities of Kyiv and Sevastopol). In Dnipropetrovska oblast 83% of sewage and treatment facilities needed reconstructing; with 82.4% in Mykolaivska oblast, 82% in AU Crimea, 77.4% in Donetsk oblast, 74.2% in Sumska oblast, 70.6% in Volynska oblast, 70% in Cherkaska oblast; this figure ranged between 50-60% in another 8 oblasts, it was between 40-50% in 5 oblasts and between 30-40% in other 5 oblasts. In Kyiv oblast only 20% of the facilities needed to be reconstructed.

Sewage pumping stations. In 2011, the total number of sewage pumping equipment increased from 8,337 to 8,407. Those requiring equipment replacement made: 2,898 (34.8%) in 2010 and 2,817 (33.5%) in 2011. The amount of stations with the equipment replaced during the year was: 314 (10.8%) in 2010, and 314 (11.1%) in 2011 of those in need of equipment replacement (Fig. 24).

The worst condition of sewage pumping facilities was recorded in Ternopilska oblast where 95.3% of pumps had to be replaced, of which during the year only 8.2% were changed. In other oblasts these figures were the following: 51.8% and 10.4% in Poltavaska oblast, 51.5% and 5.4% in Sumska oblast, 47.9% and 3.6% in Cherkaska oblast, 45.5% and 6.6% in Kharkivska oblast, 42.7% and 15% in Kirovohradska oblast, 42.4% and 5.7% in Khersonska oblast, 41% and 8.5% in Lvivska oblast. Approximately 30%- 40% pumping equipment needed to be replaced in 9 oblasts; 20-30% in 8 oblasts; the figures were 12.2% and 7.3% in Chernihivska and Luhanska oblasts, respectively.

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.

Ministry of Regional Development reported the construction of 12 (compared to 4 in 2009) and modernization of 15 (compared to 5 in 2009) treatment facilities in 2011.

3. Assess the progress achieved towards the target.

Concerning indicators for NT # 11, there were 16 treatment facilities newly constructed and 20 ones modernized, which is 60% of the target achievement. Thus, there has been recorded considerable progress in terms of the given national 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.

Considering the fact that it is Ukraine's first target report, to revise national targets is ahead of time.

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

National target has been set.

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

For each target set in this area:

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

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target has not been set due to a lack of financing or technological capacities.

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.

National Target has not been set due to a lack of financing or technological capacities.

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.

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target has not been set due to a lack of financing or technological capacities.

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.

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target has not been set due to a lack of financing or technological capacities.

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

For each target set in this area:

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

National Target #12 “ *Development and adoption of the Dnieper, Dniester, Danube, Tisza, Siverskiy Donets and Southern Bug basins management plan*”.

A river basin management plan devised is the indicator.

Target dates: intermediate deadline – 2015. The Danube, Tisza and Southern Bug river basins management plans are scheduled and are to be approved. The final deadline is the year of 2020. The Dnieper, Dniester and Siverskiy Donets river basins management plans are scheduled and are to be approved.

Executive authorities having responsibility: Ministry of Ecology and Natural Resources of Ukraine; State Water Agency of Ukraine.

The National Target set aims to improve the water basins condition and the groundwater hydraulically linked to them and being a source of drinking water and irrigation in Ukraine. There has been the tendency of water and environment deteriorating in the majority of river basins of Ukraine of late. The experience of our neighboring countries demonstrates progress in solving such problems. Ukraine needs implementing fundamental changes in water resources management.

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.

Issues concerning the water resources management improvement in the basins of the main rivers, their sustainable use and ecological sanitation by introducing integrated water resources management on basin principle were considered at the meetings of the basins board in 2009.

Elaborating of the elements of the Southern Bug river basin management Plan to comply with the standards of "The EU Water Framework Directive" was envisaged in 2012 having the espousal of the Agency of Environmental Protection of Sweden within the scope of the project "Enhanced Institutional Management of Ukraine' river basin" (the Southern Bug serving as an example).

In April 2012, a seminar was held to present and consider the project "The National Tisza River Basin Management Plan". The project had been worked out by the Tisza basin water resources department and the national experts of the ICPDR under the aegis of EU Project "The support of the agencies of Ukraine responsible for the implementation of the Danube and Ramsar Conventions". The National plan of the Tisza basin management was elaborated and submitted for endorsement of the Zakarpattia Oblast's local administration.

The Danube basin water resources management office is an associated member in a number of projects implemented by the International Committee on the river Danube protection.

Joining these projects helps to implement EU's best practices in managing water resources, to develop the transboundary partnership and implement the provisions of "The EU Water Framework Directive" concerning the elaboration of elements of river basin management plan.

3. Assess the progress achieved towards the target.

The Tisza basin management plan had been elaborated and submitted for endorsement of the Zakarpattia Oblast's local administration after the public hearings.

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.

Taking into consideration that Ukraine is reporting for the first time, it would be premature to revise the national targets.

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

The national target has been set.

XX. Additional national or local specific targets

In Ukraine, 3 additional targets are established: NT # 13 “The preparation and publication of the report on the quality of drinking water and the condition of the drinking water supplies in Ukraine”, NT # 14 “Issuing a Summary report on the progress towards implementation of the Protocol on Water and Health”, NT #15 “Raising awareness among the representatives of central executive bodies and local governments, scientific institutions, organizations and the public. Broadening Ukraine's experience in introducing world’s advanced water supply and sewerage technologies, increasing public responsibility for the protection of water resources”.

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

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

National target #13 – *“The preparation and publication of the report on the quality of drinking water and the condition of the drinking water supplied in Ukraine”.*

The indicator is the availability of the National Report on the quality of drinking water and the condition of the drinking water supplied in Ukraine.

Target Date: annual publication is expected.

Authorities responsible for implementation: The Ministry of Regional Development, Construction and Housing and Utilities of Ukraine;

National target #14 – *“Issuing a Summary report on the progress towards implementation of the Protocol on Water and Health”.*

The indicator is the availability of the Summary report on the progress towards implementation of the Protocol on Water and Health.

Target Date: the Summary report on the progress towards implementation of the Protocol on Water and Health is expected to be prepared every three years.

Authorities responsible for implementation: Ministry of Ecology and Natural Resources of Ukraine, Ministry of Public Health of Ukraine.

National target #15 – *“Raising awareness among the representatives of central executive bodies and local governments, scientific institutions, organizations and the public. Broadening Ukraine's experience in introducing world’s advanced water supply and sewerage technologies, increasing public responsibility for the protection of water resources”.*

The indicator is holding meetings, conferences, seminars, and the international water forum AQUA UKRAINE.

Target Date: annual activity

Authorities responsible for implementation: Ministry of Ecology and Natural Resources of Ukraine, Ministry of Public Health of Ukraine, Ministry of Regional Development, Construction and Housing and Utilities of Ukraine; State Agency on Energy Efficiency and Energy Saving of Ukraine; State Water Agency of Ukraine; International Exposition Centre.

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

National Target # 13.

Within the framework of the implementation of the law “On drinking water and drinking water supplies” in order to constantly inform the customers about the quality of drinking water, the National Report on the quality of drinking water and the condition of the drinking water supplies in Ukraine is annually prepared by the Ministry of Regional Development and is published on the

websites of The Ministry of Regional Development and the Ministry of Ecology and Natural Resources of Ukraine.

National Target # 14.

During the reporting period, there were three meetings dedicated to the NT which were organized by the Ministry of Ecology and Natural Resources of Ukraine. The results of the public consultations on the NT Project were presented at the meeting of the Steering Committee of the National Policy Dialogue in 2010. In 2012 4,000 copies of the NT in the Ukrainian language were published through the agency of the joint Ukrainian-Norwegian Project. The publication was distributed by the national coordinator according to the Protocol and by the public organizations among the interested parties, during the conferences and meetings of the central executive bodies, and the sessions of Basin Councils.

In 2012 the Ministry of Ecology and Natural Resources of Ukraine supported the initiative of the State Sanitary and Epidemiological Service and All-Ukrainian ecological non-governmental organization (NGO) "MAMA-86" to launch a pilot project on self-assessment of equal rights to water and sanitary in Ukraine by means of the instrument of self-assessment developed by an expert group of the Joint Secretariat of the Protocol on Water and Health. Within the framework of the pilot project, the State Sanitary and Epidemiological Service organized the collection of the information from all Central executive bodies (CEB) and regional subdivisions of the Sanitary and Epidemiological Service to fulfill the task of the instrument. Based on the received official information and the work of the project experts, the task of the self-assessment instrument was fulfilled and the analysis of the current situation with ensuring equal rights to water and sanitary in Ukraine was carried out. The pilot project was implemented with the support of the government of France and the United Nations Economic Commission for Europe. The results of self-assessment were presented at the national seminar where the interested parties including CEA, international institutions and public institutions of Ukraine took part on March 1st, 2013 in Kyiv. The seminar was organized by NGO "MAMA-86". The results were also presented within the framework of the press-club on March 23, 2013 and devoted to the Year of water partnership.

The functioning of the pilot project on self-assessment became the basis for pushing forward and preparing the Summary report on the progress towards implementation of the Protocol. As a result of the pilot project, the Situational analysis is included into the Summary report and is the first attempt to do in-depth research on the effectuation of the right to water and sanitary in Ukraine and define the major problems and possible ways of solving them.

In 2013 the Ministry of Ecology and Natural Resources of Ukraine organized 2 meetings on the preparation of the Summary report on the progress towards implementation of the Protocol. A new composition of the Interdepartmental Working Group on Protocol implementation was established. Governmental organizations are part of the Inter-agency Working Group on Protocol implementation. The former have participated in the meetings on the preparation and discussion of the draft 2013 Summary report on the Protocol implementation.

National Target # 15.

Annually, starting with the year of 2013, according to the decree of the Cabinet of Ministers of Ukraine, International Water Forums "AQUA UKRAINE" are held. The events taking place are specialized exhibitions, conferences, and seminars, etc.

The Ministry of Ecology and Natural Resources of Ukraine and State Agency of Water Resources are the co-organizers of the annual scientific conference "Water and Environment" that takes place during the water forum «AQUA UKRAINE»; together with branch offices, they take part in the celebration of World Water Day through organizing round table discussions, conferences and other events. It raises ecological awareness of the representatives of central executive bodies and local governments, scientific institutions, organizations and the public; it fosters familiarization with the world's best technologies within water supply and sewerage and improves public responsibility for the protection of water resources.

Within the water forum "AQUA UKRAINE" 09.11.2011, with the assistance of the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, the conference

“Drinking Water is the Health of the Nation” took place, devoted to the discussion of the reformation and improvement of water supply and sewerage systems management, attracting investments in this sphere, providing the population of Ukraine with high-quality drinking water through implementing cutting-edge technologies of drinking and sewage water purification, the use of energy efficient technologies and equipment, the relationships between water supply and sewerage companies and local government administrations, heat supply companies, housing offices and tenant ownership co-operatives, the improvement of financial condition of water supply and sewerage companies.

07.06.2011 in Yalta International Congress and Technical Exhibition ETEWS-2011 (Ecology, Technology, Economics, Water Supply, Sewerage) took place; the theme of the events was the discussion of the reformation and improvement of water supply and sewerage systems management.

Every year in Yaremche International scientific seminar “Resource preservation and quality water supply – strategic direction of the development of the sewerage systems of Ukraine” is held. The representatives of water supply and sewerage companies, research and project development institutes, engineer centers, ecology funds, international and public institutions, businesses from different countries of the world and Ukrainian media take part in the seminar. The event is organized by the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, LLC “Water Point” and the magazine “Water Supply and Sewerage”. In February 2012 VII International Seminar gathered 200 participants from 12 countries to facilitate sharing experience and the best practices of water supply and sewerage.

In 2011 and 2012 in Ukraine, 2 seminars on Water Safety Plans (WSP) were held. This measure is developed by World Health Organization (WHO) in order to provide access to safe drinking tap water through implementing measures of minimization and elimination of risks to insure the safety of drinking water at all stages of production, from the source to the customer’s tap. The Water Safety Plans were recognized as a measure of implementation of the Protocol by the Meeting of the Parties of the Protocol in 2010 in Bucharest. Both events were organized by NGO “MAMA-86” together with the Bureau of WHO in Europe and the Bureau of WHO in Ukraine through the financial support of WSSCC – the Water Supply and Sanitation Collaborative Council and Women for Water Partnership (WfWP). In 2011 the seminar was held for different level representatives of the State Sanitary and Epidemiological Service and a number of water supply and sewerage companies. The president and experts of EUREAU – European Federation of National Associations of Water and Wastewater Services and the experts of Associations of Water and Wastewater Services from Denmark, Spain, France, Sweden, and Poland took part in the seminar and shared their experience of implementing WSP. In 2012, apart from the seminar for the representatives of water supply and sewerage companies, practical training was held where software “The instrument for quality assessment of the Water Safety Plan” was used, which was translated into Russian specially for this training, Experts from WHO and a water supply and sewerage company from Sweden attended the seminars.

September 18 – 19 in Kyiv International Scientific Practical Seminar “Key issues for water quality and ways of dealing with them” was held. The seminar was organized by the Associations “UkrVodokanalEcologia” and “Drinking Water of Ukraine”, LLC “Water Point” with the organizational and financial assistance of the Foundation for German-Polish Cooperation FWPN – SfDPZ. The seminar was attended by heads of laboratories, engineers of water supply and sewerage companies of Ukraine, representatives of the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, leading Ukrainian scientists and experts from Poland and Bavaria. The representatives of NGO “MAMA-86” familiarized the participants with the approach and the instruments of Water Safety Plans implementation.

In July 2012 the 4th Dnipropetrovsk Public Forum was held where the representatives of non-governmental organizations of Ukraine, Belarus and the Russian Federation together with the representatives of state institutions of these countries took part. The Forum was organized by NGO “MAMA-86”, UNDP-GEF Dnieper Basin Environment Programme with the assistance of Global Water Partnership and UNECE. The Forum was dedicated to the issues of cross-border cooperation to solve the problems of Dnieper Basin and encourage the participation of the public

in the introduction of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the Protocol on Water and Health and sharing experience in solving the problems of the River Dnieper.

3. Assess the progress achieved towards the target.

National Target #14 – The Summary report on the progress towards implementation of the Protocol on Water and Health in 2013 is prepared and published.

National Target #15 – Annually in Ukraine, a succession of international and national events which raise the issues of drinking water supply and sewerage and facilitate sharing experience in approaching these issues takes place. These measures are aimed at increasing professional knowledge and sharing the best practical experience. These events are attended and supported by The Ministry of Regional Development, Construction and Housing and Utilities of Ukraine, The Ministry of Ecology and Natural Resources of Ukraine, the State Sanitary and Epidemiological Service, the Association of water agencies “UkrVodokanalEcologia” and Nonprofit Organizations.

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.

Taking into consideration that Ukraine reports on the targets for the first time, reconsideration of the national targets would be premature.

These targets concern permanent educational work on the requirements of the Protocol according to Articles 9, 10, 11 and 13.

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

National Targets are set.

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.

Adverse economic and political circumstances, following a prolonged period of state institutions being formed, have plunged Ukraine into a deep recession. In all of its major spheres, the country's activity calls for immediate reform requiring persistence and consistency in decision-making, as well as considerable investment. Prompt reform is an urgent task for Ukraine's housing and communal services, healthcare, and ecology. Targets concerning the three sectors have been integrated in the provisions of the Protocol on Water and Health. With the document being ratified and becoming law, Ukraine undertook to ensure its implementation. However, it appeared to be difficult to indicate a public authority (an executive body) to take the leadership and coordinating role in Protocol implementation. Ministry of Ecology and Natural Resources is in a position to accept only a limited responsibility, the operating conditions of water supply systems and the citizens' health being outside its control. Although the Ministry of Ecology and Natural Resources does not intend to shift the responsibility for a failure to make significant progress towards the set targets, it has to be pointed out that it is often narrow sectional interests that impede the progress. Moreover, despite its being continuously reorganized, the Ministry took the leadership in preparing a summary report on Ukraine's progress towards the set targets.

Reasoning that the Protocol guidelines cover a wide range of health care issues, public groups have repeatedly suggested that the responsibility for the Protocol implementation should be shared with another public authority (Focal Point) concerned with the issues of water and health – the State Sanitary and Epidemiological Service of Ukraine. Besides, Ukraine still has not fulfilled the Protocol Article 8 commitments on introducing/ updating the systems of monitoring water-related disease, designing early warning systems, as well as developing corresponding Action Plans. In order to fulfill the international commitments on reaching the Protocol targets, the State Sanitary and Epidemiological Service and the Ministry of Public Health of Ukraine should join in the international working groups, especially those concerned with monitoring, developing emergency measures and preventing water-related disease. These targets are among Ukraine's top priorities in Protocol implementation for the period of 2014-2016.

It is worthy of note that the UNECE Water Convention Secretariat has actively assisted Ukraine in fulfilling the Protocol obligations. In 2008, under the auspices of the Secretariat, under the EU Water Initiative, Ukraine launched the National Policy Dialogue (NPD) on Integrated Water Resources Management (IWRM) – a series of consultations with all the relevant central executive bodies, the academic community, the public and businessmen. It was reaching the Protocol on Water and Health targets that was among the major priorities of the first meeting agenda. In 2008 the Ministry of Ecology and Natural Resources requested the Protocol Secretariat to provide Ukraine with technical and financial support for the National Targets setting. In 2009-2010 Ukraine and Norway ran a joint international project aimed at setting the National Targets negotiated at the 2nd-4th meetings of the Steering Committee of the National Policy Dialogue on Integrated Water Resources Management.

The Target setting process proved to be complicated and time-consuming.

Considerable effort has been expended by MAMA-86, a UNENGO which has been monitoring and actively assisting the implementation process, attending all the major events, holding public consultations on the draft National Targets, and raising public awareness of the Protocol guidelines. Ukraine's international commitments on the National Targets setting have been fulfilled. However, the ministries and other government bodies responsible for reaching the National Targets encounter major difficulties in ensuring the Protocol implementation, specifically in introducing measures aimed at reaching the targets. For example, a press release issued by the Ministry of Regional Development, Construction and Housing and Utilities of Ukraine runs as follows: "Inadequate funding for state programmes on utilities, including "Drinking Water in Ukraine" programme, is a major impediment to raising the quality of drinking water in Ukraine. Current funding of the programme is only 20% of that stipulated by the law. Over the last seven years only 412 million hryvnas has been allocated out of 2 billion that had been planned. To realize "Drinking Water in Ukraine" programme, there have been constructed/reconstructed 403 water intake facilities, 115 sewage disposal plants, 125 pumping facilities, 119 water towers, 731 km of water-supply pipeline network; 701 drinking water afterpurification facilities have been installed. Nearly 200 certified laboratories testing water quality and sewage have been modernized and equipped. 1968 sewage treatment plants have been inventoried. Local funds have been allocated to design 51 schemes of improving the water supply and sewerage systems. These measures have ensured a slight improvement in water supply in a number of large villages. However, **the problem has not been solved on a national level.** Many principal targets have not been reached, largely due to inadequate funding and concentrating on numerous minor projects.

Even those few National Target Indicator statistics showing a modest improvement (such as ensuring quality water supply and sanitation for the population or schoolchildren) might be put into question. Ukraine's population tends to show a yearly decline of about 350,000 people. Thus, in the evaluation of facilities and their accessibility, figures showing an improvement on previous years' may not be sufficiently reliable as the population decline is disregarded.

Following the Decree of the President of Ukraine # 1085 dated December 9, 2010 "On reorganization of the central executive body system", the State Sanitary and Epidemiological Service of Ukraine was established as an independent central executive body to implement policies aimed at ensuring the sanitary and epidemiological safety of the population. There have been set up local bodies headed by chief sanitary officers of the corresponding regions. Currently the State Sanitary and Epidemiological Service of Ukraine employs 29,996 people on its staff, with only 2,500 of those being civil servants. The new administrative reform is aimed at reorganizing the central executive body system, eliminating parallelism of responsibility, reducing the number of executives and cutting down on their expenses, as well as enhancing the efficiency of water supply and sanitation management.

The quality of surface and ground water – the main source of drinking water supply in Ukraine – proves difficult to assess. With a large number of set targets and extremely stringent standards of drinking water quality, the practice of applying MAC (maximal acceptable concentrations) and MAD (maximal acceptable discharge) results in failing to meet the requirements or reporting the results which are stretching the truth. Moreover, even the monitoring data, which are aimed at imposing restrictions and fines instead of reaching environmental targets, do not ensure adequate executive decisions. Ukraine needs to set the water quality classification accepted by the EU member countries in compliance with EU's Water Framework Directive. The EU water quality standards have already been set in Moldova and are being considered in Belarus. Ukraine shares transboundary watercourses with the two countries and, therefore, urgently requires setting the above classification.

Ukraine needs to set an additional National Target to comply with Chapter XIV "The quality of waters used as a source of drinking water" (Paragraph 2 j) Article 6 – Part 1 – "Developing and implementing in Ukraine new standards of surface and ground water quality based on the principle of comparing the current state of a water body with the undisturbed". In order to improve the quality of surface and ground water, an ad hoc state programme based on this target should be launched.

To promote international and transboundary cooperation, two years ago Ukraine embarked on a joint EU project "Environmental protection of transboundary watercourses" in partnership with

Azerbaijan, Georgia, Armenia, the Republic of Belarus, and the Republic of Moldova. The aim of the project is to ensure access to reliable data on the ecology, chemistry and hydromorphology of transboundary watercourses, including groundwater, to develop a River Basin Management Plan for a number of watercourses in compliance with EU's WFD requirements. Ukraine's progress towards the targets implementation has been analyzed within the framework of the Project Facilitation Mechanism aimed at assisting Ukraine in meeting its commitments on UNECE Water Convention and the Protocol on Water and Health. Presently, the central executive bodies of Ukraine are formulating proposals concerning the project. These are to include management strategies for the transboundary watercourses of the Upper Dnieper and the Prut River to comply with National Target Indicator 12 with a view to improving the accuracy of monitoring data on the current state of the surface and ground water – the main source of drinking water supply.

Ukraine still holds a scientific and technological potential. However, lack of governmental support prevents the findings and ideas put forward by the representatives of academia and experts from being put into practice. Every year these issues are raised during round-table discussions, seminars, conferences, public meetings, and at the yearly conference "Water and the Environment" within the International Water Forum ("AQUA UKRAINE") and other public and expert consultations.

Part Five

Information on the person submitting the report

The following report is submitted on behalf of PROSKURIAKOV O. [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:

Baysarovykh Iryna, Focal Point for the Protocol on Water and Health in Ukraine

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Name and address of national authority: *Ministry of Ecology and Natural Resources of Ukraine*

Minister



PROSKURIAKOV O.

Signature:

Date:

23.04.2013

Submission

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

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

Joint Secretariat to the Protocol on Water and Health

United Nations Economic Commission for Europe

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and

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WHO European Centre for Environment and Health

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The Baseline Analysis on Ensuring Equitable Access to Water and Sanitation in Ukraine, based on Pilot Testing of the Self-evaluation Tool

The Pilot Introduction

In January - March 2013, Ukraine participated in pilot testing of the self-evaluations tool to assess ensuring equitable access to water and sanitation at the national level. The pilot was implemented by the State Sanitary and Epidemiological Service of Ukraine and Ukrainian National Environmental NGO (UNENGO) MAMA-86 with support of the Ministry of Ecology and Natural Resources of Ukraine (MoE). The pilot was implemented in the framework of the Work Program for Implementation of the Protocol on Water and Health (hereinafter - the Protocol) to the UNECE (United Nations Economic Commission for Europe) Convention on Protection and Use of Transboundary Watercourses and International Lakes (the Water Convention) for 2010 - 2013. The pilots were implemented in 3 countries (France, Portugal and Ukraine) with facilitation of the Protocol Secretariat UNECE and with support of the French Government. The pilot is a continuation of activities of the Expert Group on Ensuring Equitable Access to Water and Sanitation under the Protocol Secretariat and work on publication "No one left behind: Good practices to ensure equitable access to water and sanitation in the pan-European region". In March 2012, "good practices" were launched by the French government and the Protocol Secretariat at Marseille World Water Forum. In 2012, the expert group has developed a self-assessment tool (the Scorecard) to help countries to assess and track progress in achieving equitable access to water and sanitation at national-local levels, in the context of the implementation of the Protocol. The tool is aimed to assist public authorities or non-governmental organizations to assess the relevance of political decisions on ensuring the equitable right to water (W) and sanitation (S), efficiency of the measures implemented, identification of priority problems and options to address the problems identified.

In the framework of implementation of the self-assessment pilot, Ukraine completed:

- collection of data available in central executive bodies (CEBs), including information gathering from regional units of the State Sanitary and Epidemiological Service (SSES), international and non-governmental organisations;
- a baseline analysis, based on the official data collected and publicly accessible information, data submitted by different organisations in response to requests, as well as based on expert information available;
- expert development of the Baseline Analysis Draft on ensuring equitable access to water and sanitation in Ukraine (the Base line Analysis), based on the scorecard tool completion;
- discussion of the Baseline Analysis Draft and the self-evaluation results at the National Stakeholders Workshop in Kyiv, March 1, 2013;
- finalization of the Baseline Analysis taking into account the stakeholders' discussion results, which will be included into the National Summary Report on Protocol implementation progress and presented in 2013
- based on tool testing, preparation of the critical comments and recommendations to the Scorecard (effectiveness, usefulness and easy to use) and the procedure of its application with the aim to further use of the Scorecard in Pan-European Region.

The following CEBs took part in compiling the scorecard tool and information gathering:

- the Ministry of Economic Development and Trade of Ukraine;
- the Ministry of Finance of Ukraine;
- the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine (Minregionbud);
- the Ministry of Education and Science, the Youth and Sport of Ukraine;
- the Ministry of Social Policy of Ukraine (Minsocpolicy);
- the Ministry of Public Health of Ukraine (MPH);
- the National Commission for State Regulation in Housing and Utilities Sector;

- the State Statistics Service of Ukraine (UkrStat);
- the State Penitentiary Service of Ukraine;
- the State Service of Ukraine for the Disabled and Veterans;
- the State Migration Service of Ukraine,
- M.V. Ptukha Institute of Demography and Social Researches of the National Academy of Sciences of Ukraine (IDSR),
- SIDA – Swedish International Development Agency.

Experts, involved in the baseline analysis development and Scorecard fulfilment, are:

Sergiy Vykhryst, international water law expert (“International obligation” table of the Scorecard), Tetyana Rakhimova, Monitoring Centre of SSES (Scorecard Chapter 1 on policy and mechanisms); Oleksandr Kravchenko, Science research constructing technical Institute of urban economy –SRCTI UE (Chapter 2 on Geographical Disparities), Natalya Rynkach, M.V. Ptukha Institute of Demography and Social Studies of the National Academy of Sciences of Ukraine (Chapter 3 on Vulnerable and Marginalised groups) and Alyona Babak, Anton Levytskiy, Alyona Nych, Institute of Local Development Marina Ogayo, M.V. Ptukha Institute of Demography and Social Studies of the National Academy of Sciences of Ukraine (Chapter 4 on affordability), Anna Tsvietkova, UNENGO “MAMA-86” (Summary and editing of baseline study), Nataliia Chyzhmakova, UNENGO “MAMA-86”, (technical assistance).

The Baseline Analysis

The country profile context

Socio-economic and sector data			
	2011	2009	Source
Population (in fact)	45633,6 ths	46143,7 ths	UkrStat
resident population	45453,3 ths	45782,6 ths	
Extension (km2)	603 550		
GDP per capita (EUR/person)	2568,38	1824,8*	UkrStat *
% of population below national poverty line	24,3%	26,4%	Institute of demography and social research (IDSR)
% of population living in urban areas	68,77 % (31380,9 ths. prsn.)	68,45 % (31524,8 ths. prsn.)	UkrStat
% of population living in peri-urban areas	Not relevant	Not relevant	
% of population living in rural areas	31,23 % (14252,7 ths.prsn.)	31,55 % (14438,1 ths. prsn.)	UkrStat
Renewable freshwater resources (million m ³ per capita/year)	0.002		Draft «Water Strategy of Ukraine for the period 2011-2020»**
% of population without access to safe drinking W	No data	No data	
% of population without access to wastewater collection	No data	No data	
% of population without access to wastewater treatment (any level)	No data	No data	
Public financial resources spent on W and S sector	102,7 M UAH (in 2012)		
Public financial resources spent in ensuring equal access to W and S			
* http://library.oseu.edu.ua/docs/StatSchorichnyk%20Ukrainy%202010.pdf			
* http://www.bank.gov.ua/files/5-Exchange_rates.xls#5.1 '!A1			
** http://www.scwm.gov.ua/fls/vdr.htm			

International obligations on water and sanitation

One of the first international legal instruments to ensure equitable access to water and sanitation is now in force in the pan-European region - the Protocol on Water and Health (hereinafter - the Protocol). Ukraine is a Party of the Protocol since 2003, and it had already fulfilled the first obligation under the Protocol by setting the National Targets to the Protocol in 2011. The National Targets were approved by the Order of the Ministry of ecology and natural resources and a Decree of the Cabinet of Ministers of Ukraine was passed to approve reporting procedures for CEBs on implementation of the National Targets (NTs).

However, Ukraine lacks a legislative act to stipulate comprehensive plan on Protocol NTs implementation. The Key principals of the State environmental policy (EcoStrategy) till 2020 (21.12.2010, N 2818-VI) and National Environmental Action Plan for 2011 - 2015 (NEAP) provide some general measures on setting and implementation of NTs to the Protocol, specific actions are foreseen in measure 140 of the NEAP for Development and Implementation of a Mechanism to stimulate the development of centralised water supply (WS) and sanitation (S) Systems, and decentralized sanitation in rural areas.

The international water legal framework related to water and sanitation is broad and well developed. It includes 15 International legal instruments (conventions, protocols and covenants) at UN level. Since soviet times Ukraine as Ukrainian Soviet Social Republic has ratified or joined to 13 of these International Legal Acts. It has to be mentioned that Ukraine does not have specialised legal acts for implementation of these acts. For example, it's relevant to Geneva Convention relative to the Treatment of Prisoners of War (Aug. 12, 1949), Geneva Convention relative to the Protection of Civilian Persons in Time of War (Aug. 12, 1949) and Additional Protocols to these Conventions. In 2000, the Cabinet of Ministers of Ukraine (hereinafter - the CMU) established the Inter-agency Commission for Implementation of International Humanitarian Law in Ukraine, and approved Regulation of the Commission.

Some of international norms are reflected in the special legal acts, for example the Instruction on Procedure and Conditions of Detention of Apprehended and Detained Servicemen (it's approved by Order # 618 of the Minister of Defence of Ukraine of 16.12.2004) stipulates that "detained military servicemen shall be provided accommodation conditions that meet sanitary and hygiene rules" (para 10.5), and that "provision of health care services to the detained military servicemen, sanitary, hygiene and counter-epidemic measures shall be conducted according to the due public health legislation" (para 10.10). The Status of Station and Post Regulation of the Armed Forces of Ukraine, approved by Law of Ukraine # 550-XIV of March 24, 1999, stipulates that "drinking water tanks shall be installed in mass cells, equipped with fountains ... " (para 51 of Annex 12). This provision is the only norm in the legislation of Ukraine that directly stipulates the need to ensure access of inmates to drinking water.

As for Geneva Convention relative to the Protection of Civilian Persons in Time of War of Aug. 12, 1949, it is necessary to note that Law of Ukraine on Legal Regime of Martial Law (Law # 1647-III of April 6, 2000) stipulates that measures under Martial Law include, among others the introduction - if deemed necessary - of rationing arrangements for supply of basic food, other basic products and medical items to residents (para 16 and 17 of Art. 15). According to the Civil Defence Code of Ukraine, competences of the CMU in the sphere of civil defence include "defining procedures for preparing and conducting potentially hazardous activities in conditions of presence of civilians, with participation of servicemen of the Armed Forces of Ukraine, other military units and law enforcement bodies with application of weaponry and military hardware" (para 13 of Art. 16), while competences of the Cabinet of Ministers of AR Crimea and local State Administrations in the sphere of civil defence include organisation and supporting livelihoods of victims of military (armed) actions or persons affected by consequences of such actions (para 18 of Art. 19).

According to para 9 of Art. 33, "in particular, evacuation shall be supported by provision of livelihoods to the evacuees in areas of their safe dislocation". According to Art. 36 of the Civil Defence Code, "medical protection and ensuring sanitary and epidemiological wellbeing include: provision of medical assistance to victims of emergency situation; timely application of preventive medical preparations and timely

implementation of sanitary and counter-epidemic measures; control of quality and safety of food products and raw food, drinking water and water supply sources; provision of trainings to local residents in the sphere of primary emergency health care and personal hygiene; monitoring quality of the natural environment, sanitary, hygiene and epidemiological situation".

Besides that, in connection with Additional Protocols to the Geneva Conventions 1949, it is worth to note that Law of Ukraine on the Red Cross Society of Ukraine (Law # 330-IV of November 28, 2002) stipulates that the Society, in the course of its activities, in particular organises operations the non-governmental voluntary emergency medical assistance service of the Society, supports functioning of camps for the injured and affected persons and provides free necessary sanitary, medical and social assistance to local residents in specific emergencies; provides free sanitary, medical and social assistance to single elderly persons, orphan children, disabled and homeless persons and other socially vulnerable population groups in need of care and support - both due to donations and humanitarian aid, and due to charitable funds established by the Society (Art. 9). According to Art. 14 of the Law, Ukraine, supports humanitarian and charitable activities of the Society and the International Red Cross Movement.

According to Art. 19 of Law of Ukraine on Defence of Ukraine (Law # 1932-XII of December 6, 1991), the civil defence system includes among others the sanitary, hygiene and counter-epidemic measures being implemented by central and local executive bodies, local authorities and volunteers units, that ensure application of these measures to prevent and mitigate emergencies in peace time and in a special period". Other relevant provisions of the Additional Protocols that deal with means and methods of war and measures to ensure survival of civilians on occupied territories are not reflected in the legislation of Ukraine.

Human and civil rights in the sphere of water and sanitation, as provided for in the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights of 1966, were generally incorporated into Ukrainian law, in particular into relevant provisions of the Constitution of Ukraine. In some cases, these rights lack efficient mechanisms for their implementation and ensuring.

The Ukrainian legislation does not incorporate a separate legal provision on elimination of discrimination of women in rural areas. However, according to Art. 24 of the Constitution of Ukraine "citizens have equal constitutional rights and freedoms and are equal before law. No privileges or limitations may exist on grounds of race, skin colour, political, religious or other convictions, sex, ethnic and social origin, wealth, residence, language or other grounds. Equal rights of men and women are ensured by: provision of equal opportunities to women and men in public, political and cultural activities, in access to education and professional skills training, in labour and remuneration; by special measures for protection of women's labour and health, by setting the pension privileges; by provision of conditions allowing women to harmonise career and motherhood; by legal protection, by provision of material and moral support to mothers and children, including provision of paid maternity leaves and other benefits to pregnant women and mothers".

Besides that, on September 8, 2005, Law of Ukraine on Ensuring Equal Rights and Opportunities of Women and Men and on September 6, 2012, Law of Ukraine on Basics of Prevention and Combating Discrimination in Ukraine were approved.

Occupational health, including sanitation and hygiene issues, are regulated by the Labour Code of Ukraine. The CMU approved the Concept of the National Target-specific Program for Improvement of Occupational Safety, Labour Hygiene and Workplace Environments for 2012 - 2016. The Program aims to ensure comprehensive addressing of problems in the sphere of occupational health, development of modern safe and healthy workplace environment, minimisation of risks of occupational injuries and diseases and accidents...

In 1991, Law of Ukraine on Basics of Social Protection of the Disabled was approved. According to the Law the State shall provide preconditions to the disabled person allowing the person to enjoy his/her rights equally with other citizens; and shall ensure social protection. Discrimination on grounds of disability is prohibited.

Besides that, Law of Ukraine on Rehabilitation of the Disabled in Ukraine was passed in 2005 and CMU Decree # 706 of August 1, 2012 approved a State Targeted Program - the National Action Plan for Implementation of the Convention on the Rights of Persons with Disabilities up to 2020.

The president Decree # 63/96 of January 18, 1996 approved a National Program - "Children of Ukraine". Main actions of the Program include: ensuring maintenance of the hygiene regime of individual water use and control of water use in education, boarding and health improvement facilities for children; actualisation of education, development, health care, nutrition and water and use hygiene issues. CMU Decree # 1200 of August 3, 2000, established the Inter-agency Commission for Childhood Protection and approved Regulations of the Commission. "Main objectives of the Commission include: facilitating coordination of activities of executive bodies pertaining to childhood protection matters; development of proposals on matters of development and implementation of state policies for protection of children's rights and interests; identification of ways, mechanisms and options to address problematic issues emerging in the course of implementation of state policies in the childhood protection sphere".

In 2009 National Program - the National Action Plan for Implementation of the Convention on the Rights of the Child up to 2016 was approved. It aims to ensure optimal functioning of a comprehensive system for protection of children's rights in Ukraine in line with the UN Convention on the Rights of the Child, accounting for the Millennium Development Goals, and the Strategy of the Final Document of the Special UN General Assembly Session on Children - "A World Fit for Children". While the Program does not refer to drinking water directly, Section 1 of the Program deals with health care and promotion of healthy lifestyles for children.

Therefore, Ukraine lacks a systemic approach to implementation of its international commitments on water and sanitation matters.

Part 1. Guideline governance frameworks for ensuring equitable access to water and sanitation

1.1 "A strategic framework for achieving equitable access to water and sanitation"

Some laws and regulations of Ukraine seek to ensure citizens' access to water and sanitation. The framework ones include: the Constitution of Ukraine, laws of Ukraine on Drinking Water and Drinking Water Supply, on Ensuring Sanitary and Epidemiological Wellbeing; as well as such political documents as Drinking Water of Ukraine Program; the National Program for Reforms and Development of the Housing and Utilities Sector, the Program for Development of Water Management and Improvement of the Dnieper River Basin up to 2021, etc. Besides that, there are specialised regulations, State Sanitary Rules and Norms, Orders of the Chief Sanitarian of Ukraine, etc. of relevance to access to water in Ukraine. At the same time, the right to sanitation is not legislatively defined. Sanitation issues remain a secondary priority and are not paid due attention by authorities. However, since 2011, some draft laws were developed to address sanitation problems.

Only some specific programs address issues of equitable access to water and stipulate relevant measures. Already effective programs stipulate extension of coverage by centralised water supply and sanitation services. A specialised target-specific program exists for provision of centralised water supply services to rural settlements that use truck water now.

Measures to Improve access of vulnerable and marginalised groups to safe drinking water are stipulated in some budget items of the State Budget and in the List of Projects for Implementation of Measures Stipulated by National Program "Drinking Water of Ukraine for 2006 - 2020", and Relevant Finance Allocations (Order # 247 of the Ministry of Regional Development of Ukraine of 24.10.2011 that stipulates improvements of access to water and sanitation in education and health care facilities). Some measures are stipulated in the National Action Plan for Implementation of the Convention on Rights of the Disabled, in the Model Regulation on Temporary Accommodation Facilities for Foreigners and Stateless Persons who Stay in Ukraine Illegally, etc.

In 2011, Ukraine set its national targets under the Protocol on Water and Health (Decree of the Cabinet of Ministers of Ukraine of 26.09.2011, MoE Order # 324 of 14.09.2011). The range of targets incorporates the ones pertaining to ensuring provision of high quality drinking water and sanitation services to rural and urban residents, to children in pre-school facilities and secondary schools.

Relevant powers and duties in the sphere are defined and distributed between central executive bodies (CEBs) in regulations of relevant authorities, laws, regulations and in national targets under the Protocol on Water and Health. However, some functions and tasks are duplicated and/or spheres of responsibility/financing are not clearly delineated (a particular issue may belong to spheres of competence of several ministries and administrations, hindering actions to address relevant problems).

At the territory of Ukraine, framework laws and mechanisms are in place to guarantee free public access to information. However, in practical terms they are not sufficiently used in public relations. The relevant legal base incorporates: the Constitution of Ukraine (Art. 34, 102), laws of Ukraine on Information, on Access to Public Information, on Drinking Water and Drinking Water Supply, on Ensuring Sanitary and Epidemiological Wellbeing. Ukraine is a Party of the Aarhus Convention. The country produces annual National Reports on Quality of Drinking Water and Drinking Water Supply in Ukraine, as well as other information materials that are posted on web-sites of the Ministry of Regional Development, Construction, Housing and Utilities of Ukraine, other ministries, agencies and state administrations.

Practically applied mechanisms for discussions and coordination incorporate:

- sessions and meetings of different CEBs in charge of access to water and sanitation;
- sessions of the MoE WG on Implementation of the Protocol on Water and Health;
- sessions of oblast-level state administrations and commissions in charge of industrial and environmental security and emergency response;
- public hearings, meetings of Public Advisory Councils under ministries and agencies with participation of NGOs, NGO-led initiatives (public consultations, hearings on relevant draft laws, posting the draft laws in web-sites of CEBs).

CEBs in charge of access to water and sanitation maintain agency-specific monitoring in spheres of their competence and make general assessments of drinking water quality, water bodies, technical quality of water supply and sanitation networks and their reconstruction. Oblast-level state administrations submit reporting to the Ministry of Regional Development on such matters as: coverage of settlements/residents by centralised drinking water supply and sanitation services, availability of 24/7 water supply, use of truck and standpipe water, funding and implementation of existing programs, etc.

The State Sanitary and Epidemiological Service maintains state supervision of compliance with the due sanitary legislation and maintains laboratory control of drinking water quality in water supply networks and in facilities under control, including pre-school facilities and schools, clinics (control of compliance with DSanPiN 2.2.4-171-10 and SanPiN 4630-88 and application of relevant sanctions in cases of non-compliance).

There are no specialised monitoring and assessment activities that cover access of specific population groups (e.g. low income, vulnerable and marginalised groups, etc.) - as a result, no information is available on these matters.

1.2 Sector financial policies

The country has identified finance resources necessary to ensure access of all residents to water, the funds are stipulated in framework national and regional programs for implementation of relevant actions.

In particular, Program "Drinking Water of Ukraine for 2011 - 2020" stipulates allocation of budgetary funds (UAH 200.7 million for 2011, and UAH 238.2 million for 2012), including construction and reconstruction of water intakes (84 million), water supply and sanitation networks with application of energy-efficient equipment (56), installation of tertiary water treatment units in centralised water

supply systems of pre-school facilities, schools and clinics, particularly in rural settlements; and establishment of drinking water distribution centres with its delivery by specialised water trucks (43.1). In order to implement activities for installation of individual and collective tertiary treatment units (on-tap filters), particularly in regions of environmental crisis and in pre-school facilities and clinics, and for establishment of drinking water distribution centres with its delivery by specialised trucks, Order # 247 of the Ministry of Regional Development of 24.10.2011 stipulates allocation of funds for construction and reconstruction of relevant facilities in the period from 2006 to 2020. Estimated costs of these projects reach UAH 166.5 million, including UAH 150.2 million from the state budget.

National and regional state programs (including the ones for improvement of water services in rural areas) are financed under general expenditures of the state budget, only provided some co-financing from other sources including local (e.g. oblast, district, township-level) budgetary allocations from revenues generated by water and sanitation utility bills, as well as by loans and subventions (inter-budgetary transfers for local authorities from the state budget to local budgets).

Development of private decentralised water supply and sanitation systems is not supported by the state budgets. However, even planned actions are not duly implemented due to chronic underfunding of state programs in the sphere. In particular, Program "Drinking Water of Ukraine" was implemented only by 20% in 2011 - according to finance reporting of the Ministry of Regional Development, in 2012, at planned allocations from the state budget of UAH 200 million, while actual allocations reached UAH 182.5 million and actually utilised funds reached UAH 102.7 million or 50% (the program report for 2011 is not available). Implementation of the National Program for Reforms and Development of Housing and Utilities also remains problematic, including its regional sub-programs. The State Target-specific Program for Ensuring Priority Centralised Water Supply in Rural Settlements also was not financed in 2011 and 2012.

The Strategy for Financing Water Supply and Sanitation Sector addresses issues of general access of country's residents to water and sanitation, but the Strategy does not focus on ensuring equitable access, it deals with specific actions (and relevant finance allocations) for provision of drinking water supply and sanitation services to education and health care facilities, particularly in rural areas.

The Accounts Chamber is a national authority in charge of control over finance flows that provides information to the Government and the general public. The Accounts Chamber posts its reports and other information materials on its web-site (www.ac-rada.gov.ua).

Audit results of implementation of the State Target-specific Program for Provision of Centralised Water Supply Services to Rural Settlements that use Truck Water Now up to 2010 suggest that adequate financing of the Program activities was not ensured in 2008 - 2010, as a result, its actual implementation allowed to provide centralised water supply and sanitation services to only 11 thousand residents of rural settlements (or 25% of the planned level).

Audit results of implementation of programs for reforms and development of water supply and sanitation sector in Donetsk and Lugansk oblasts suggest that relevant oblast-level state administrations failed to ensure implementation of planned actions under these programs due to insufficient management and underfunding from the state budget in the whole period of time since their approval. Actually, a number of activities (facilities) under these programs were financed in a haphazard manner at the expense of other state target-specific programs on similar matters (i.e. national programs for development of the housing and utilities sector for 2009 - 2014, Drinking Water of Ukraine).

At the regional level, these activities are controlled by Housing and Utilities Directorates of relevant state administrations.

Only chief executive officials have access to information on use of budgetary resources. Such information is provided on requests only and in information reports.

There is no information on international assistance for ensuring equitable access to water and sanitation in Ukraine. However, international support for the sector does exist, but associated information is limited, inaccessible, nobody compiles and analyses it.

Most prominent international actors in Ukraine include the International Monetary Fund, the World Bank, regional development banks and EU finance institutions that provide national-level support for modernisation of the existing infrastructure. In particular, according to the Swedish International Development Agency (SIDA), it is possible to use E5P platform for allocation of grants for capitalisation of water supply and sanitation - i.e. to finance modernisation projects in Ukraine. Sweden contributed € 24 million into a WB project at the implementation stage in early 2011. A WB loan of \$ 140 million was provided to another project on urban infrastructure matters. SIDA provided grants for modernisation of water utilities (SEK 45 million). In the framework of another project in Yalta (Crimea) that will be financed by EBRD (€ 10 million), SIDA also provides a grant of SEK 40 million for purchase of wastewater treatment facilities and elimination of wastewater discharges to the Black Sea.

In Mykolaiv, preparations are under way for implementation of a joint project with EIB - Development of Water Supply and Sanitation Systems in Mykolaiv - with the overall costs over € 31 million. Besides that, programs for investments and development of water supply and sanitation systems in Lviv and Zaporizhzhia operate jointly with EBRD and WB.

1.3 Rights and duties of users and other right-holders

Laws and regulations in force at the territory of the country ensure informing right holders and consumers on their rights and duties and ensure their access to relevant information. The underlying legal framework incorporates: the Constitution of Ukraine (art. 34, 102), laws of Ukraine on Information (1992), on Access to Public Information (2011); on Citizens' Applications (1996), on Drinking Water and Drinking Water Supply (2002), on Ensuring Sanitary and Epidemiological Wellbeing of the Population (1994), as well as recommendations on practical implementation of Law of Ukraine on Access to Public Information - the recommendations were developed in 2011 by the Ukrainian Independent Centre of Political Studies with support of a joint project of the European Union and the Council of Europe (Promotion of European Standards in Ukrainian Media). The recommendations are available as a printed document and on-line (www.ucipr.kiev.ua).

According to the above laws and regulations, right holders have access to information through their direct information requests or on web-sites of relevant authorities. According to Order # 390 of the Ministry of Regional Development of Ukraine of 30.07.2012 - "Procedures of Informing Users on the Range of Housing Maintenance and Utilities' Services, on Structure of Prices/Tariffs, Changes of Prices/Tariffs with Substantiation of their Necessity and on Accounting for Relevant Positions of Territorial Communities" - relevant information should be posted on the Ministry's web-site and incorporated into the National Report. Water utilities also introduce mechanisms to inform their customers and ensure their access to information. As an example, Kyiv Water Utility (www.vodokanal.kiev.ua) holds sessions of its information media club, implements information campaigns (e.g. Work for True Men campaign in February 2013), concludes direct service contracts with users, etc. Many water utilities of Ukraine maintain their web-sites and PR departments.

Public hearings represent an effective mechanism allowing right holders to participate in decision-making on qualitative and quantitative levels of service provision. However, such hearings are not duly used by both authorities and the public. Public control of service quality may be also considered as such mechanism.

Rights and duties of both right holders and users are legislatively fixed, including rights for compensations for non-compliance with the due legislation on drinking water and drinking water supply, provisions for emergency water supply of residents in cases of failures of centralised water supply systems, etc.

Effective mechanisms for restoration of infringed rights and compensations for the damages incurred incorporate court remediation with issuance of court rulings according to Art. 48 of Law on Drinking Water and Drinking Water Supply and Law on Ensuring Sanitary and Epidemiological Wellbeing of the Population, as well as application of administrative sanctions.

However, no compensations for users are stipulated in the case of washing and disinfecting of water supply networks with subsequent laboratory control of water quality. In practice, no deductions from water supply and sanitation bills are applied in cases of provision of understandard services to users. The situation may be attributed to the fact that users are not aware of relevant procedures or simply do not believe that they may get redress for understandard services in courts.

"Notwithstanding official statistical information on non-compliance of water quality with applicable standards in a number of cities of Ukraine (in 2011, in 261 cities of Ukraine understandard water was supplied to residential users), so far, there were no readjustments in utility bills of residential users (physical persons) in connection with such cases in Ukraine. Only in one known case, a water utility was sanctioned - according to Order # 758 of the National Commission for Power Industry Regulation of 24.03.2011, "Clean Water - Berdyansk" water company had to pay a monetary fine of UAH 85 thousand and was obliged to ensure provision of drinking water to its users in compliance with DSan PiN 2.2.4-171-10" (The Right to Water and Sanitation. The Legislative Framework and Situation in Ukraine, Kyiv, 2011, UNENGO MAMA-86).

Authorities' reporting and accountability mechanisms include national and agency-specific reports, that are publicly accessible via mass media outlets or relevant web-sites (however, the latter mechanism is not applied to its full extent).

In particular, the State Water Resources Agency of Ukraine reports under budgetary program State Monitoring of Surface Waters, Water Cadastre, Certification, Water Management; the State Statistics Service of Ukraine collects state statistical reporting forms (annual reporting form # 1 "Report on Operations of a Water Distribution Network (a stand-alone water supply network)"

1.4 Incentive framework for water and sanitation service providers

The National Commission for State Regulation of Utilities operates in the framework of implementation of investment programs of economic actors in the sphere of centralised water supply and sanitation.

National authorities encourage water utilities to reduce water losses in centralised water supply networks. Encouragement mechanisms include: tax incentives, access to governmental contracts, etc. particularly for SMEs operating in priority sectors. These measures stipulate gradual transition from direct budgetary allocations to indirect tools for promotion of regional development.

Water and sanitation service providers operate under their relevant workplans and provide their services to all population groups without any differentiation.

National authorities apply mechanisms to encourage centralised water supply and sanitation service providers to serve all users equitably, including users of low income, vulnerable and marginalised groups. The following mechanisms are applied: subventions for implementation of state social programs; budgetary compensations to local budgets for provision of subsidies to cover service costs (100% in 2011). However, such mechanisms are not available for decentralised water supply systems (except commercial ones). State subsidies to regions are provided solely for infrastructure development purposes, not to cover service costs.

For social protection of low income population groups, national authorities provide housing subsidies to cover expenditures for housing and utility bills (including water supply and sanitation ones), individual benefits to large and low income families, disabled children and temporary benefits for children according to the State Budget and Decree # 621 of the Cabinet of Ministers of Ukraine of 14.07.2010 on Improvement of Social Protection of Residents in Connection with Housing and Utility Bills and other regulations.

According to the due legislation, residential tariffs for water and sanitation services are set solely as costs plus necessary investments. A cross-subsidisation mechanism in a given area allows to subsidise some users at the expense of other categories (residential users, businesses, budgetary organisations). Water supply and sanitation tariffs of key service providers in a given area are set for residential users and

businesses. However, no effective mechanisms are available to encourage service providers to develop tariff structures that could ensure affordability of prices for all population groups.

Chapter 2. Reducing geographical disparities

Quantitative information on geographical disparities			
Provide the official definition of rural, urban and (if applicable) peri-urban areas in your country/region	City - settlements with at least 10 000 people, most of whom are workers and employees. Townships - urban settlements of not less than 2 000 people and more than half of employees not working in agriculture or forestry. Rural settlement is characterized by the fact that most of its inhabitants are engaged in the agriculture. They also have low-rise residential buildings with gardens and a small population. Rural settlements include large (from 2 000 to 5000 residents or more), medium (1 000 – 2 000 residents) and small (up to 1000 inhabitants): Law of Ukraine on administrative-territorial structure of Ukraine The terms “peri-urban” is not defined in Ukraine		
	2011	2009	Source
Rate of access to water in urban areas (%)	88%*	88%*	National Report on the water quality and State of drinking water supply of Ukraine (2006-2011), Official report of the International Congress ETEVK
Rate of access to water in peri-urban areas (%)	Not relevant	Not relevant	
Rate of access to water in rural areas (%)	22,2%*	21,5%*	
Rate of access to sanitation in urban areas (%)	61%*	58,9%*	
Rate of access to sanitation in peri-urban areas (%)	Not relevant	Not relevant	
Rate of access to sanitation in rural areas (%)	3%*	3%*	
Public financial resources spent in reducing geographical disparities in access to water and sanitation (million EUR)	17.184	1.85	Official report “Implementation of the Budget of Ministry of Regional Development in 2011, National Report on the water quality and State of drinking water supply of Ukraine (2006-2011)
Public financial resources spent in reducing geographical disparities in access to W and S (EUR/capita)	1,2	0,16	
Public financial resources spent in reducing geographical disparities in access to W and S (% of public budget spent on W&S)	4,8	6,5	

Note: The current statistics of Ukraine does not have and does not allow to calculate the level of public access to water or sanitation. Available data are only on the proportion of settlements with the centralized water supply and sewer. These data are shown in the table with an asterisk (*).

It should be taken into account that the lack of centralized water supply/sewage systems does not exclude the possible presence of the decentralized systems in the settlement. On the other hand the presence of centralized water / sewage systems does not guarantee that these services are provided of a good quality.

Ukraine faces the problem of geographical disparities in access to water, associated with substantially different climate conditions, uneven spatial distribution of water resources, different regional urbanisation levels, etc. In the reporting period, some steps were made to address these disparities, however, to assess their efficiency and appropriateness, it is necessary to consider the state of water supply and sanitation sector in the whole country.

As a result of constant lack of financing of Water Supply and Sanitation (WSS) development during almost 20 years, the WSS infrastructure is substantially aged and actually operate at the level of high risks of accidents.

Another problem, that contributes to growing geographical disparities, is associated with WSS tariffs, which don't cover the real costs of these services. As a result, water utilities became loss-making, unprofitable, they cannot upgrade the infrastructures and renovate the main assets.

Ukraine now faces the situation when absolutely all WSS systems are outdated. In the majority of settlements, revenues from water utility bills even fail to cover services costs. At such conditions, the state priority is to lead sector out of crisis, unfortunately reduction of geographical disparities is considered as less important.

Geographical disparities in access to WSS exist as a result of different quality of WSS services in urban and rural areas and with differences in quality and costs of these services in different regions of Ukraine.

Main causes of disparities between urban and rural areas

While technical quality of water supply and sanitation systems in major cities is poor, in rural areas these systems are in some cases absolutely inadequate. The first problem is associated with substantial underfunding of WSS systems in rural settlements in 20 recent years. While major cities were able to replace obsolete infrastructures at least partly due to local budgets, in the case of villages budgets such finance allocations were simply impossible. District and oblast-level budgets also have only rather limited possibility to finance such measures.

Some water systems were left without owners. In the Soviet period, group water supply networks were built. They supplied drinking water to several villages in a district and technical grade water for irrigation. When collective farms were dissolved, operations of such cluster systems became profitless; moreover these systems actually almost out of operation.

Level of coverage by centralised sanitation systems in rural areas was and still is extremely low (only about 3%). The quality of decentralized sanitation systems practically is out of control and their state is inadequate.

Besides that, costs of water and sanitation services in rural areas are much higher comparatively to cities. It relates to low capacity systems and to higher operational costs. Sometimes water to the villages is transported to larger distances, what is resulted in higher costs. Besides that, if a city water utility supplies water to its rural counterpart, the former may charge higher rates comparatively to tariff rates paid by urban users.

Decentralised water supply and sanitation installations belong to their private owners. So far, the state does not provide direct finance support to private owners for development of such systems.

So, the situation in the sphere of ensuring the right to water and particularly, to sanitation in rural areas of Ukraine still remains extremely difficult.

In order to address the situation, some important political decisions were made at the national level. In particular, the State Targeted Social Program for Priority Provision by Centralised Water Supply of Rural Settlements that used (truck) transported water up to 2010 was adopted and later extended to 2015. Besides that, finance allocations for development of water supply and sanitation facilities in rural areas were set as a separate budget line in National Targeted Program "Drinking Water of Ukraine for 2006 – 2020", and in the overwhelming majority of regional water supply development programs. For example, Program "Drinking Water of Crimea" stipulates co-financing from the state budget and local budgets, but in the case of rural areas state budget allocations are the main sources of financing.

At the same time, planned actions are not implemented to the full extent due to chronic underfunding of state programs, including "Drinking Water of Ukraine" which has been financed only by 20%. All others regional development programs also remain underfunded. In the reporting period, the State

Targeted Social Program for Priority Provision by Centralised Water Supply of Rural Settlements that used (truck) transported water was not funded in 2010-2012.

So, notwithstanding some important legislative steps towards reduction of disparities in access to water and sanitation services between urban and rural areas, in practical terms the gap actually remains uncovered due to chronic underfunding. Moreover there is a trend to increase the numbers of the rural settlements supplied by transported.

Geographic disparities between different regions of Ukraine

Ukraine is a country with limited water resources, moreover available water resources are distributed unevenly at the territory of Ukraine. Up to 70% of drinking water supply relies on surface water sources, particularly rivers of the Dnieper river basin. Underground water resources provide up to 30% of water for drinking purposes. The Water quality in different resources is extremely unevenly. While Central and the majority of Western Ukraine regions have underground water resources of high quality that might be used almost without any treatment, in the Northern, Eastern and Southern regions water from surface and underground sources needs substantial treatment.

Water quality in local water sources also demonstrates substantial differences. dominantly rely on surface water that requires at least two stages of treatment.

Naturally, such uneven distribution of water resources results in uneven quality of water services and in differences in their costs. Besides that, as it was already noted, water treatment systems are seriously deteriorated and almost all of them need major modernisation, that also contributes to increasing of geographic disparities.

Relating to sewer and wastewater treatment services (and the right to sanitation), almost all regions of Ukraine face serious problems.

Naturally, so different availability of water resources results in substantial disparities in costs of water and sanitation services. In regions where water supply requires long-distance transportation or special water treatment technologies, water supply costs are much higher. At the same time, as tariff-setting in Ukraine is a political matter (see above), such major disparities cannot be easily identified. In particular, due to artificially low tariffs for residential users in AR Crimea tariffs are almost the lowest in Ukraine, notwithstanding that local service provision costs are rather high. On the other hand, disparities between water supply costs and relevant tariffs make water utilities loss-making, and - as a result - adversely affect quality of the services. When 100% cost recovery be reached finally, disparities in tariffs between different regions are expected to raise.

In 2011, a national regulator was established in Ukraine to address tariff polity issues - in Ukraine. The Commission should estimate and set service tariffs, including tariffs for water and sanitation services in cities with more than 40 thousand residents (in other cities tariffs are set y local authorities). However, after 2 years of its activities, the Commission has failed to ensure full cost recovery.

The Ministry of Regional Development, Construction and Housing and Utilities monitor tariffs, so far the affordability of WSS services isn't a subject of this monitoring, however the new monitoring systems are already developed, which includes WSS prices and affordability parameters. Their implementation will start in 2013.

As for cross-subsidisation between regions of Ukraine, it is legislatively prohibited. According to the due legislation of Ukraine, tariffs are set at the base of service costs and the investment for WSS systems development component. Introduction of any additional components to cover differences in costs of water and sanitation services is prohibited.

There is another cross-subsidisation mechanism that relies on different water tariffs for residential and non-residential users in a particular settlement. However, such a mechanism is hardly efficient. Experience suggests that higher tariffs induce facilities to look for other water supply options (e.g. using

standalone water well). Such cross-subsidisation results in cost disparities even in individual settlements.

There are some objective reasons for substantial differences in quality and quantity of water and sanitation services in different regions of Ukraine. At the contemporary stage, reduction of these disparities is not considered as a state priority, so associated activities have no adequate financing. Moreover, after achieving full cost recovery level, these disparities will increase additionally.

Geographical allocation of external support for the sector

Taking into account that now almost all WSS systems of Ukraine need substantial external support, it is almost impossible to identify some regions that lag behind particularly seriously. Identification of financing allocation areas depends on priority of activities. Today the highest priority actions are associated with measures to prevent failures of WSS systems, followed by measures on improving water quality, etc. without taking into consideration geographic location. In Ukraine there is no attempts to identify the regions which are lag behind in water supply and sanitation. Under the underfunding of WSS sector development there are no steps forward to decrease geographical disparities between regions.

International support to improve access to drinking water and sanitation services is predominantly provided to formerly deported peoples –Crimean Tatars in AR Crimea.

The main conclusions on matters of reduction of geographical disparities in access to water and sanitation are the following:

1. For Ukraine in general, water and sanitation issues and right to water and sanitation are extremely relevant and need to be addressed as soon as possible. On such background, unfortunately geographical disparities are not considered as a priority.
2. Preconditions for geographical disparities between urban and rural areas developed historically. Quality of services in rural areas is usually lower while service provision prices are higher.
3. There is no special program for reduction of geographical disparities between rural and urban areas in Ukraine; however, almost all state and regional programs define rural water supply and sanitation as a one of priorities. At the same time, chronic underfunding of these programs results in failures to implement planning measures and the disparities remain unchanged.
4. Geography of Ukraine and uneven distribution of water resources create preconditions for substantial geographic disparities between regions.
5. The existed legal framework of Ukraine stipulates only fragmental measures to reduce the geographical disparities. Such disparities in service provision will only increase in the nearest future.
6. In fact all regions of Ukraine are facing the challenge to ensure the right to water and sanitation in full scale, so it is not possible to identify some regions that lag behind particularly seriously. There is no special national program to decrease the disparities between the regions.

Part 3. Ensuring access for vulnerable and marginalized groups

Quantitative information on vulnerable and marginalised groups			
Provide the official definition of vulnerable and marginalized groups in your country	Socially vulnerable population - individuals or social groups that are more likely than others to suffer social losses of economic, environmental, technological and other factors of modern life. For some social groups there is a separate definition provided in the relevant legislation (disabled, homeless, etc.)		
	2011	2009	Source
Rate of access to water in the country (%)	In 2010: 26.1% of rural population and 90.5% of urban population have access to water supply	in 2008: 28% of rural population and 88% of urban population have access to water supply	State Agency of Water Resources
Rate of access to water by the poorest fifth of the population (%)	No data	No data	
Rate of access to sanitation in the country (%)	Proportion of the population that has centralized sewage system – less than 20% in rural, and 80% in cities and urban settlements		
Rate of access to sanitation by the poorest fifth of the population (%)	No data	No data	
% of water and sanitation facilities open to the public that are accessible to people with disabilities	No data	No data	
% of schools that have sufficient and adequate water and sanitation services	85% schools with water supply 94,4% schools with canalization, including 44% schools with a cesspool/pit latrine	82% schools with access to water supply 91% schools with canalization, including 43% schools with a cesspool/pit latrine	State SES's Data, Reports on environmental factors affected human health (form № 18), protocols of laboratory analysis of tap water at schools for compliance with SSRN 2.2.4-171-10 "Hygienic requirements for drinking water intended for human consumption"
% of hospitals that have sufficient and adequate W and S services	Data not available	Data not available	
% of prisons that have sufficient and adequate W and S services	Data not available -	Data not available	
% of persons without a fixed residence that have access to W and S through public facilities	lack of objective information on the number of homeless persons	lack of objective information on the number of homeless persons	
Number of people lacking access to W and S that live in neighbourhoods where access is available	11.3 Mln without water supply network 11.8 Mln without canalization	12,9 Mln without water supply network 13,8 Mln without canalization	Calculation according to the UkrStat data****
Public financial resources spent in ensuring access to W and S by vulnerable and marginalized groups (Mln EUR) or (EUR/capita)	Data not available	Data not available	fragmentary information for certain items within the Budget or targeted programs, no possibility to estimate funds spent on the items for these groups.

3.1 Public policies to address the needs of vulnerable and marginalised groups

The state guarantees protection of rights in the sphere of drinking water and drinking water supply by provision of drinking water of standard quality to every person and in quality within scientifically substantiated norms of drinking water supply, set depending on regions and living conditions (according to Law of Ukraine on Drinking Water and Drinking Water Supply). However problems and needs of vulnerable and marginalised groups are not specified separately.

An official definition of a national legislative act does not exist except a notion of "persons, specific social groups in difficult living circumstances", i.e. in circumstances caused by disabilities, age, health or social status, habits or lifestyle, due to which a person lacks fully or partly (failed to acquire or lost) capacity or ability to manage his/per personal (family) life independently and participate in social life, and need a state intervention to address his/her living problems.

It is generally accepted that socially vulnerable population groups mean individuals or social groups at higher risks of social losses from impacts of economic, environmental, technogeneus and other factors of modern life (pensioners, the disabled, families with children, orphan children, the youth, the unemployed, victims of the Chernobyl disaster, low income and marginalised groups (the homeless, alcohol and substance-dependent, criminals), etc). Marginalised groups are persons, who lost their previous socio-economic status, are excluded from the system of legitimate social relations, failed to adapt to new social condition and - as a result - are alienated from social life processes.

Problems of access of vulnerable and marginalized group's analysis:

- available information on different categories substantially differs in terms of completeness, coverage, availability of time series and reliability;
- data on numbers of individuals in specific groups is not easily available from official statistics, or are merely estimates;
- usually funding is not separately allocated to ensure access to water and sanitation;
- there is an opportunity to fall on different criteria referring to such groups at the same time, while restricting access is enhanced through combined action of various adverse factors;
- restricting access caused not only by objective factors (spatial, financial and institutional) but also by behaviour.

3.2 Persons with special physical needs

Creating conditions for unhindered access of the disabled to social infrastructure, facilities of public and civil purposes, creating at the workplace of disabled person appropriate conditions, including sanitation, is stipulated by the Ukrainian legislation.

Spatial planning and development of settlements, design, construction and reconstruction of physical environment objects without adjustment for disabled person's usage is not allowed.

State Target-specific Program - the National Action Plan for Implementation of the Convention on the Rights of Persons with Disabilities up to 2020 includes provision of barrier-free access of the disabled to civil and public facilities up to 50% by 2020.

However, all these positions concern the full range of rights and needs of people with special physical needs, and the issue of access to water and sanitation is not separately represented, there is no targeted funding to ensure access to water and sanitation for disabled.

The Law defines the possibility of the usage of amounts from the Fund of Social Protection of Disabled paid for each workplace, designed for the employment of disabled people and not occupied by him, among other things, for the establishment of adequate sanitation at the workplace of the disabled.

The general benefits for utilities also include a discount of the cost of water supply and sanitation for disabled of I and II groups.

Compliance with hygiene requirements of inpatient (residential) institutions of social services for pensioners, the disabled and single disabled people is controlled by SES.

Maintaining of Centralized Database of Problems of Disability with appropriate budgetary financing (National Plan of Action to Implement the Convention on the Rights of Disabled Persons) in our opinion, will allow to more specifically focus on the problem of equitable access to water and sanitation for people with special physical needs.

3.3 Users of institutional facilities and institutionalised persons

There is a state-regulated system for requirements for institutional establishments that appears under Building Codes, Standards of SES with their placement and retention, industry standards, the relevant provisions, etc. and regularly audit of compliance with responsible departments. Data on access to water and sanitation of such users is available from the results of SES inspections, departmental monitoring and data of independent studies and surveys.

There is a special task in the National Program "Drinking Water of Ukraine" for 2006-2020 concerning the installation of tertiary water treatment installations (units) for water supply of pre-school facilities, schools and public health facilities, and establishment of drinking water vehicle filling and delivery facilities.

Refugees, illegal migrants

Provision of foreigners and stateless persons regulated under keeping them in temporary accommodation centers, creating sanitation as provided by law, which concerns the whole population and the Model Regulations (the temporary stay of foreigners and stateless persons who are illegally residing in Ukraine and the temporary accommodation centers). They are provided on a 24/7 basis an unhindered access to the water point with shower and toilet rooms (separate for men and women), wastewater engineering treatment is carried out in the urban sewer network or autonomous biological treatment plants.

Provision of adequate accommodation and sanitary conditions (including water supply) to foreigners and stateless persons is regulated in the frame of keeping them in Temporary Refugee Accommodation Centres, assurance of sanitation is provided by Law, which concerns the whole population, and by Model Regulations (Of Centres for Temporary Accommodation of Foreigners and Stateless Persons, Who Stay in Ukraine Illegally, and On Temporary Refugee Accommodation Centre). They are provided free 24 hours access to water, centres are equipped by shower rooms, washrooms and toilets (separately for men and women), wastewater flows of the centres are discharged to municipal sewers or to standalone biological treatment facilities.

Maintenance of the due sanitary and epidemiological status in a Centre belongs to the sphere of competence of its responsible staff members and is controlled quarterly by territorial Sanitary and Epidemiological Facilities.

Financing of Centers by water and adequate sanitation is carried out at the expense of the State Budget.

Inmates in penitentiary facilities

According to the State Penitentiary Service, all penal institutions are provided with regular water supply and sanitation, there are contracts for laboratory studies of drinking water quality between medical care departments of Internal Affairs of Ukraine and territorial bodies of SES. Correctional institutions and

establishments for sentenced men and women are separated, so the toilets used by persons of the same sex.

State funding of drinking water is provided by the Law of Ukraine on the State Budget of Ukraine for the corresponding year in the budget program KPKVK 3606020.

However, there is evidence of external and internal audit of inadequate sanitary conditions, especially in temporary detention wards and remand.

Children in pre-school facilities and schools

Almost all education facilities provide 24/7 water supply and sanitation services, however, some regional disparities exist. In particular, in 2011, in Ukraine, the share of pre-school and secondary education facilities with access to water of adequate quality reached 94.8% and 85%, respectively vs. 94.8% and 82% in 2010, and 94.4% and 82% in 2009. Specialists of territorial SES units maintain scheduled laboratory control of drinking water quality. By 2015, shares of education facilities with drinking water of adequate quality should increase by 15% in cities and townships, and by 10% in villages. Correspondingly, shares of education facilities connected to sewers and equipped by cesspools should increase by 15% in cities and townships and by 5% in villages (according to the National Targets for Ukraine under the Protocol on Water and Health).

Now, in the whole country, cesspool sanitation systems are applied in 8479 (44%) of secondary education facilities (comparatively to 8573 or 45%) and 4309 (32.7%) of pre-school facilities. Numbers of secondary education and pre-school facilities without any sanitation services reach now 1087 (or 5.6%) and 172 (or 1.4%), respectively. In the public focus is absence of stationary toilets in rural schools. All educational institutions are provided with all necessary facilities (including separate toilets) except hygiene rooms for the girls.

Specific budgetary allocations were defined in the List of Projects for Implementation of Measures stipulated by National Program "Drinking Water of Ukraine" for 2006 - 2020 first of all in regions of environmental crisis, as well as for water supply of pre-school and school facilities, including the ones in rural areas, and launch of specialised facilities for filling vehicle carriers by drinking water and its delivery by specialised vehicles. Extra budgetary funds are also involved - in the frame of the projects on safe water, sanitation and hygiene for schools in Ukraine funded by WECF and FE Fund dry stationary toilets for 5 schools, 12 local systems of local treatment of drinking water for kindergartens, schools and orphanages were installed.

Hospitalised patients

There are requirements of state building codes of Ukraine's water supply, hot water supply, sewerage and drainage, industry standards of accommodation, equipment and operation of hospitals and their state accreditation, requirements of State standard to the quality of water supplied to industrial and drinking needs, etc., and how they are controlled by the territorial SES.

However, in practice such water supply norms often are not met, that is recognized by imposed by SES penalties and by allocation of funding in the program "Drinking Water of Ukraine" for the additional purification of water for drinking purposes, settlement of points of bottling drinking water and its delivery to specific list of hospitals in different regions of the country.

In addition to problems of hospital patients, it is necessary to pay attention to problems of medical personnel as well. In particular, they often lack shower rooms, adequate conditions for menstrual hygiene of medical personnel with round-the-clock work schedule (particularly ambulance and reanimation personnel, etc.).

Public finance resources in the sphere of drinking water supply and sanitation in health care and disease prevention facilities are allocated according to amounts stipulated by a Law of Ukraine on the State Budget of Ukraine for a particular year for local executive bodies, local authorities and water utilities.

All health care facilities are equipped by separate toilets for men and women. In almost all central hospitals and medical clusters, necessary condition are provided for personal hygiene including

menstrual hygiene (there is no official data on this issue), while in smaller municipal health care facilities situation is worse, particularly in rural areas.

3.4 Persons without a fixed residence

The country lacks information on real numbers of persons without a fixed residence. Estimated data – about 100-800 thousand persons, according to the Ministry of Social Policy of Ukraine, in 2011 alone, Adolescent Services conducted raids that allowed to identify 19,5 thousand homeless children.

In 2011 there were 135 facilities that provide social policies to the above population groups (the range of services always included sanitary and hygiene ones) however they are financed only from a local budget and not always in the necessary amount.

Measures for social protection of homeless persons and abandoned children are financed from the state budget and local budgets with potential contributions of citizens' associations, facilities, bodies and organisations, charitable donations, etc. It is impossible to assess a share of these funds dedicated to ensuring access of these persons to water and sanitation at the national level.

Notwithstanding that the State Target-specific Social Program for Poverty Prevention and Eradication up to 2015 declare application of annual data of the Ministry of Social Policy of Ukraine on "the ratio of numbers of homeless persons and persons released from penitentiary facilities, who need social reintegration and social adaptation in a region to the number of beds in facilities for the homeless and for persons released from penitentiary facilities", assuming availability and tracking of relevant data, no such information was found in open sources.

There are considerable local activities. For example, nearby Lviv, a centre of "Oselya" Mutual Assistance Community NGO operates (in cooperation with the city municipality and Lviv City Employment Centre). In facilities of Kirovograd city SES (with support of charitable donations) the homeless may get access to hot water, shower rooms. In Poltava, the Centre for Adaptation of the Homeless and Former Convicts was launched in response to initiative of "Light of Hope" Charity and with support of city authorities (however, regardless free access, homeless persons of Poltava hesitantly apply for services of the centre.)

In many towns the public toilets and baths are missing or lacking, and payments disability of homeless makes access to these facilities limited.

3.5 Persons living in housing without water and sanitation

According to the data of the State Statistics Service of Ukraine the shares of residential housing connected to water supply, hot water supply and sanitation networks in 2011 were 63.3% (55.5% in 1995); 43.9% (35.0% in 1995); 58.2% (47.3% in 1995). Based on results of a sample survey of living conditions of Ukrainian households on availability in the houses of water supply (74.3%), sanitation (73.1%), hot water supply (31.9%), a bathroom or a shower room (69.1%), gas fuelled water heaters (17.0%) we roughly estimated that 11.3 million person lived in housing without water and 11.8 million persons lived in housing without sanitation. Since 2009 there is a slow progress (then with water and sanitation 71% and 69% of households, respectively, were equipped, a bath or shower had two-thirds of households, and gas water heater 15%).

According to the National Targets of Ukraine under the Protocol on Water and Health by 2015, the share of residents with access to drinking water of adequate quality should reach 90% in cities and townships and 50% in villages, while relevant shares of residents with access to centralised sewers should reach 80% in cities and townships and 20% in villages.

However, this position refers more to the persons, which denied basic services of water supply and sanitation in case of the location of housing in neighborhoods / areas where there is existing possibility of such access, and the reasons for non access are dispossession, poor quality of rented premises, unauthorized seizure and discrimination against minorities. It is therefore not possible to make an adequate assessment if we take into account this vision.

3.6. Persons without access to water and sanitation in their workplaces

According to article "Employee's rights to occupational safety" of Law of Ukraine on Occupational Safety (Law № 2694-XII of 14.10.1992) , workplace sanitary conditions must comply with legislatively set requirements, approved General Requirements to Employers on Matters of Ensuring Occupational Safety that stipulate for sanitary-epidemic norms. However, in reality, in crisis times and in the case of small facilities (including both municipal and private ones), compliance with these requirements and control of compliance are often simply non-existent. Additional studies are necessary to assess workplace access to water and sanitation.

Roma people

Roma people represent another social group, whose limited access to water and sanitation is recognised, but information on the scale and gravity of the phenomenon is rather limited and fragmentary. There is no reliable data about numbers of Roma people in Ukraine (from 200 thousands to 400 thousands persons according to Roma human rights groups, official Census data suggest a figure of 47,6 thousands).

According to a survey, conducted in 2002, only a third (32%) of surveyed representatives of Roma families reported having operational water supply in their flat (house). Program "Roma population of Zakarpattya" in 2012 - 2015 years stipulates provision of improved communal conditions with financing of constructing of public drinking water wells.

Conclusions:

1. It is impossible to make a general substantiated situation assessment for all vulnerable and marginalised groups, because available information on different categories of such population groups substantially differs in terms of completeness, coverage, availability of time series and reliability.
2. The State guarantees the protection of rights in the field of drinking water by ensuring everyone with drinking water of a normative quality within the science-based standards for drinking water, depending on the area and living conditions, but the problems and needs of vulnerable and marginalized are not separated.
3. The most reliable and substantiated situational analysis might be made for the category of users of institutional facilities and institutionalised persons. None of the groups may be considered as the one that enjoys adequate access always and everywhere, however, "hospital patients" and "refugees and illegal migrants" may be considered as social groups in the most favourable situation. Regardless declarations that children in Ukraine are a privileged social group, problems of access to water and sanitation in pre-school facilities and in schools needs immediate remediation, particularly in rural areas. In 2009-2011 the proportion of schools that are not canalized generally decreased from 9% to 5.6%.
4. For the majority of vulnerable and marginalised groups, the situation analysis reveals major gaps between available underlying legal frameworks and their practical implementation and control of compliance especially if finance matters are involved.
5. Data on the public financial resources spent on providing access to water and sanitation for vulnerable and marginalized groups is provided only fragmentary, in few articles of the State budget or within the funding of targeted programs.
6. To improve the situation, we can recommend a combination of behaviour change (as a representative of a social group, and society's attitude to his needs and problems), changes in policy and practice; intersectoral partnership; making decisions based on evidence: collation, the isolation and synthesis of scientific knowledge with disclosure and their availability to the public. It is reasonable to make further study with consideration of the needs of individual groups (including the elderly).

Part 4. Keeping water and sanitation affordable for all

Quantitative information on affordability			
Please, provide the official definition of affordability (and/or target) in your country	<p>The legislation ensures availability of all utility services to the poor through the provision of state aid in the form of housing subsidies to cover part of expenses for housing and utilities:</p> <p>A) Regulations on the use and provision of subsidies for reimbursement for housing and communal services the Cabinet of Ministers of Ukraine Order of October № 848 from 21, 1995</p> <p>Б) the Cabinet of Ministers of Ukraine Order № 1156 from July 27, 1998 "On the new value of the cost of housing utilities, purchase of liquefied natural gas, solid and liquid stove fuel in case of granting of housing subsidies".</p> <p>The right to subsidies have families in which payments for utility services within the norms of consumption exceeds the amount specified by the Cabinet of Ministers of Ukraine mandatory interest payment for housing and communal services, which:</p> <ul style="list-style-type: none"> ➤ for households consisting only of disabled people is 10% of the average monthly gross income; ➤ for households, that are registered with children, the disabled of the first or second group, and have the average monthly total revenue per registered person less than the subsistence minimum - 10% of the average monthly gross income; ➤ for all others household – 15% of the average monthly gross income 		
	<p>National Bank of Ukraine has established the following official exchange rate to the Euro: 31.12.2009 – 11,448893 UA H/Euro 31.12.2011 p – 10,537172 UA H/Euro. http://www.bank.gov.ua</p>		
	2011	2009	Source
Amount of the average water and sanitation bill in the country (EUR/year)	Costs of water supply and sanitation services per household on average are 44 UA H/month and 528 UA H/year. (50.1 EUR/year)	Costs for the use of water supply and sanitation per household on average are 35.5 UAH/month and 426 UA H/year (37.2 EUR/year)	IDSR, UkrStat Access: on info-request of the client. Information is available, indicators are not calculated
% of Households used centralized W&S services	68.5% of households use cold water supply services and 50.7% of households use sanitation services	67.0% of households use cold water supply services and 49.0% of households use sanitation services	IDSR UkrStat Access: on request of the client
Amount of the W&S bill in the country for households in the lowest wealth or income group (this refers people under the national poverty line) (EUR/year)	Costs for the use of water supply and sanitation per household averages 43.6 UA H/month and 523.2 UA H/year. (49.7 EUR/year)	Costs for the use of water supply and sanitation per household averages 33.5 UA H/month and 402 UA H/year. (49.7 EUR/year)	IDSR UkrStat Access: on request of the client.
Added indicator: The average share of centralized W & S services in the structure of the services cost for households receiving housing subsidies	11,27%	10,13% For 1,1% households part of the costs for cold water supply and sewerage is more than 10% of income	«Program for housing subsidies. Statistical bulletin”. January 2012. IDSR
Average disposable household income (or expenditure) (EUR/year)	The indicator is not calculated	The indicator is not calculated	
Added indicator: Average total household expenditures (recommended for evaluation of level of living of population) (€/year)	The average total expenditures per household is 3456.01 UA H/month and 41472.12 UA H/year (3935.8 EUR/year)	The average total expenditures per household is 2754,08 UA H/month and 33048,96 UA H/year (2886,7 EUR/year)	UkrStat
Added indicator: Average households cash	Average cash income per household is approximately	Average cash income per household is approximately	UkrStat

income (recommended to evaluate ability to pay of the population) (EUR/year)	3452.80 UA H/month and 41433.60 UA H/year (3932.1 EUR/year)	2669,96 UAH per month and 32039,52 UAH per year (2798,5 EUR/year)	
Changed indicator Average total income of households living below the poverty line for the country (EUR/year)	2067.23 UA H/month and 24806.75 UA H/year (2354.2 EUR / year)	1527.26 UA H/month and 18327.08 UA H/year (1600.8 EUR/year)	IDSR Ministry of Social Policy
Average household income in the lowest wealth or income group (please specify whether this refers to lowest quintile, lowest decile, or people under the national poverty line) (EUR/year)	Income - 2521,25 UA H/month and 30254,94 UA H/year (2871,3 EUR/year)	Income - 1810,72 UA H/month and 21728,64 UA H/year (1897.9 EUR/year)	IDSR Ministry of Social Policy
Public financial resources spent in ensuring affordability of the water and sanitation bill (million EUR)	housing subsidies from state budget (electricity, gas, W &S, solid waste and sewage removal) – 6.97 billion UA H (664.3 M EUR)	Subsidies from state budget for housing (electricity, gas, water and sewage, solid waste and sewage removal) – 5.94 billion UA H (563,5 M EUR)	Laws “On State Budget of Ukraine on 2009” and “On State Budget of Ukraine on 2011”
Public financial resources spent in ensuring affordability of W and S bill (EUR per capita)	2012 – 85,7 UAH		Ministry of the Regional Development
Public financial resources spent in ensuring affordability of the water and sanitation bill (% of public budget for W&S)	2012 - 81,6%		Ministry of the Regional Development

Average money income per household in Ukraine is approximately 3452.80 UA H per month or 41,433.60 UA H per year (3932.1 Euros/year).

In 2011 centralized water supply and sanitation services in Ukraine were received respectively by 68.5% and 50.7% of households. Payments for water supply and sanitation per household was on average 44 UA H per month, or 528 UA H / year (50.1 Euros / year). 24.3% of the population in Ukraine are below the poverty line (official data of State Selective Household Living Conditions Survey).

Affordability of water and sanitation services in Ukraine is maintained in the framework of the general system of maintaining affordable prices for all housing and utilities services. The system includes:

- provision of privileges (reduction) to pay of housing services for separate categories of users;
- provision of housing subsidies to low income users;
- provision of compensations to utilities to cover the difference between tariffs for residential users and service provision costs;
- application of cross-subsidisation of residential users by setting higher rates for other categories of users.

In 2012, subsidies from the state budget for the privileges and housing subsidies to pay for electricity, natural gas, heat, water supply and sanitation, rent, removal of household waste and wastewaters were 7.388 billion UA H (701.14 million Euros).

The most broadly used forms of privileges in the sphere of social protection of housing- communal services users is providing services free of charge or discounting (by 25%,50% or 75%) the payment for

the services. The level of discount depends on the category of privilege recipients within the established norms of consumption. Discounted payments are granted to numerous categories of social groups, including disabled war veterans, participants of combat activities, war veterans, victims of the Chernobyl disaster, etc. Such privileges present the most common and the most costly form of social protection of consumer of housing-communal services. More than 22% of residents of Ukraine are recipients of privileges to pay for these services.

Social protection of residential users of communal services is also implemented by provision of housing subsidies. Housing subsidies represent state support to users to cover partly their housing and communal services bills. These subsidies represent an targeted social protection mechanism to support low income groups, they are provided in non-monetary form to help to pay for housing rent and / or housing maintenance and communal services (water supply, heating, gas supply, sanitation, power supply, disposal of household solid waste and wastewater).

Average payment for centralized WSS in the housing and communal services payment structure for households, which receive the housing subsidies, is 11.27% (sources: Minsocpolicy's data).

The targeting of subsidies provision is ensured by the fact that they are provided only to persons with a certain low income. If a household's payments for housing and communal services, liquidified gas, solid and liquid fuel exceed a pre-set share of the household's income (10% - 15%), the household becomes eligible for a subsidy.

The legal framework for regulation of residential privileges and subsidies is provided by the Budget Code of Ukraine. Art. 102 of the Budget Code stipulates that expenditures for state social protection programs (in particular, privileges and subsidies to pay the utility bills) are financed by subventions from the State Budget of Ukraine.

In addition to privileges and subsidies established at the national level, local authorities may establish - relying on local budgets – additional local privileges and subsidies for low income persons and other categories of residents at their respective territories (e.g. payment discount for orphan children, disabled persons, widows of former political prisoners and repressed persons, etc).

The subsidies and privileges approved are provided to service providers by transfers of budget financing, calculated according to reports of social protection authorities.

In addition, the service providers get subventions from the state budget and local budgets to cover their losses in case if the tariffs don't cover the costs and the cross-subsidisation of residents by other categories of consumers is used.

Subsidies are provided if tariffs are set at the level lower than economically justified costs. Local authorities that approved such tariffs, must compensate to service providers (from local budgets) the difference between the approved tariffs/prices and economically justified costs of services. Such subsidies do not belong to the state social assistance system.

To improve financial state of WSS service providers in the Law of Ukraine "On the State Budget of Ukraine for 2012" (with amendments) it was planned 4.28 Billion UA H from the State Budget subsidies to local budgets for reimbursement of debts for difference in tariffs on WSS services.

The system of cross-subsidisation for residential users due to higher tariffs for other categories of users is applied at the national and local levels. Cross-subsidisation can't fulfil social protection function and is being gradually phased out.

According to the data of Minregionbud, tariffs for commercial consumers are higher than tariffs for residential consumers and the tariffs difference varies substantially, for example, for Water Supply services its varies from 5 times higher (in the city Vinnitsa) till in 1.3 times (in the cities: Zhytomyr, Bila Tserkva, Lviv, Ternopil); for Sanitation services: from 5,4 times (in the cities Vinnitsa and Kharkiv) till 1.1 times (in the cities Zhytomyr and Lviv).

In practice all kinds of assistance are provided to consumers, who use defined services. The cost of the obtained privileges is as higher as bigger consumption volumes, and better the living conditions of the

recipient of the privileges. The norms of housing-communal services consumption, adjusted for privileges and subsidies, are enough high, that gives possibility to obtain oversize assistance. Majority of rural residents, who have privileges and don't have the basic communal services, cannot materialise their rights to privileges.

The system of ensuring affordability of WSS services in Ukraine is cumbersome and inefficient. Due to subventions and cross-subsidisation, low service prices are set for all users regardless their income levels. The legal privileges for housing and utilities services are provided to large numbers of residents, regardless their individual economic state and real social protection needs.

Providing privileges for housing and communal services is regulated by more than 20 Laws of Ukraine. According to the Ministry of Social Policy administrative report on 01.01.2012 the right to the privileges for housing and communal services have 6.8 million citizens.

The privileges system is not balanced, in parallel with the privileges belong to the social protection system there is another system of privileges based on professional ground for the groups of population, which cannot be classified as socially vulnerable ones.

Privileges do not ensure a sufficient level of protection for low income households. Up to 60% of households received subsidies also use privileges for payment utility bills.

The most efficient protection is provided by the program of housing subsidies: low income households pay a certain share of a household's total income. If tariffs rise, the mechanism guarantees the same level of payments for services, while households with higher income levels pay the full price.

According to the State Statistics Service of Ukraine on 01.01.2012, the number of recipients of subsidies for reimbursement of expenses for housing and communal services was 1327.2 thousand households. Subsidies for housing and communal services received 7.8% of all households in Ukraine.

Parallel application of housing subsidies and privileges increases administrative costs of these programs that in fact fulfil almost the same functions. As a negative consequence, many users remain prone to paternalistic and consumerist attitudes, lacking incentives for energy/resources saving in the sphere of housing and communal services.

In Ukraine, the key information for analysis of households' ability to pay is provided by results of state sample surveys of living conditions of households (HLCSs), which is conducted regularly since 1998 by the State Statistics Service of Ukraine. The HLCSs micro-economic data base covers about 10.5 surveyed households (each consecutive year the selected households for survey are changed), that allows to analyse the ability to pay rather closely and annually or quarterly. Besides that HLCS data representativeness allows to extrapolate statistically sound results of analysis as to the households-users of these services in total, as well as to specific types of households, depending on regions, locations, living conditions, etc. At the same time, access to HLCS data is limited to a wide range of users, and the indicators of households' consumption of certain kinds of communal services, including WSS are not estimated, ability to pay analysis is not conducted on a regular basis, only at the request of customers.

Prices for water supply and sanitation in Ukraine, based on the ability to pay level, is quite affordable for the population as a share of the cost for the use of these services does not exceed 1.25% of household income. The affordability of WS services for poor is somewhat lower, but not critical. In 2011 the share of water supply and sewerage payment of poor households was 1.73% of their cash income. During 2009-2011 the tendency to increase the population ability to pay for the use of these services was observed.

Economic Reform Program for 2010-2014 "Prosperous Society, Competitive Economy, Effective State" (Committee on Economic Reforms under the President of Ukraine) in "Raising living standards" established objectives of the reform of social support in order to increase social assistance coverage of poor populations with rational use of budget funds, which include:

- increased targeted character of social assistance;

- the introduction of social norms of consumption housing and communal services (including water supply and sewerage);

- the introduction of incentives to economically responsible behaviour of recipients of social assistance.

It is worth to note that no measures are applied in Ukraine to ensure affordability of self-provision of water and sanitation services. In such cases no social support may be provided.

Affordability of tariffs for housing and utilities services (in particular water and sanitation ones) may be assessed based on households' ability to pay. In the case of household consumption of housing and utilities services, a household's ability to pay defines an income level, sufficient to pay utility bills without a substantial reduction of living standards, in particular without substantial reduction of consumption of other basic goods and services. Therefore, affordability of water and sanitation services for residential users depend on service prices (tariffs and consumption levels) and income levels of users.

In 2011-2012 the National Commission, which performs state regulation in the field communal services(NKRKP)) conducted a study of introducing a block tariffs for water and sanitation on a progressive scale (ascending block tariffs) to eliminate cross-subsidization one group consumers by others and create conditions for consumers with low consumption to pay the lowest tariff for first block. Information discussed with a wide range of stakeholders and experts. Members and employees NKRKP gave numerous interviews with the media on the introduction of block tariffs as a policy implementing "social" tariffs. The purpose of this policy is to protect the most vulnerable groups of the population by giving them service volume relevant to basic needs for an affordable, "social" price. Those who consume more should pay more. As on 15.02.2013 there is no decision to move towards a new system of tariff setting based on blocks. Experts believe that this decision is not popular and does not receive support among consumers and producers, because the system is complex for administration and not sufficiently transparent when there is no water metering at the level of individual consumers.

SUMMARY SHEET			
Section	Area of action	Score	Reliability
Steering governance frameworks to deliver equitable access to water and sanitation	1.1 Strategic framework for achieving equitable access	2,0	High
	1.2 Sector financial policies	1,0	Medium
	1.3 Rights and duties of users and right-holders	1,6	Medium
	1.4 Incentive framework for water and sanitation service providers	1,25	Medium
Reducing geographical disparities	2.1 Public policies to reduce access disparities between geographical areas	1,4	Medium
	2.2 Public policies to reduce price disparities between geographical areas	1,5	Medium
	2.3 Geographical allocation of external support	1,0	Medium
Ensuring access for vulnerable and marginalised groups	3.1 Public policies to address the needs of vulnerable and marginalised groups	1,4	Medium
	3.2 Persons with special physical needs	1,2	Medium
	3.3 Users of institutional facilities and institutionalised persons	2,2	Medium
	3.4 Persons without a fixed residence	1,3	Medium
	3.5 Persons living in housing without water and sanitation	0,4	Medium
	3.6 Persons without access to water and sanitation in their workplaces	1,0	Medium
Keeping water and sanitation affordable for all	4.1 Public policies to ensure affordability	2,2	High
	4.2 Tariff system	1,5	High
	4.3 Social protection measures	2,33	High