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**Procedure and mechanisms facilitating the implementation of
the Protocol: national summary reports on implementation****Regional report on the status of implementation of
the Protocol****Prepared by the joint secretariat with the assistance of two consultants****Summary*

The present regional report on the status of implementation of the Protocol on Water and Health was prepared by the joint secretariat pursuant to the decision of the Meeting of the Parties at its first session (see ECE/MP.WH/2/Add.5–EUR/06/5069385/1/Add.5).

The report summarizes information from 23 national summary reports submitted during the first pilot reporting exercise. The document aims to assist the Parties in assessing implementation of the Protocol and in facilitating preparation and adoption by the Meeting of the Parties of a number of decisions, in particular the programme of work for 2011–2013.

* Late submission.

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Introduction

1. According to article 6 of the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, within two years of becoming a Party, each Party shall establish and publish national and/or local targets and target dates in different areas in order to achieve or maintain a high level of protection of human health and well-being and for the sustainable management of water resources.

2. Furthermore, article 7 of the Protocol requires Parties to collect and evaluate data on their progress towards the achievement of the targets set and how this has contributed towards preventing, controlling or reducing water-related disease. Every three years, Parties shall review the progress made in achieving the targets set, and publish an assessment of that progress. Parties shall also provide to the joint secretariat for circulation to the other Parties, a summary report of the data collected and evaluated and the assessment of the progress achieved. Such reports shall be in accordance with guidelines established by the Meeting of the Parties.

3. The Meeting of the Parties at its first session entrusted the Task Force on Indicators and Reporting with the preparation of the guidelines for the summary reports for adoption at its second session. The Working Group on Water and Health at its second meeting decided on the organization of the first pilot reporting exercise based on the draft guidelines and template for summary reports. For this purpose, the joint secretariat sent letters to ministers of health and of environment from both Parties and non-Parties in the region, outlining the procedure for the submission of summary reports.

4. This regional implementation report has been prepared on the basis of 23 summary reports submitted by Parties and non-Parties to the Protocol.¹ No reports were received from the following Parties: Albania, Luxembourg and Spain. Two reports were submitted too late to be considered in this analysis.² All reports submitted are available at: http://www.unece.org/env/water/Protocol_implementation_reports.html.

5. Reports submitted vary greatly in terms of the length, level of detail and quality of the information provided. It was not within the mandate of the joint secretariat to carry out extensive further research to locate information that should have been included in the summary reports, or to check the information provided. Thus the present document should be read with these limitations in mind and should not be regarded as a comprehensive, exhaustive or independent review of the status of implementation of the Protocol.

I. Procedural aspects of the first reporting exercise

6. Of the 23 summary reports on which this report is based, only 10 were submitted by the deadline agreed by the Working Group on Water and Health (31 March 2010).

7. Many reports were clearly written and comprehensive; nevertheless some did not follow the agreed template and failed to address some of the questions. The information related to the targets set, the measures taken to achieve them and the assessment of the

¹ Reports were received from Armenia (non-Party), Azerbaijan, Belarus, Belgium, Croatia, Cyprus (non-Party, not a full report but general information on water and health), Czech Republic, Estonia, Finland, France, Georgia (non-Party), Germany, Hungary, Latvia, Lithuania, Republic of Moldova, Netherlands, Norway, Romania, Slovakia, Switzerland, Ukraine and Uzbekistan (non-Party).

² The reports of Portugal and the Russian Federation.

progress achieved was in some cases incomplete or even missing. A majority of the countries in Eastern Europe, the Caucasus and Central Asia provided extensive answers; however, the information provided was not always relevant to the questions in the template. Only one report significantly exceeded the recommended word limit, but some were too concise, thus less informative and conclusive.

8. One of the main objectives of reporting is to inform other Parties. Many countries, however, focused on the procedural and formal part of the reporting, often omitting the analysis and conclusions that would have been most relevant, also for others.

9. Another clear difference between reports is related to their process of preparation: some reports clearly appear to be the product of inter-ministerial and external consultations, while others seem to have been compiled by one or a few persons.

10. In a few cases it was difficult to trace the origin of information as the reports were sent by fax, without providing information on the person or institution submitting them.

II. General aspects of the process of target setting

A. The target-setting process in the different countries

11. The reports do not always clearly state whether targets in accordance with the Protocol have been set: in some cases it is not clear whether targets are just existing regulations and strategies or the result of a target-setting process in accordance with article 6 of the Protocol. Seven Parties — Croatia, Czech Republic, Estonia, Finland, France, Hungary and Slovakia — explicitly indicated that targets had been set. Slovakia has also already revised and updated its national targets once in 2007, adding nine new national targets. However, for some of these Parties it is not always possible to extract from the reports what are the targets set.

12. Parties from the European Union (EU) have generally stressed that the vast majority of targets as required by the Protocol overlapped with those required by relevant EU directives. It should be noted that the pure transposition of EU directives into national legislation does not correspond to setting targets in accordance with the Protocol, and two EU member States (Germany and the Netherlands) which are in the process of setting targets clearly acknowledged this in their reports.

13. Ten Parties indicated that the process of setting targets was ongoing and that targets had not been officially adopted yet: Belarus and the Netherlands — which are supposed to have established their targets respectively by April and June 2011 — and Belgium, Germany, Lithuania, Norway, Romania and Switzerland, as well as the Republic of Moldova and Ukraine (both of the latter with the support of projects under the Ad Hoc Project Facilitation Mechanism), which were all supposed to have already set their targets.

14. For the other Parties the summary reports are not clear and it is therefore impossible to understand whether efforts to set targets are still ongoing or the Party considers that its obligations under the Protocol, and in particular article 6, are fulfilled.

15. In general, implementation of the Protocol, and more specifically target setting, is the main responsibility of the Ministry of Health and/or the Ministry of Environment (sometimes with one of the two with a clear leadership position, in others with the two on the same level). Other ministries involved include ministries responsible for housing and spatial planning, agriculture, the interior, foreign affairs, economic development, infrastructure and regional development. Moreover health and environment institutes,

research centres, inspectorates, water authorities and in some cases non-governmental organizations (NGOs) are also involved.

16. Some countries clearly defined (or are in the process of defining) the terms of reference of the coordination mechanism, its mandate and the distribution of responsibilities (e.g., Belarus, Hungary, the Republic of Moldova, Ukraine). Coordination was sometimes ensured through the focal point (e.g., Belgium and Slovakia).

17. Targets are mostly set at the national level. Exceptions are States with federal structures where the responsibility for implementing the Protocol or for specific areas of work under the Protocol lies at the subnational level (e.g., Belgium where implementation of the Protocol is at the regional level, and Norway for which decisions on drinking-water and wastewater are decentralized). Targets at the local level usually focus on cities/municipalities.

18. The legislative basis (national and/or EU legislation) seems to be in place in all Parties that have submitted full reports. Many reports included detailed information on national legislation, responsible authorities, terms of responsibilities and related lists of official documents (laws, acts, regulations and strategies). Where targets are identical with the requirements of other international obligations, especially EU directives, the target deadlines are also almost always identical. On top of their existing national legislation, several countries in Eastern Europe, the Caucasus and Central Asia expressed their intention to adopt EU legislation.

19. Cost-benefit analysis of target setting is either omitted in the reports or mentioned as not having been carried out. Some countries provided information about national funding, EU funding or funding from bilateral donors through the Ad Hoc Project Facilitation Mechanism. Some countries mentioned financial problems as obstacles to increasing access to water and sanitation.

B Public participation in the target-setting process

20. Means to ensure information and public participation mentioned in the reports included public hearings, meetings, presentations, public media, and websites (Azerbaijan, Belgium, Croatia, Cyprus, Finland, Georgia, Latvia, Republic of Moldova, Norway, Romania, Slovakia, Switzerland and Ukraine). For example, Slovakia introduced a Web-based information system making selected information available on the quality of drinking water, including information on the percentage of samples in non-compliance with its standards. However, few reports explicitly stated that remarks and suggestions from the public were analysed and taken into account in establishing the final versions of a given target.

21. Most Parties which are in the process of setting targets specified that they intended to consult with the public on them. Some countries which are Parties to the Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters (Aarhus Convention) reported that environmental information is available to the public.

C. Consideration of emerging issues such as climate change

22. With regard to the consideration of emerging issues, such as climate change, responses in the reports were rather vague. Some countries mentioned that such issues were or would be taken into account without any detail on what was being or would be considered and how. Some even considered that the question was not applicable or not

relevant for the moment. Others mentioned that information was not available to answer the question.

23. The countries that addressed the issue of climate change mentioned that potential impacts on water management and health were currently being evaluated at the national level, including in the formulation of adaptation strategies and research needs (Romania, Germany) or that emergency handbooks on environmental healthcare and water service had been taken into account in target setting (Finland).

24. Some countries mentioned chemical pollution and the occurrence of legionella as emerging issues. Others referred to drinking water supply and sanitation in extreme weather events, in particular the responsibility of local governments for ensuring drinking water supply and for handling sewage during an extreme event, as well as the responsibility of the health authorities for surveillance of drinking water safety during an emergency.

III. Common indicators

25. As many of the Parties have not yet set their targets, the part on common indicators in the summary reports has been in many cases the one for which most information was provided, somehow distorting the nature and objectives of reporting as defined by the Protocol.

26. Even if the common indicators aimed to gather similar information from all countries, not all countries could report using all proposed indicators. Moreover, the information is neither easily exploitable nor comparable because countries used different methodologies and often did not provide enough supporting information to put the data into context. As a result, while much data was provided, little useful information could be gathered from it.

27. In order to allow an analysis of trends for all Parties under the Protocol, it was requested to use wherever doable 2005 — the year of entry into force of the Protocol — as the baseline year. But this was not possible in all cases.

A. Quality of the drinking water supplied

28. The baseline year as well as the relevant population coverage of the data provided varies between countries. As expected, coverage is overall higher in urban areas than in rural ones. Subnational variations are high as stated by Ukraine. Several countries indicated an increase in population coverage from baseline and/or forecasted an increased coverage by 2010. The EU Drinking Water Directive is mainly used and sometimes relations to the World Health Organization (WHO) guidelines values are made. Some countries state more stringent national standards than the limits of the Drinking Water Directive.

29. The WatSan_S2 indicators for microbial quality of water — i.e., the percentage of samples that failed to meet the national standard for *E. coli* and *Enterococci* — are used. The percentages reported mostly show a decrease in microbial non-compliance; however, the number of samples and the coverage are seldom clearly defined. The lack of completeness in the reporting makes it difficult to correctly interpret the numeric data reported. Switzerland constitutes a good example of complete reporting and has provided the figures directly related to the number of samples taken. Only Germany provided data for both water works and consumers' taps.

30. Many countries, especially countries in Eastern Europe, the Caucasus and Central Asia did not report data on *Enterococci* as they often lacked a national standard.

31. Rural water supplies were especially mentioned in relation to non-compliance or as non-monitored. Information on small water supplies was generally not provided. Furthermore, it is probable that the bases for reporting non-compliance vary strongly between countries.

32. WatSan_S3 as an indicator for chemical quality of water is generally used but many countries did not report on all the suggested parameters. The explanations accompanying the data provided were in many cases vague or lacking and therefore did not allow for an interpretation of the situation. Several countries submitted data on nitrates and nitrites combined while others presented the data separately, which hampers comparative assessments. Belarus and the Republic Moldova are examples of countries that reported high concentration of nitrate and nitrite. Fluoride is generally not stated as a problem except for localized areas in the Baltic States. Arsenic remains a localized problem in different countries in Eastern Europe. Lead problems are pointed out by a few countries and high iron content, although not of direct health concern, are reported by others. Also in this case, there is often no clear differentiation for centralized and decentralized/rural systems and the statistical base for the parameters is not given.

33. Additional health-relevant chemical parameters that were of special concern in the national or local situation were usually identified. However, the reasoning for the selection was seldom given, nor was the number of samples that the compliance was based on specified. Some countries did report on five additional parameters as suggested, while others just reported on a few (1–3).

34. The additional chemical parameters reported were based on health concerns and in many cases were stated as zero or not detected. Reported chemical parameters included: manganese, pesticides (both total pesticides and specific metabolite products such as desethylatrazine), ammonium and ammonia, trihalomethanes and polycyclic aromatic hydrocarbons.

35. Specific parametric values were sometimes not reported and an overall chemical failure rate was instead calculated. Eleven countries reported an integrated chemical value of drinking water.

36. It should be noted that, for both bacteriological and chemical quality, in some cases where the data reported highlighted a problem of high concentration, there was no corresponding target set in the area of quality of drinking water supplied.

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

37. The analysis of the data reported on incidence of water-related disease should be based on the understanding that they heavily depend on the accuracy and reliability of the surveillance system. Low values reported or lacking data do not necessarily reflect a “healthy” situation. For the same reasons, data are not comparable between countries.

38. No cholera cases were reported except for a few import cases; reported cases of typhoid were also low. Enterohaemorrhagic *E. coli* (EHEC) is not generally registered in countries in Eastern Europe, the Caucasus and Central Asia, possibly due to weaker national surveillance systems that may not always have the required clinical diagnostic capacity, but it occurs sporadically in Western Europe and the Baltic States. Shigellosis and hepatitis A have a much higher incidence in Eastern Europe, the Caucasus and Central Asia. No clear trends can be derived from the data provided. Outbreaks are generally absent according to the reporting, which may be a reflection of the selected indicators and the

reporting system. In the reporting no information is provided for other exposure routes such as recreational water or irrigation.

C. Access to drinking water

39. Access to water was either defined in accordance with the Joint Monitoring Programme (JMP) or according to the EU Drinking Water Directive. Access to drinking water is high in urban and rural areas in Western Europe, and is substantially lower in the Eastern part of the region (including, to a lower degree, in some new EU member States), in particular in rural areas. Not all countries provided differentiated data for urban and rural areas. Some countries highlighted issues related to small-scale water supplies (including different types of wells), including lack of responsibilities and management issues. No country gave information related to seasonal used houses in rural or peri-urban areas, like dachas, summer or winter houses or camps.

D. Access to sanitation

40. The definition of access to improved sanitation used in the summary reports also varied (i.e. JMP definition or access to centralized sanitation systems in accordance with the EU Waste Water Treatment Directive). Also in this case there are great differences in the Eastern part of the region between urban and rural areas. But separate figures for urban and rural areas were not always provided, or considered uncertain, or not available.

E. Effectiveness of management, protection and use of freshwater resources

41. Reporting on the effectiveness of management, protection and use of freshwater resources varies between EU member States, which follow the criteria of the EU Water Framework Directive (WFD) and the Groundwater Directive, and non-EU countries, for which the information is based on national standards.

42. For surface waters, Croatia, for example, classifies waters in five categories depending on four indicators (oxygen regime, nutrients, microbial and biological parameters) while Belarus has six categories for hydro-chemical quality (clean, relatively clean, moderately polluted, lightly polluted, polluted, heavily polluted) based on the yearly average of six parameters (dissolved oxygen, BOD₅, ammonia nitrogen, nitrite nitrogen and oil products), as well as a biological classification (also in six classes, based on taxonomic composition, population and biomass of communities, dominant groups and varieties of aquatic organisms).

43. A lack of national classification and of monitoring of groundwater is reported by some non-EU countries.

44. The majority of surface water in all EU countries is classified as good for its chemical status; while for the ecological status more than 50 per cent of water bodies were classified as poor or bad in several Central European countries (e.g., Belgium-Flanders region, the Czech Republic, Germany, the Netherlands).

45. The main impacting factors according to the reports are nutrients from point and diffuse pollution sources, hazardous substances, as well as hydromorphological alterations. Few reports mention microbiological pollution.

46. As for the chemical status of groundwater, overall it is good in the majority of EU countries; only a few countries reported a high percentage of "poor status": Belgium, in the

Flanders region (73.8 per cent), Germany (37 per cent), the Netherlands (39 per cent) and Slovakia (23.6 per cent).

47. Many countries reported on water use but some used the water exploitation index while others reported through other parameters (e.g., percentage of abstraction by sectors). In most countries, in particular EU countries, industry accounts for the biggest user (often including energy use). In some countries in Eastern Europe, the Caucasus and Central Asia, on the contrary, agriculture accounts for the biggest share of the abstraction.

IV. Targets and target dates set and assessment of progress

48. Information on targets set and target dates is given in most reports. However, there are great differences between the information provided by Parties that have set targets (and to a certain extent Parties that are in the process of setting targets) and Parties and non-Parties that have not set targets. While the first group provided detailed and meaningful information, the second group did not really address the questions in the template.

49. For EU countries, the requirements of relevant EU Directives³ are the basis of targets set and relevant dates; in many cases the target is to comply with the EU Directives.

50. In some cases, the targets set are not measurable but are rather declarations of intent or the identification of an area of work.

51. The dates by which targets need to be achieved obviously vary greatly from very short term targets to 2027. No Party set intermediate targets, even when the target date was far in the future, while the Protocol requires it explicitly in art 6, para 4.

52. Most of the information provided on the targets set focused on the relevant legal basis (at national and, in many cases, at EU level) as well as on the national institutional arrangements. Less information was reported on the measures implemented to achieve the targets and on achievements and challenges, which makes many reports less interesting for other countries than they could be. However there are some noteworthy exceptions which should be of inspiration for future reporting exercises (e.g. reports from Finland and Switzerland).

Quality of the drinking water supplied — Article 6, paragraph 2 (a)

53. Quality of drinking water is an area of priority importance for most of the countries and was addressed in all reports. Targets set vary in scope and nature. For EU countries the legal reference is the Drinking Water Directive, and most of the targets are linked to ensuring compliance with it. Some countries, including outside the EU, focused on chemical parameters of the water supplied (e.g., target on arsenic in Croatia; on fluoride in Finland; on nitrate in Slovakia; for oxidability, ammonium, turbidity, aluminum, iron, nitrate, heavy metals, pesticides and manganese in Romania). Some of the targets are related to the extension or renovation of water distribution systems (in Belarus and Czech Republic focusing on lead pipes; but also in Georgia and Lithuania). Common measures include legislation and investments. A number of countries have also set targets related to small-scale supplies, individual water sources and wells (e.g., Belarus, Georgia and Lithuania). In most of these cases targets or relevant measures were aimed at improving knowledge of the issue (development of inventory) or to raise awareness and educate the

³ For a list of Directives relevant to the different areas of art. 6, para. 2, of the Protocol under which targets need to be set, refer to the *Guidelines on the Setting of Targets, Evaluation of Progress and Reporting* (ECE/MP.WH/5–EUDHP1003944/4.2/2/1).

population and well owners. The target set by Switzerland (establishment of a national drinking water database) illustrates another approach to improve knowledge for further action, as needed.

Reduction of the scale of outbreaks and incidence of infectious disease potentially related to water – Article 6, paragraph 2 (b)

54. Many targets in this area aim at reducing incidence levels (0.01 per cent Finland; 0.05 per cent Romania) or, in more generic terms, probability and consequence (Norway, Slovakia). Belarus focused specifically on the reduction of incidence of hepatitis A. Other targets are linked to the improvement of surveillance systems (Czech Republic, Georgia, Slovakia and Ukraine). In Belgium, the Flanders region focused on data collection related to pathogenic intestinal parasites in swimming pools and swimming areas which are not covered by the EU Bathing Water Directive and the Walloon region on the introduction of norms for the prevention of legionella in public structures including swimming pools. Other targets include awareness-raising activities.

55. Related actions include legislative measures, strengthening of monitoring and data collection, awareness-raising campaigns and capacity-building of operators of small-scale drinking water supplies. Belarus also mentioned vaccination campaigns against hepatitis A and provision of bottled water to educational institutions.

56. Specific comments refer to smaller and less serious disease outbreaks that may evade examination and to the problems of small water supply systems. An increase in rotavirus and Norovirus infections was noted which could become the focus of future targets. This also concerns parasitic protozoa. Incidents and outbreaks of water-related disease occur due to, among others, inadequate protection of the water source, poor treatment of water, leaky water pipes and poor protection during repair and/or illegal connections between drinking water and wastewater networks. Pathogens, such as *Campylobacter jejuni*, Salmonella, Noroviruses, rotaviruses and giardia were identified from drinking water samples, although only in reports from Western European countries, pointing to the need to strengthen the national health system in clinical diagnosis in Eastern countries.

Access to drinking water — Article 6, paragraph 2 (c)

57. Targets mostly relate to increasing access to centralized water supply systems in both urban and rural areas (Belarus, Croatia, Czech Republic, Finland, Georgia, Norway, Romania and Slovakia). Related actions include development of legislative frameworks and national strategies as well as investments. Some countries pointed to difficulties related to a lack of funding. Other targets in this area are related to improving the availability of data (including for small-scale and private supplies). Three countries pointed to the issue of the price of water (Belgium, Hungary and Lithuania) with a focus on the sustainability and transparency of the pricing systems that encourage sustainable use of resources and affordability of drinking water. Switzerland is looking into the issue of access to water during extreme weather events and how to ensure continuity of the service in emergency situations.

Access to sanitation — Article 6, paragraph 2 (d)

58. Also in this case, targets mostly relate to increase access to collective sanitation systems and other means of sanitation, as well as to improving wastewater treatment (Belarus, Belgium, Croatia, Czech Republic, Estonia, Finland, Georgia, Hungary, Lithuania, Norway, Romania and Slovakia). In EU countries the basis is the EU Urban Waste Water Treatment Directive. Measures included mostly investments. In general, countries in the west of the region reported an increase in access to sanitation and progress

towards the targets, but some pointed to the fact that the targets set might not be realistically achieved due to lack of resources.

Levels of performance of collective systems and other systems for water supply and sanitation — Article 6, paragraph 2 (e)

59. Few countries set targets in this area and some mentioned the same targets as in previous areas of access to water and sanitation.

60. Targets set or issues mentioned for water supplies include introducing in the legislation aspects concerning the performance of drinking water supplies, upgrading the reliability of water supplies systems in exceptional situations and decreasing water losses. They have to a lesser extent than expected addressed management issues, like average continuity of drinking water supply, failure rates and complaints received.

61. Related activities are mainly technical, like restructuring and optimization of utilities and water supply systems and exchange rates of pipelines. Finland referred to an ongoing project dealing with adaptation to climate change including the identification of groundwater abstraction sites that might be in danger during exceptional flooding situations.

62. Targets or issues mentioned for sanitation are related to increased treatment of wastewater and reduction of nutrients as well as to the treatment of micro-pollutants; reduced leakages in wastewater distribution systems; rehabilitation and extension of sewage networks; an increased number of connections; services at affordable tariffs; reduced overloading of the wastewater networks; and issues related to pre-treatment of industrial wastewater. Several countries refer to the EU WFD and to the Waste Water Treatment Directive.

63. Reported limitations relate to sustainability, especially for small-scale systems. The issues of failure rates and complaints are seldom addressed, nor are monitoring of leaks and pipeline bursts. The need for adaptations to climate changes is addressed by few Parties. Actions needed include an increased rate of replacement and renewal of wastewater networks; to adapt the handling of storm water run-off to climate changes; and to frame these issues within an overall risk assessment and risk mitigation system, including necessary restoration.

Application of recognized good practices to the management of water supply and sanitation, including the protection of waters used as sources for drinking water — Article 6, paragraph 2 (f)

64. Similarly, in this area, only a reduced number of countries have set targets.

65. Targets or issues mentioned for water supply are in general related to risk and vulnerability analysis and in particular the development of water safety plans, the promotion of cleaner production methods and internal control of the water supply system, as well as to the protection and sustainable use of water sources, in particular groundwater. Trainings relating to service of utilities and to administrative and technical regulations have been organized by some Parties.

66. Targets or issues mentioned for sanitation relate to the construction and maintenance of well-functioning collecting systems; vulnerability analysis; protection of surface and groundwater, in particular through the reduction of nutrient inputs; management of storm waters; and limitation of storm water overflow. The legal basis for sludge management and disposal is also addressed.

Occurrence of discharges of untreated wastewater from wastewater collection systems — Article 6, paragraph 2 (g)(i)

67. The few targets set in this area generally refer to the reduction of discharges of untreated wastewater. More specific targets relate to preventing and reducing the impact of accidental pollution through the implementation of plans by operators, as well as the development of a warning system for accidental pollution.

68. Finland reported that, as a way to reduce impacts of discharges of untreated wastewater, the pollution arising from occasional discharges is accounted for in each treatment plant's environmental permit. Emissions requirements laid down in the permit, which, depending on plant size, are expressed as quarterly, six-month or full-year averages, are to be complied with also in case of exceptional discharges of untreated wastewater, which obliges plants to improve treatment efficiency for their routine operation.

Occurrence of discharges of untreated storm water overflows from wastewater collection systems — Article 6, paragraph 2 (g)(ii)

69. Targets in this area include the increase of separate systems for the collection and treatment of storm waters (e.g., Belarus, Romania and Slovakia), or the reduction of overflow through the application of good practice for the management and construction of wastewater treatment plants. Legislation is sometimes lacking in relation to overflows but is partly accounted for in newly constructed sewerage systems.

Quality of discharges of wastewater from treatment installations — Article 6, paragraph 2 (h)

70. Targets are related to the application of national and EU legislation, permit systems and, for EU countries, the objectives of the EU WFD to achieve good status of water resources. Some countries specifically focus on hazardous substance as well as on hygienic risks of urban wastewater. In most of the new EU countries, major progress has been made in this area, while in the countries of Eastern Europe, the Caucasus and Central Asia treatment facilities are still lacking or not functioning properly.

71. Related action is often linked to national legislation and investments, as well as to improved monitoring.

Disposal or reuse of sewage sludge from collective systems of sanitation or other sanitation installations — Article 6, paragraph 2 (i) (first part)

72. A limited number of countries set targets in this area. Most refer to legislation regulating the management and disposal of sludge. The handling practices differ between countries, from mainly incineration to biogas production; landscaping or landfills; use in forestry; for soil improvements; and storage on grounds without reuse. The use of sewage sludge in agriculture is only mentioned by a few countries based on special waste permits, supervision and monitoring by accredited laboratories, but is legally banned in others. A legislative base is normally in existence but still lacking in a few countries. Risk assessment and management is mentioned for contaminants, effects on leakage, drainage and erosion and plant nutrient recovery as part of a sludge management strategy.

Quality of wastewater used for irrigation purposes — Article 6, paragraph 2 (i) (second part)

73. Targets are not set for most countries in this area and many countries prohibit the reuse of wastewater for irrigation. Very few recommend its use on agricultural lands, for specific crops, or in forestry, with the approval of the landowners and of the competent authorities. On a case-by-case basis treated domestic wastewater can be used for irrigation

of adjacent kitchen gardens. The relationship to heavily polluted surface water used for irrigation is not mentioned.

Quality of waters used as sources for drinking water — Article 6, paragraph 2 (j) (first part)

74. For EU countries, targets in this area are based on the EU WFD and the Groundwater Directive. They focus on measures for the protection of groundwater and surface water, such as legal frameworks, stricter environmental standards, restrictions on the use, monitoring and creation of an integrated information system and scientific research. The quality and control requirements are included in the legislation of most countries. Actions to reach the targets include implementation of protection measures and development and application of good practices. Belgium and Switzerland especially mention the preventive measures taken against contamination by pesticides within the protected areas.

Quality of waters used for bathing — (Article 6, paragraph 2 (j) (second part)

75. Targets in this area cover the limitation of health impacts from bathing; the quality of the bathing waters — both natural bathing waters as well as enclosed waters (e.g., swimming pools) — in accordance with national laws; monitoring of bathing waters (both natural and enclosed); the classification of bathing sites; and the management of bathing water quality. EU countries refer to compliance with the EU Bathing Water Directive for both freshwater and coastal zones; no reference is given to the WHO Guidelines for safe recreational water environments. Many reports underline measures for public information and involvement of the media and NGOs. Cyanobacteria were reported as a problem in some countries. In general, the quality of bathing waters is good in EU countries or at least clear management and protection measures are being put in place, while the quality or the monitoring of the quality seem to vary more in some of the countries of Eastern Europe, the Caucasus and Central Asia.

Quality of waters used for aquaculture or for the production or harvesting shellfish — Article 6, paragraph 2 (j) (third part)

76. A minority of Parties have set targets in this area and two countries have stated that this is not relevant to them without any further explanation (Slovakia and Georgia). This might be linked to a misinterpretation by some Parties of the term “aquaculture”, mistakenly thinking that it does not also cover freshwater fish production, including in internal waters such as ponds. Targets set in this area cover the protection of water bodies used for food production; and protection of the status of surface water. The quality and control requirements are linked to national laws and standards. Actions include ensuring quality of surface waters also through investments for wastewater treatment, ensuring fish migration and publication of results.

Application of recognized good practice in the management of enclosed water generally available for bathing — Article 6, paragraph 2 (k)

77. Targets set include ensuring the quality of water in swimming pools in accordance with national standards; monitoring and information systems; development and publishing of good operating practices manuals; training of operators of swimming pools, and updating and improving the current legislation in force, according to new scientific development. The quality and control requirements for swimming pools are usually regulated by national legislation. The WHO Guidelines for safe recreational water environments are not mentioned as a reference. The extent of surveillance is less clear; however, it is generally part of the work of the municipal health protection authorities. The prevention of legionella

in collective warm water systems is mentioned as an issue that needs to be addressed and is regulated in some local legislation.

Identification and remediation of particularly contaminated sites — Article 6, paragraph 2 (l)

78. Targets in this area are often linked to national legislation on the matter and generally cover the development of inventory of contaminated sites and their remediation, including the allocation of financial resources to this end. The level of action differs between countries: some state that there are no problems, while others mention a diverse array of contaminants including oil and petroleum products, hazardous and organic chemical substances, pesticides, persistent organic pollutants (POPs) and radioactive substances. One county mentioned the risks of old military base sites.

Effectiveness of systems for the management, development, protection and use of water resources — Article 6, paragraph 2 (m)

79. Several countries mentioned that the targets set in previous areas are enough and no additional targets are needed in this area. However, other countries set targets in this area linked to the protection of water quality and quantity; treatment of wastewater; reduction of pollution from agriculture (both nutrients and pesticides); and flood protection management. The requirements are generally ensured by national legislation. Reports mentioned that information is disseminated through awareness-raising campaigns and/or making it available on websites. Action is often linked to national or transboundary water management plans and long-term reduction of nutrient discharges in watercourses.

Other targets set

80. It is noteworthy that the Czech Republic set additional targets. Additional targets relate to the implementation of articles 9 and 10 of the Protocol. Targets set are linked to public information, including through the development of information systems, training programmes and research, including on the economic ramifications of cost-effectiveness in water supply and wastewater treatment.

81. Hungary included considerations on the impacts of climate change on both quality and quantity of water resources and the needs to prevent, control and reduce negative impacts on human health and the environment.

V. Information on the overall evaluation of progress achieved in implementing the Protocol

82. Unfortunately, information provided in this section of the reports is often scarce and incomplete. With few exceptions (e.g., Finland, Switzerland and Croatia) Parties have not consistently addressed aspects related to articles 9 to 14.

83. Often the information provided is a mere reference to a programme, a law or an agreement, without an analysis of the level of implementation. With few exceptions (e.g., Hungary, Lithuania, Ukraine) most of the reports tend to focus on the results achieved and do not provide an analysis of the challenges and possible future threats.

84. In general, the overall evaluation of progress achieved tends to be positive.

85. Among the problems most frequently reported is a low level of public participation, in some cases due to difficulties in involving NGOs in the process, and in others to a lack of arrangements for NGO involvement.

VI. Lessons learned and conclusions

A. General conclusions

86. The first reporting exercise has been overall successful. In quantitative terms, most of the Parties — 21 out of 24 — submitted summary reports. The fact that all of the Parties from the Eastern Europe, the Caucasus and Central Asia submitted reports is particularly commendable. Moreover, it is also a very positive sign that four non-Parties reported.

87. There are several gaps in the reports submitted and the information provided was often not clear and did not allow for a full assessment of the situation. This document therefore draws on a somewhat limited pool of information. However, some tentative conclusions may be drawn that could be useful to define further action needed, as well as for future reporting exercises.

88. In general, Parties from all parts of the region appear to be committed to pursuing the implementation of the Protocol and its objectives. Many countries directly link the Protocol's implementation with similar goals to be achieved at the national level through implementation of national laws and strategies and EU directives. In most cases, the legal framework for the implementation of the Protocol is in place.

89. However, many Parties are late in setting their targets and should speed up the national process for their adoption and publication. Also, for the Parties which have set targets it is not always clear whether the target-setting process is in accordance with the Protocol or results from the compilation of different policies, strategies, measures and national laws which have not been analysed together in a holistic manner, looking also at synergies and gaps. In some cases, it appears from the information provided that some Parties consider that they have set targets, but this has not been done completely in accordance with article 6, paragraph 2, of the Protocol.

90. It often seems that there are no links between the information provided under the common indicators part and the targets set. In some cases, it might be that the common indicators do not reflect issues for the countries and thus do not deserve any specific target. However, in other cases, they might actually point to possible future target(s). In particular, the preventive monitoring of chemicals in drinking water is essential. Some countries might need to take into account the introduction of specific chemical parameters. Some countries (mainly countries of Eastern Europe, the Caucasus and Central Asia) do not have data or lack national standards for *Enterococci* and use the specific weight of non-standard drinking water samples. This might also need to be addressed in the future.

91. It is also noted that, while in general Parties focus — and set targets — in the areas of access to water and sanitation, quality of drinking waters and reduction of water-related disease, other areas of article 6, paragraph 2, of the Protocol tend to be neglected and relevant targets are not set. If it is obvious that these areas have different importance for countries depending on their particular situation, it is also true that, by looking at all its different aspects, the Protocol promotes a holistic approach: targets set in the different areas should be mutually supportive and allow for more efficiently achieving the overall objectives. Parties should therefore strive to set targets in all areas of article 6, paragraph 2.

92. It also appears that some Parties misinterpreted the areas of the Protocol under which targets should be set and sometimes set targets under an area which would have been more relevant to another one, or claimed that the same target was relevant to both areas. This misinterpretation can easily be avoided by making use of the Guidelines on the Setting of Targets, Evaluation of Progress and Reporting (ECE/MP.WH/5–EUDHP1003944/4.2/2/1).

93. Challenges commonly mentioned by countries are: absence of separate financial support for target setting and for Protocol implementation; the heavy financial implications related to the development of infrastructures for drinking water and sanitation; insufficient cooperation between different institutions; and structural reorganization and changes. In Eastern Europe, the Caucasus and Central Asia, and to some extent in some EU countries, obstacles also relate to the lack of public participation.

94. In general, the gaps identified in the reporting process confirm the relevance of the draft programme of work for 2011–2013 (ECE/MP.WH/2010/L.1–EUDHP1003944/4.2/1/3), with its focus on the process of inter-institutional collaboration; support to activities at the national level to set targets and target dates, including the strengthening of public participation; the enhancement of surveillance; and the overall importance it lays on strengthening capacity in different areas related to the implementation of the Protocol, including through the use of the guidance documents developed under the Protocol.

95. The level of implementation varies significantly across the UNECE region, depending, inter alia, upon countries' legal traditions, experiences in governance and socio-economic conditions. Thus some subregional trends can also be outlined.

B. European Union countries, Norway and Switzerland⁴

96. The trend has been to develop the implementing legislation in accordance with the EU directives dealing with drinking water, sanitation, water management, bathing water and wastewater treatment. The reports from this subregion indicate that the level of implementation appears to be quite advanced with regard to effectiveness of management, protection and use of freshwater resources, as well as for the access to drinking water and sanitation and reduction of water-related disease. However, while some of the new EU member States have rather progressive systems in place, others may still face difficulties in implementing certain provisions.

97. Some EU countries have limited their implementation of the Protocol to EU directives; however, the Protocol touches upon areas which are not regulated by EU directives. Furthermore, the Protocol also offers the opportunity to deal with specific or emerging problems beyond the scope of EU legislation or with a different approach. EU countries should therefore consider these aspects when setting targets.

C. Countries in Eastern Europe, the Caucasus and Central Asia⁵

98. Several countries reported progress in creating a general legislative framework for the implementation of the Protocol. However, reports indicated that most countries of Eastern Europe, the Caucasus and Central Asia have difficulties in collecting the required information due to the absence of standards and insufficient monitoring and surveillance systems. Public participation in most countries is still at an early stage. The quick progress in setting targets in Belarus is commendable. Progress appears to have been recently made in Ukraine and in the Republic of Moldova thanks to the projects funded under the Ad Hoc Project Facilitation Mechanism. In general, there are financial and technical constraints

⁴ Belgium, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Hungary, Latvia, Lithuania, Netherlands, Norway, Portugal, Romania, Slovakia and Switzerland.

⁵ Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Russian Federation, Ukraine and Uzbekistan.

regarding the implementation of activities. Some countries implement the Protocol within the framework of their National Policy Dialogues under the EU Water Initiative.

D. South-Eastern Europe⁶

99. Croatia has undertaken measures to improve its legislation, in many cases also to harmonize it with the relevant EU directives, and has obtained results in many areas. However, the full implementation of the Protocol is problematic in Croatia due to the lack of financial resources.

E. Conclusions related to the reporting exercise

100. A number of remarks can also be made on the reporting itself which should guide Parties in future reporting exercises.

101. The reports submitted were in many cases neither complete, comprehensive nor reader friendly. Answers provided did not respond to the questions in the template. Several countries did not use the agreed template at all.

102. In some cases it is not even possible to discern from the information provided whether targets have been set, what the targets exactly require, and what the deadlines are to achieve them.

103. In particular, many reports do not specify baseline conditions next to the description of targets and target dates, which are required to assess progress. In others, extensive background information is not accompanied with respective targets and/or target dates. Often Parties fail to clearly indicate whether the target is national or local and for long-term targets no intermediate targets have been set.

104. When Parties described the actions taken to reach a particular target, they seldom emphasized the difficulties and challenges encountered. In some instances the information provided in the reports is extremely general and non-specific. A common feature of most reports is the very extensive list of national standards, but often without a description of their main principles and the basic outlook of their regulatory approach.

105. In many instances the descriptive/narrative information is supported by a wealth of statistics. However, sometimes the data provided is irrelevant and hard to comprehend.

106. Sometimes the absence of targets is explained in very general terms and there are no clear explanations on why targets in specific areas are not relevant.

107. The part on common indicators allowed for gathering a large array of data, but their usefulness for the reader is limited due to the lack of explanation of the methodology used for compiling them and to the lack of background information allowing the data to be put into context. It is also obvious from the above that information provided by different countries is not comparable.

108. A main advantage of reporting under the Protocol — and a distinctive feature compared to other reporting mechanisms, in particular in the EU — is that Parties do not have to demonstrate compliance but rather assess progress achieved and share their experience with the others. It is therefore regrettable that in general not enough efforts have been made to make the reports useful for other readers (other countries or the public). In most cases very little information is provided on measures adopted and there is almost no

⁶ Croatia.

analysis of the progress made, challenges encountered and lessons learned. The case of Switzerland, which made its national report also useful for public dissemination, is a positive exception.

109. Information about implementation of the Protocol and about targets needs to be more frequently used as a basis for policy discussions and decisions. Summary reports can be a useful tool to this end. But this also requires the provision of data on the cost-effectiveness of environmental health actions and on the economic benefits of adequate environmental conditions. This information need to be further investigated and communicated to the public and to decision makers.
