



Economic and Social Council

Distr.: General
20 July 2012

Original: English

Economic Commission for Europe

Meeting of the Parties to the Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

Working Group of the Parties

Third session

Geneva, 20–21 November 2012

Item 4 (f) of the provisional agenda

Promotion and capacity-building: provision of technical assistance

Results of surveys on Protocol on Pollutant Release and Transfer Registers

Note by the secretariat

Summary

At its first session, the Meeting of the Parties to the Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision-making Procedures and Access to Justice in Environmental Matters requested the secretariat to provide a more detailed assessment of the activities in the work programme for the period 2011–2014, including, in particular, whether or not a separate technical assistance mechanism should be established, and to report to the Working Group of the Parties (ECE/MP.PRTR/2010/2/Add.1, decision I/6, para. 4).¹ Furthermore, the Meeting of the Parties: (a) entrusted the secretariat, in close cooperation with partner organizations, to assist countries in the effective implementation of the Protocol (ibid., annex, item B) and (b) entrusted the Working Group of the Parties to monitor and facilitate the implementation of the Protocol (ibid., annex, item C). Pursuant to this decision, the following three surveys were carried out by the secretariat in 2011 and 2012: (a) on possible needs for a technical

¹ Available from

http://www.unece.org/fileadmin/DAM/env/pp/prtr/docs/ece_mp.prtr_2010_2_Add.1_e.pdf

assistance mechanism; (b) on current status of pollutant release and transfer register activities in countries of Eastern Europe, the Caucasus and Central Asia; and (c) on pollutant monitoring, diffuse releases and bilateral cooperation.

The present note summarizes these surveys and provides an analysis of the responses to them. The note aims to assist the Working Group in monitoring and facilitating the implementation of the Protocol, as mandated by decision I/6.

Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction	1	3
II. Possible needs for a technical assistance mechanism.....	2–10	3
A. Distribution one	3–5	3
B. Distribution two	6–10	4
III. Current status of pollutant release and transfer register activities in countries of Eastern Europe, the Caucasus and Central Asia.....	11–17	5
IV. Pollutant monitoring, diffuse release and bilateral cooperation	18–40	8
A. Pollutant monitoring	21–23	8
B. Diffuse releases.....	24–32	10
C. Bilateral cooperation.....	33–40	15

Figures

1. Main barriers to capacity building activities	5
2. Who pays for monitoring of point source releases	9
3. Who conducts monitoring of point source releases	10
4. Sectors for which diffuse releases are calculated or estimated.....	11
5. Who pays for measuring diffuse releases?	12
6. How is data collected on diffuse releases?	13
7. Who carries out measurement or estimation of diffuse releases?.....	14
8. What methodologies does your country use to measure or estimate diffuse releases?.....	15
9. Would your country like to receive bilateral assistance from another country in relation to PRTR development?	16
10. Can your country provide bilateral assistance on PRTR development to a country in need of assistance?.....	17

I. Introduction

1. At its first session, the Meeting of the Parties to the Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs) to the Convention on Access to Information, Public Participation in Decision-making Procedures and Access to Justice in Environmental Matters (Aarhus Convention) requested the secretariat to provide a more detailed assessment of the activities in the work programme for the period 2011–2014, including, in particular, whether or not a separate technical assistance mechanism should be established (ECE/MP.PRTR/2010/2/Add.1, decision I/6, para. 4). To that end, the secretariat was to send out a questionnaire, and to analyse the results (*ibid.*, annex, item B). The secretariat, in close cooperation with partner organizations, was also to assist countries in the effective implementation of the Protocol (*ibid.*) and the Working Group of the Parties was requested to monitor and facilitate the Protocol's implementation (*ibid.*, item C). To carry out those mandates, three country surveys were carried out by the secretariat in 2011 and 2012: (a) on possible needs for a technical assistance mechanism; (b) on the current status of pollutant release and transfer register (PRTR) activities in countries of Eastern Europe, the Caucasus and Central Asia; and (c) on pollutant monitoring, diffuse releases and bilateral cooperation. The present note summarizes these surveys and provides an analysis of the responses to them.

II. Possible needs for a technical assistance mechanism

2. The questionnaire on a technical assistance mechanism was intended to gather information on the need for such a mechanism to support implementation of the Protocol. The questionnaire comprised three sections: part I sought to collect information on countries' current activities on PRTRs; part II aimed to identify barriers to the implementation of PRTRs; and part III undertook to identify solutions to the barriers identified. The questionnaire was sent out in two separate distributions, as set out below.

A. Distribution one

3. In distribution one, the secretariat received a total of 25 responses² to the questionnaire, 17 from Parties to the Protocol,³ 6 from Signatories⁴ and 2 from other United Nations Economic Commission for Europe (ECE) member States.⁵

4. The responses to the survey on possible needs for a technical assistance mechanism are summarized in the note on a technical assistance mechanism⁶ presented at the first meeting of the Working Group of the Parties (Geneva, 28–29 November 2011).

² Responses to the questionnaire are available at <http://www.unece.org/environmental-policy/treaties/public-participation/protocol-on-prtrs/areas-of-work/envppprtrcb/surveys.html>

³ The following Parties sent their responses to the questionnaire: Belgium, Bulgaria, Czech Republic, Denmark, Estonia, European Union, Germany, Latvia, Netherlands, Norway, Romania, Slovakia, Spain, Sweden (sent two responses), Switzerland, the former Yugoslav Republic of Macedonia and the United Kingdom of Great Britain and Northern Ireland.

⁴ The Signatories that sent a response were Armenia, Cyprus, Georgia, Ireland, Poland and Serbia.

⁵ Azerbaijan and Belarus also sent their responses to the questionnaire.

⁶ Available at

http://www.unece.org/fileadmin/DAM/env/pp/prtr/docs/2011/ece_mp.prtr_wg.1_2011_4_eng.pdf

5. The responses received suggested the following main types of solutions and actions to overcome the existing obstacles: (a) further promotion and encouragement of bilateral cooperation between countries that are advanced in implementing PRTRs and those that require assistance; (b) provision of more information on technical assistance opportunities from existing programmes; (c) assistance in organizing technical trainings for operators on compiling PRTRs; (d) facilitation of access to free software available for managing PRTR data flow; and (e) establishment of a capacity-building fund to support capacity-building activities.

B. Distribution two

6. The survey was also distributed to countries in Eastern Europe, the Caucasus and Central Asia that had not responded to it in the initial distribution (i.e., distribution one). These responses were made available on the ECE website⁷ prior to the PRTR subregional workshop in Minsk on 3 and 4 November, 2011.

7. The secretariat received a total of five additional responses to the questionnaire in this distribution, three from Signatories,⁸ and two from other ECE member States.⁹

8. The survey responses in relation to capacity-building activities indicated 39 checked items. Of these 39 items:

(a) Twenty items were planned activities, fifteen items were ongoing activities and six items were implemented activities, indicating that few of the listed activities had been implemented, and the vast majority were either ongoing or planned;

(b) The main activity implemented was national workshops to identify PRTR goals, which were implemented by two countries;¹⁰

(c) The main ongoing activities were preliminary or related activities, design of the main PRTR characteristics, design and development of a PRTR register accessible online, pilot trials, and regional and/or international PRTR activities;

(d) The main activities planned were national workshops to identify PRTR goals and a feasibility study to access existing capacity for a PRTR, as well as, to a lesser extent, preparation of PRTR guidance document, the setting-up of an information technology reporting tool for PRTR data flow and regional and/or international PRTR activities.

9. The survey responses listed the following as the main barriers for capacity-building activities (see figure 1):

(a) Limited financial resources (this was listed four times);

(b) Limited interest in using a PRTR;

(c) Limited expertise/know-how;

(d) Limited communication and cooperation with industrial facilities;

(e) Limited market availability of measurement equipment and/or accredited laboratories, and high cost of the equipment;

⁷ Available at <http://www.unece.org/environmental-policy/treaties/public-participation/protocol-on-prtrs/areas-of-work/envppprtrcb/surveys.html>

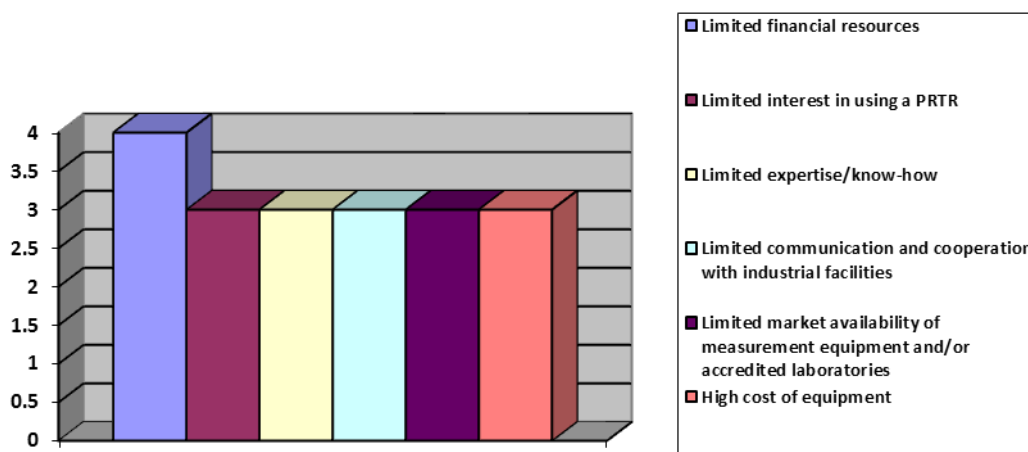
⁸ Republic of Moldova, Tajikistan and Ukraine.

⁹ Kazakhstan and Uzbekistan.

¹⁰ Kazakhstan and Tajikistan.

(f) Other factors. Kazakhstan noted that the cost of observing the Protocol for the State and for the users of natural resources was not defined, as well as a lack of interest among the State bodies (additional work for a state officer who had too many duties). Tajikistan reported the absence of regulations in some laws for environmental protection; the absence of an environmental information management system at the regional level; and illegal importation of pesticides and other chemical substances to Tajikistan. The other factor listed by Uzbekistan was that the Protocol had not yet been ratified.

Figure 1
Main barriers to capacity building activities



10. The responses received revealed that four of the five countries suggest that all the solutions listed by countries are required to overcome the existing obstacles (see para. 5 above). The Republic of Moldova listed (c) and (e) only. In addition, Tajikistan suggested the following additional solutions: to assist countries in the establishment of analytical laboratories for identification of pollution sources; and that the Protocol secretariat needs to consider capacity-building in development of regional databases and PRTR management.

III. Current status of pollutant release and transfer register activities in countries of Eastern Europe, the Caucasus and Central Asia

11. Responses to the survey on the current status of PRTR activities in Eastern Europe, the Caucasus and Central Asia were made available on the website¹¹ prior to the PRTR subregional workshop (see para. 6). The secretariat received a total of eight responses.¹²

12. In relation to the question on current status of the institutional structure in each country to support access to environmental information and its dissemination, all eight countries described or listed the relevant ministries, ministry subdivision, centres, committees, or agencies in their country that carry out this function.

¹¹ Available at <http://www.unece.org/environmental-policy/treaties/public-participation/protocol-on-prtrs/areas-of-work/envppprtrcb/surveys.html>

¹² Responses were received from Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Tajikistan, Uzbekistan, and Ukraine.

13. In relation to the question on the current status of the regulatory framework for data collection and dissemination and for public participation and access to information and justice in each country, seven countries¹³ described or listed the relevant legal acts, codes, regulations, guidelines, index of legal instruments, or resolutions for data collection and dissemination. One country¹⁴ provided the answer “N/A” (not applicable).

14. In relation to the question on the provision of a list of the major substances and types of releases and offsite transfers in each country:

- (a) Three countries¹⁵ provided a list of pollutant releases;
- (b) Two countries¹⁶ listed the main polluting sectors;
- (c) One country¹⁷ stated the PRTR list is under construction;
- (d) One country¹⁸ listed the relevant informational website;
- (e) One country¹⁹ stated the information is available in several separate Government databases;
- (f) One country²⁰ stated that businesses, organizations and agencies report releases and waste to statistical authorities covering 150 types of releases to air, but did not list the releases;
- (g) One country²¹ provided a list of waste types for which standards of waste disposal are established;
- (h) One country²² maintains a database for air pollution, and a database for water pollution.

15. In relation to describing the approach to data management (i.e., the management of the data on major pollutant releases and transfers) there were seven²³ responses:

- (a) In Azerbaijan, the State defines rules for collecting, processing and presenting environmental information. Armenia did not provide an answer. According to legislation, the State updates environmental information on relevant websites and has committed itself to collection and dissemination of environmental information;
- (b) In Belarus, this data management activity is not currently carried out;
- (c) In Georgia, enterprises submit annual reports to the ministry listing quantities of releases; the State creates an inventory of releases to air and water, and releases from transport are estimated or quantified;
- (d) In Kazakhstan, the State maintains four databases related to environmental contamination, waste production, an inventory of disposal sites and sources of environmental pollution;

¹³ All countries except Armenia.

¹⁴ Armenia.

¹⁵ Georgia, Kazakhstan and Tajikistan.

¹⁶ Azerbaijan and Tajikistan.

¹⁷ Belarus.

¹⁸ Armenia.

¹⁹ Ukraine.

²⁰ Uzbekistan.

²¹ Kazakhstan.

²² Georgia.

²³ All countries except Armenia answered this question.

(e) In Tajikistan, ministries, departments, committees and research organizations provide data to the Committee for Environmental Protection, which in turn summarizes the information and sends it to the State Statistics Committee, which in turn provides information to the public, the private sector and the media;

(f) In Uzbekistan, the State monitors pollution sources and environmental media;

(g) In Ukraine, the relevant data management system is being redeveloped based on Protocol on PRTRs requirements.

16. In relation to the provision of a short explanation of how environmental data are provided to the public in each country the survey responses revealed that:

(a) In Armenia, the national statistics service periodically prints information for the public and civil officials;

(b) In Azerbaijan, legislation allows the public to have wide access to environmental information. State agencies, local authorities, and industry sectors are obliged to maintain registers of environmental information and provide it to the public. The State is obliged to provide information at a citizen's request. Information is also provided upon negotiation by non-governmental organizations (NGOs) and members of public organizations. Moreover, information is available via State websites, reports and the media;

(c) In Belarus, environmental information is provided in accordance with national legislation;

(d) In Georgia, eight periodical publications are available to the public and the Aarhus Centre plays a role in that process;

(e) In Kazakhstan, information is provided upon a citizen's request (via post or e-mail);

(f) In Tajikistan, information is available to the public via national reports, the media, the Internet and quarterly periodicals published by the Committee for Environmental Protection;

(g) In Uzbekistan, information is available via State statistics on environmental monitoring, the State ecological bulletin, and via the main environmental websites (a list was provided);

(h) In Ukraine, regional data is available via website, quarterly reports are published by the State Statistics Committee, information on incidents impacting on the environment is disseminated by the Ministry of Emergencies, and a Law on Access to Public Information states that environmental information must be provided within 48 hours upon a citizen's request.

17. In relation to listing relevant major national and international programmes to support access to data and its dissemination in each country, in response to the survey:

(a) Armenia states that projects have the support of the United Nations Development Programme (UNDP), the Organization for Security and Cooperation in Europe (OSCE), the Global Environment Fund and others;

(b) Azerbaijan did not provide a specific answer;

(c) Belarus lists a project that has the support of the European Union (EU) and UNDP;

(d) In Georgia, the Environment and Security Initiative (ENVSEC) project has the support of OSCE;

(e) Kazakhstan lists national programmes and the establishment of an Aarhus Centre;

(f) Tajikistan lists national Government concepts, strategies, programmes, action plans, resolutions and decrees; the International Fund for Saving the Aral Sea; PRTR capacity-building supported by UNEP and its Strategic Approach to International Chemicals Management (SAICM); and support for Aarhus Centres by OSCE;

(g) Uzbekistan lists a programme of action for the protection of the environment and the development of a national programme for management of chemical substances, as well as SAICM implementation supported by the United Nations Institute for Training and Research;

(h) Ukraine lists a national environmental policy strategy, a national action plan to 2015, a project of online monitoring of emissions and an EU joint programme to support implementation of the Aarhus Convention and the ECE Convention on Environmental Impact Assessment in a Transboundary Context.

IV. Pollutant monitoring, diffuse release and bilateral cooperation

18. Further to the decision of the Bureau of the Meeting of the Parties to the Protocol on Pollutant Release and Transfer Registers at its second session,²⁴ the Bureau developed a questionnaire with the support of the secretariat that was distributed on 27 January 2012 to all national focal points for the Protocol on PRTRs and, for States where a PRTR national focal point had not yet been designated, to the national focal point for the Aarhus Convention.

19. The secretariat received a total of 28 responses²⁵ to the questionnaire, 20 from Parties to the Protocol,²⁶ 5 from Signatories²⁷ and 3 from other ECE member States.²⁸

20. The questionnaire consisted of three parts: part I, on pollutant monitoring; part II, on diffuse releases; and part III, on bilateral cooperation.

A. Pollutant monitoring

21. Part I, on pollutant monitoring, aimed to collect information on who pays for and who carries out pollutant monitoring in each country.

22. The responses to question one of the survey indicate that in the vast majority of countries operators pay for monitoring of point source releases (see figure 2). According to the 28 responses received, the survey showed that:

²⁴ Report of the second meeting of the Bureau, sect. III, available from <http://www.unece.org/env/pp/prtr-bureau.html>

²⁵ Responses to the questionnaire are available on the following webpage <http://www.unece.org/environmental-policy/treaties/public-participation/protocol-on-prtrs/areas-of-work/envppprtrcb/surveys.html>.

²⁶ The following Parties sent their responses to the questionnaire: Albania, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Latvia, Lithuania, Netherlands, Norway, Slovakia, Sweden (sent two responses), Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

²⁷ The Signatories that sent a response were Armenia, Greece, Ireland, Italy and Poland.

²⁸ Azerbaijan, Kazakhstan and Israel also sent responses to the questionnaire.

(a) In 26 countries,²⁹ operators pay for monitoring of point source releases;

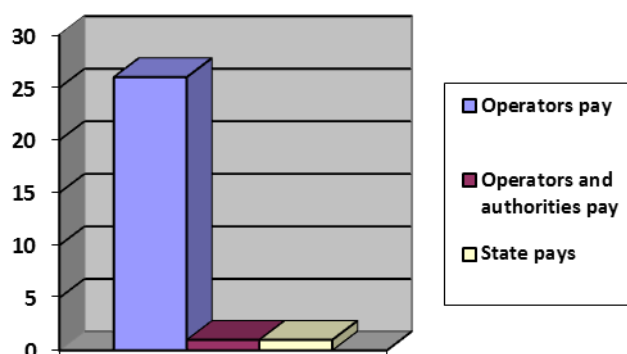
(b) In those 26 countries, in general all costs related to operation of such monitoring are fully covered by those polluters, but data coming from such monitoring are to be submitted to State organizations for insertion into emissions databases. The extent to which the operator covers the cost of the monitoring can vary. For example, in the former Yugoslav Republic of Macedonia, the required finances to perform monitoring of pollutants are prescribed in the regulation, “Decree on the amount of compensation paid by operators of installations carrying out activities which it is issued as A — integrated environmental permit”. Bulgaria also stated that operators also pay for onsite inspection and control monitoring of point sources when release limits are exceeded by the operator;

(c) Of the remaining two countries, in Austria monitoring of point source releases to air is financed by operators, and both operators and provincial authorities pay for monitoring of point source releases to water. Azerbaijan responded that pollutant monitoring of point source releases was financed by the State budget;

(d) Eleven countries³⁰ also additionally indicated that their Governments pay for monitoring of overall environmental quality. The responses received indicate that, in general, monitoring of pollutants occurring in environmental media (air, water and soil) — which in practice means monitoring of the quality of those media — is financially covered by the State Governments. The remaining 17 countries did not specifically address this aspect of the question.

Figure 2

Who pays for monitoring of point source releases



23. The responses to question two of the survey indicate that in the vast majority of countries operators carry out monitoring of point source releases (see figure 3). The survey revealed that, of the 28 responses:

(a) In 25 countries³¹ operators carry out monitoring of point source releases. Eleven of these countries also indicated that experts or private laboratories were sometimes employed by operators to carry out the monitoring of point sources;

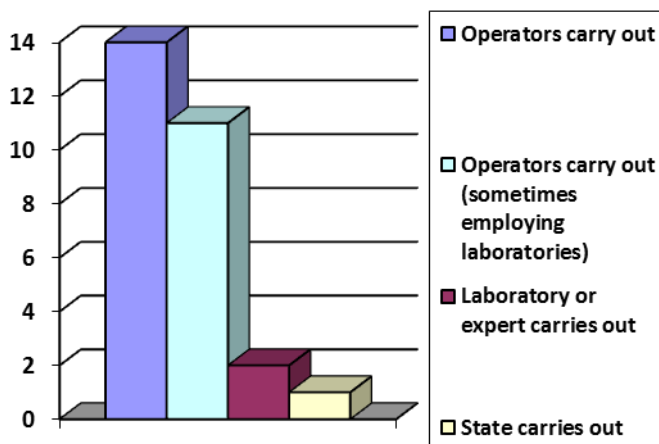
²⁹ All respondents except Austria and Azerbaijan.

³⁰ Albania, Austria, Azerbaijan, Czech Republic, Estonia, Greece, Hungary, Kazakhstan, Latvia, Slovakia and Spain.

³¹ All respondents except Armenia, Azerbaijan, and Denmark.

(b) For the remaining three countries: Armenia responded that pollutant monitoring of point source releases is carried out by experts from large enterprises; Denmark responded that, according to the terms in the environmental permit for the specific facility, the monitoring of point sources has to be carried out by a certified laboratory; Azerbaijan responded that pollutant monitoring of point source releases is carried out by the National Monitoring Department for Environment of the Ministry of Ecology and Natural Resources, and other State bodies.

Figure 3

Who conducts monitoring of point source releases**B. Diffuse releases**

24. Part II, on diffuse releases, aimed to identify data in relation to measuring or estimating diffuse releases.

25. In response to the question, “What are the diffuse releases that are measured, calculated or estimated in your country?” (see figure 4), the survey revealed that:

(a) For 15 countries³² diffuse releases are estimated or calculated for the agricultural sector (in areas such as cattle, pesticides, fertilizer, manure processing, agricultural land and agricultural fuels);

(b) For 13 countries³³ diffuse releases are estimated or calculated for the transport sector (in areas such as roads, railways, aviation, inland navigation, offshore fishing or shipping);

(c) For seven countries³⁴ diffuse releases are estimated for the energy sector (five of these countries³⁵ indicated measuring diffuse releases from building heating systems);

(d) Four countries³⁶ estimate or calculate diffuse releases for the industrial sector;

³² Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, Estonia, Germany, Hungary, Ireland, Italy, Lithuania, Slovakia, Spain, Sweden and United Kingdom.

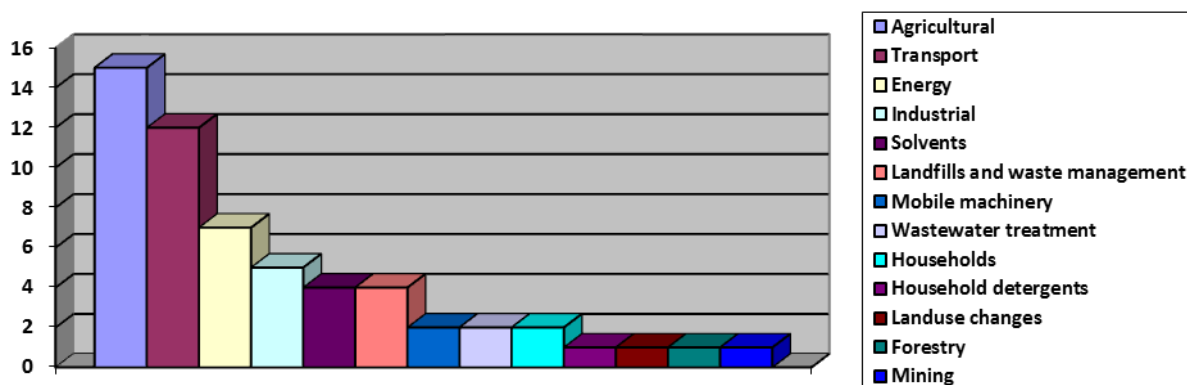
³³ Armenia, Austria, Belgium, Bulgaria, Estonia, Denmark, Germany, Israel, Italy, Kazakhstan, Spain, Sweden and United Kingdom.

³⁴ Austria, Belgium (Brussels region), Bulgaria, Estonia, Israel, Slovakia and Sweden.

³⁵ Austria, Belgium (All three regions), Estonia, Israel and Slovakia.

- (e) Four countries³⁷ estimate or calculate diffuse releases from solvents;
- (f) Four countries³⁸ estimate or calculate diffuse releases from landfills and waste management;
- (g) Sweden and Belgium estimate or calculate diffuse releases from mobile machinery and from wastewater treatment;
- (h) Germany and Spain estimate or calculating diffuse releases from households;
- (i) Bulgaria estimate or calculating diffuse releases from land use changes, forestry and from mining;
- (j) In Kazakhstan diffuse emissions from welding are estimated or calculated and diffuse emissions are taken into account when environmental impact assessments are conducted;
- (k) Slovakia estimates or calculates diffuse releases from household detergents and from atmospheric deposition;
- (l) Denmark estimates or calculates diffuse releases from anthropogenic sources without mentioning specific sectors.

Figure 4

Sectors for which diffuse releases are calculated or estimated

26. Some countries also indicated the substances that are measured, calculated or estimated when measuring diffuse releases (see figure 5):

- (a) Austria and Belgium (Walloon region) mentioned nitrogen to water, and phosphorus to water;
- (b) Hungary said that volatile organic compounds are in part measured and calculated based on mass balance and that ammonia (NH₃), methane (CH₄) and nitrous oxide (N₂O) from agricultural sector are estimated with emission factors;
- (c) Ireland reported that CH₄ is measured and estimated for landfills and livestock;

³⁶ Austria, Belgium (Brussels region), Estonia and Sweden.

³⁷ Belgium (Brussels region), Bulgaria, Estonia, and Sweden.

³⁸ Bulgaria, Estonia, Ireland and Slovakia.

(d) Israel stated that the following transportation releases are measured and calculated: mono-nitrogen oxide (NO_x), sulphur oxide (SO_x), carbon monoxide (CO), particulate matter (PM) and ozone, and that non-methane volatile organic compounds diffused releases are measured in Integrated Pollution Prevention and Control (IPPC) facilities;

(e) Poland mentioned NH₃, coarse PM (PM₁₀), NO_x, SO_x, CO and carbon dioxide (CO₂);

(f) Norway provided a comprehensive list of all substances that were measured for diffuse releases;

(g) Spain noted nitrogen, phosphorous, chemical oxygen demand in water and substances relevant to international conventions/protocols, such as the Convention on Long-range Transboundary Air Pollution;

(h) Switzerland provided a list of substances measured for diffuse releases to air and water;

(i) The United Kingdom of Great Britain and Northern Ireland mentioned that a project for the measurement of persistent organic pollutants diffuse releases was under way.

27. In response to the question, “Who pays for measuring diffuse releases in your country?” (see figure 5), the survey revealed that:

(a) For 17 countries³⁹ the State (or State bodies) pay for measuring diffuse releases;

(b) For five countries⁴⁰ operators paid;

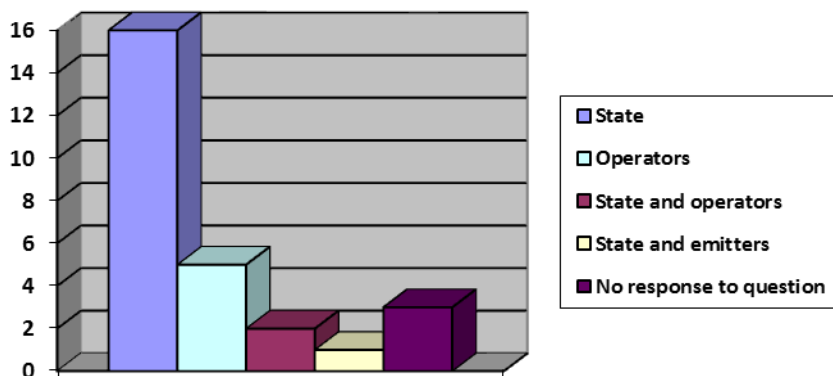
(c) For two countries⁴¹ State bodies and operators paid;

(d) For one country⁴² State bodies and emitters paid;

(e) For three countries⁴³ no answer was given.

Figure 5

Who pays for measuring diffuse releases?



³⁹ Albania, Armenia, Azerbaijan, Belgium, Czech Republic, Denmark, Estonia, Germany, Greece, Ireland, Netherlands, Norway, Poland, Slovakia, Spain, Sweden, and United Kingdom.

⁴⁰ France, Kazakhstan, Latvia, Lithuania, and the former Yugoslav Republic of Macedonia.

⁴¹ Hungary and Israel.

⁴² Switzerland.

⁴³ Austria, Bulgaria, and Italy.

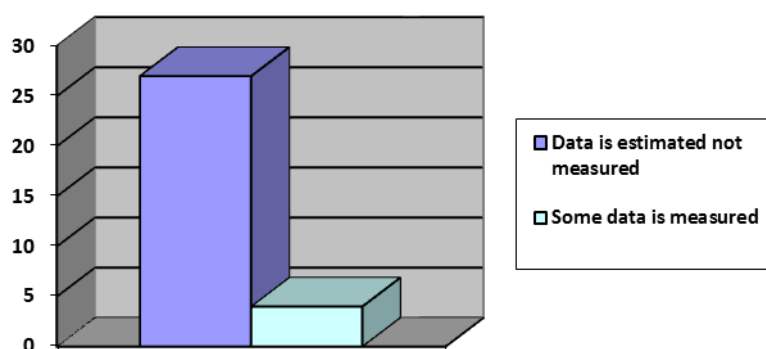
28. In response to the question, “How is data collected for measuring diffuse releases, including releases from agricultural farms, in your country?” (see figure 6), the survey revealed that:

(a) Almost all countries described how data is calculated or estimated rather than measured for most diffuse releases. Estimation methods described include: multiplying activity data by national emissions factors; IPPC methodologies; subtracting point source releases from national inventory data; utilizing monitoring networks, national statistics, consumption data, or geographical information system (GIS) mapping data; modelling; calculation software; and mass balance calculations;

(b) Three countries described aspects of data collection. Ireland described how data is collected from licensed facilities and from farms by State bodies. Lithuania mentioned that operators provide data. Switzerland mentioned emissions measurements at sources.

Figure 6

How is data collected on diffuse releases?



29. In response to the question “Who carries out the measurement or estimation of diffuse releases, including releases from agricultural farms in your country?” (figure 7), the survey revealed that:

(a) For 18 countries⁴⁴ State bodies or institutes carry out measurement or estimation of diffuse releases;

(b) For six countries⁴⁵ both State bodies and operators carry out it out;

(c) For two countries⁴⁶ operators carry it out;

(d) For one country⁴⁷ experts carry it out;

(e) For one country⁴⁸ the response was not specific.

⁴⁴ Austria, Azerbaijan, Belgium, Czech Republic, Denmark, Estonia, Germany, Greece, Israel, Italy, Netherlands, Norway, Poland, the former Yugoslav Republic of Macedonia, Slovakia, Sweden, Switzerland, and the United Kingdom.

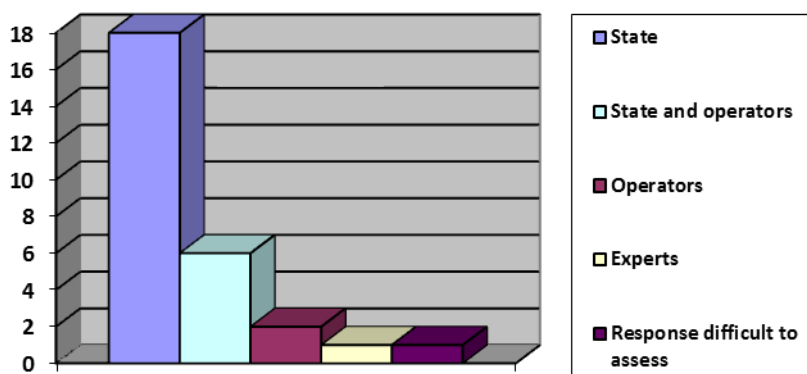
⁴⁵ Bulgaria, Hungary, Ireland, Latvia, Lithuania, and Spain.

⁴⁶ France and Kazakhstan.

⁴⁷ Armenia.

⁴⁸ Albania.

Figure 7

Who carries out measurement or estimation of diffuse releases?

30. Taken together, the answers to questions in part II indicate that all countries (apart from two)⁴⁹ estimate the vast majority of diffuse releases rather than measure them.

31. In response to the question, “What methodologies does your country use to measure or estimate diffuse releases, including releases from agricultural farms?” (figure 8), the survey reveals that almost all countries estimate diffuse releases, by using some of the following tools or a combination of these methods: multiplying activity data by national emissions factors; IPPC methodologies; subtracting point source releases from national inventory data; utilizing national statistics, consumption data, or GIS mapping data; modelling; calculation software; and mass balance calculations. In response to the question:

(a) Twelve countries⁵⁰ provided Internet links to the relevant data on the methodologies they use;

(b) Seven countries⁵¹ mentioned use of *EMEP/EEA*⁵² *Air Pollutant Emission Inventory Guidebook*⁵³ (formerly referred to as the EMEP CORINAIR emission inventory guidebook);

(c) Six countries⁵⁴ specifically mentioned the use of IPPC methodology or guidelines;

(d) Two countries⁵⁵ said they use the MODelling Nutrient Emissions in RIVER Systems (MONERIS) model for emissions to water;

(e) One country⁵⁶ indicated use of methods according to EU legislation and EU reporting obligations;

⁴⁹ Answers from Albania and Latvia were not fully complete.

⁵⁰ Albania, Bulgaria, Czech Republic, Germany, Israel, Italy, Netherlands, Norway, Slovakia, Sweden, Switzerland and United Kingdom.

⁵¹ Denmark, Estonia, Hungary, Lithuania, Slovakia, Spain and the former Yugoslav Republic of Macedonia.

⁵² The Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) and the European Environment Agency (EEA).

⁵³ Available from <http://www.eea.europa.eu/publications/emep-eea-emission-inventory-guidebook-2009>

⁵⁴ Armenia, Azerbaijan, Belgium (Walloon region), Denmark, Slovakia and Spain.

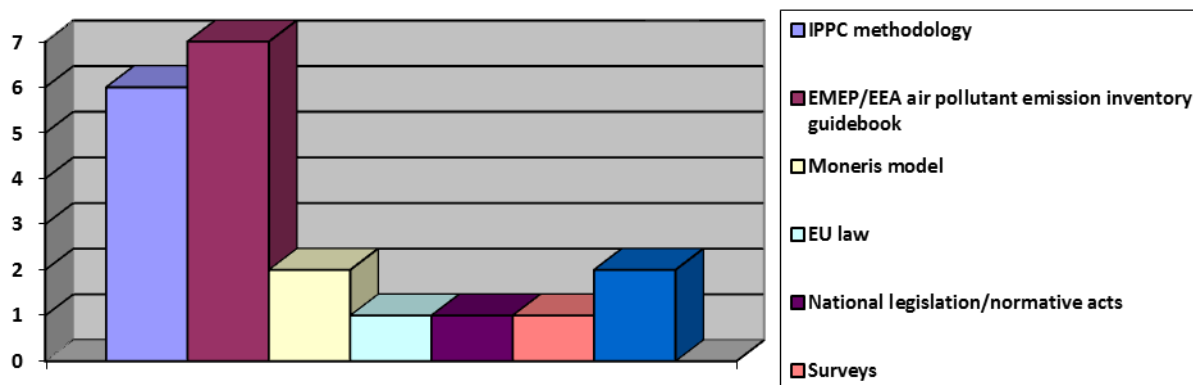
⁵⁵ Austria and Slovakia.

⁵⁶ Greece.

- (f) One country⁵⁷ referred to normative acts;
- (g) One country⁵⁸ mentioned the use of surveys to obtain agricultural statistics;
- (h) Two countries⁵⁹ did not answer this question.

Figure 8

What methodologies does your country use to measure or estimate diffuse releases?



32. In relation to the question, “Please provide any other information that you feel is relevant to the measurement or estimation of diffuse releases in your country”:

(a) Fourteen countries⁶⁰ answered the question. The answers provided covered: the provision of more relevant Internet links; encouraging experience exchange; a call to include diffuse releases in the PRTR monitoring system; perceived deficiencies in some emissions factors; the need for continuous improvement of models and emissions factors; and improvements and a pilot project for measuring diffuse emissions to water;

(b) Fourteen countries⁶¹ did not answer the question.

C. Bilateral cooperation

33. Part III of the survey, on bilateral cooperation, sought to identify potential for bilateral cooperation between countries so as to help meet countries’ needs for assistance and training in developing PRTRs. Bilateral cooperation is useful for countries developing PRTR systems as it enables learning and assistance that may not otherwise be possible, for example, due to lack of funds, and enables countries advanced in PRTRs to disseminate and share knowledge and expertise.

34. In relation to the question, “Would your country like to receive bilateral assistance from another country in relation to PRTR development?” (figure 9), in response to the survey:

⁵⁷ Kazakhstan.

⁵⁸ Italy.

⁵⁹ Armenia and Latvia.

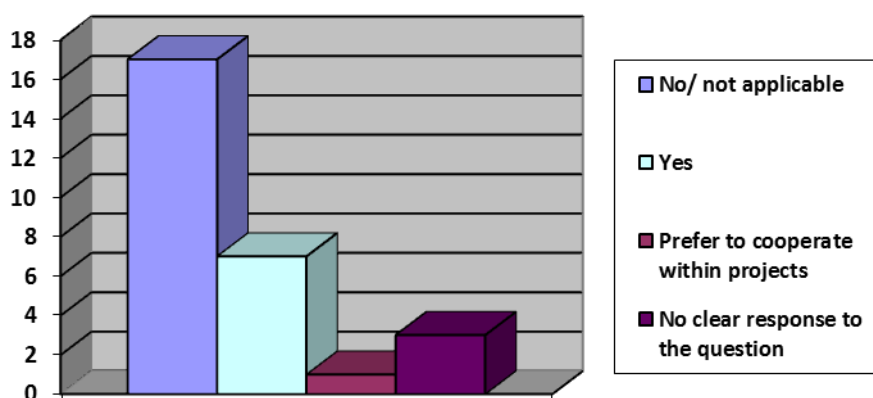
⁶⁰ Albania, Armenia, Austria, Azerbaijan, Estonia, Germany, Hungary, Italy, Kazakhstan, Poland, Slovakia, Sweden, Switzerland and United Kingdom.

⁶¹ Belgium, Bulgaria, Czech Republic, Denmark, France, Greece, Netherlands, Ireland, Israel, Latvia, Lithuania, Norway, Spain and the former Yugoslav Republic of Macedonia.

- (a) Sixteen⁶² countries answered “No” or “not applicable”;
- (b) Seven countries⁶³ answered “Yes”, indicating they would like to receive bilateral assistance;
- (c) One country (Slovakia) stated a preference for cooperation with other countries on joint projects;
- (d) One country (United Kingdom) stated it regularly exchanges knowledge as part of EU, OECD and UN PRTR development initiatives;
- (e) Three countries⁶⁴ did not provide an answer to the question.

Figure 9

Would your country like to receive bilateral assistance from another country in relation to PRTR development?



35. In response to a follow-up question, the seven countries that said they would like to receive bilateral assistance described the PRTR functional areas and issues in which their country would most like to receive assistance or training. The main areas listed for assistance were in relation to diffuse releases, setting up a PRTR register, electronic capture and storage of PRTR data, validation, release estimation techniques, reporting and expert advice on creation and promotion of PRTRs.

36. In relation to the question, “Can your country provide bilateral assistance on PRTR development to a country that is in need of assistance?” (figure 10), in response to the survey:

- (a) Fifteen countries⁶⁵ indicated “Yes”, they could provide bilateral assistance;
- (b) Nine countries⁶⁶ indicated “No”, they could not provide bilateral assistance;

⁶² Albania, Austria, Belgium, Czech Republic, Denmark, Estonia, France, Greece, Netherlands, Hungary, Lithuania, Norway, Poland, Spain, Sweden, and Switzerland.

⁶³ Armenia, Azerbaijan, Bulgaria, Ireland, Israel, Kazakhstan and the former Yugoslav Republic of Macedonia.

⁶⁴ Germany, Italy and Latvia.

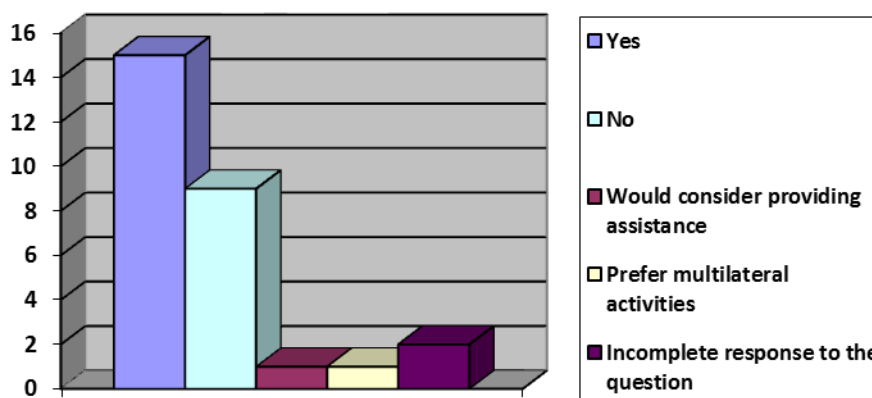
⁶⁵ Albania, Austria, Czech Republic, Germany, Ireland, Israel, Italy, Latvia, Netherlands, Norway, Poland, Slovakia, Spain, Sweden and United Kingdom.

⁶⁶ Belgium, Bulgaria, Denmark, Estonia, France, Greece, Lithuania, Kazakhstan and the former Yugoslav Republic of Macedonia.

- (c) One country⁶⁷ indicated it would consider providing assistance;
- (d) One country⁶⁸ indicated a preference for multilateral activities;
- (e) Two countries⁶⁹ provided incomplete responses to the question that were difficult to assess.

Figure 10

Can your country provide bilateral assistance on PRTR development to a country in need of assistance?



37. In relation to a follow-up question, the 15 countries that indicated they could provide bilateral assistance described the PRTR functional areas and issues in which their country could provide assistance or training. Functional areas listed included reporting, emissions data, implementation, experience exchange, guidance documents and training, legislation, website development and an open source tool for an electronic emissions register, data management, publishing data and awareness-raising activities targeting industry and the public.

38. In attempting to match the specific needs of countries requesting assistance with countries that have indicated they can provide assistance in a relevant area, some general observations can be made:

(a) Armenia requested bilateral assistance in the area of “methodology, institution and legislation for calculation and measure of release from diffuse resources”. The survey responses do not indicate these functional areas specifically, although Norway offers support in all functional areas, Slovakia, in monitoring methods, and the Czech Republic, Spain, and Italy in the area of developing the legislative framework;

(b) Azerbaijan requested bilateral assistance in the area of “training on the set-up of pollutant register and expertise of other countries”. The survey indicates that these needs could possibly be met in part by Germany, the Netherlands, Ireland, Latvia, Poland, Spain or Norway;

(c) Bulgaria requested bilateral assistance in the area of “measurement and calculation of emissions from diffuse sources in air and water; and deciding on emissions

⁶⁷ Azerbaijan.

⁶⁸ Switzerland.

⁶⁹ Hungary and Armenia.

reporting (which result to report under E-PRTR) in cases of vast discrepancies in atmospheric emissions values obtained by measurement and calculation methods”. According to the survey, these needs could be possibly be met in part by Austria, the Czech Republic, Germany, Latvia, Norway, Slovakia or Sweden;

(d) Ireland requested bilateral assistance in areas including: capturing, storing and validating and manipulating and using PRTR data; guidance documents; timelines; numbers of PRTRs received; and manpower. The survey indicates that these needs could possibly be met in part by Austria, the Czech Republic, Germany, the Netherlands, Norway, Spain, Slovakia or Sweden;

(e) Israel requested bilateral assistance in the areas “release estimation techniques, computerizing the system, and QA⁷⁰ methodology”. The survey responses show that these needs could be met in part by Austria, the Czech Republic, Germany, Norway, Spain or Slovakia;

(f) Kazakhstan, noting the great interest among the participants at the PRTR subregional workshop (see para. 6 above) in the demonstration of the operation of the PRTR systems in countries such as Norway, Poland and the Czech Republic, said that a series of similar workshops with enterprises, NGOs and Government agencies should be held. It also mentioned the need for international experts from the countries that had successfully implemented PRTRs to attend national seminars in Kazakhstan; for the expert assessment of a model PRTR system developed in Kazakhstan; for assistance with measures in order to prepare for the ratification of the PRTR Protocol; for expert advice on the creation and promotion of a PRTR in Kazakhstan; and for advice and technical support for the upcoming integration into the European PRTR. The survey indicates these needs could possibly be met in part by the Austria, the Czech Republic, Germany, Ireland, Italy, Latvia, the Netherlands, Norway, Spain, Slovakia or Sweden;

(g) The former Yugoslav Republic of Macedonia requested bilateral assistance in the areas “development of the PRTR database and user web application, training for authorities on the reporting process and obligations regarding a PRTR Protocol, and training for operators of facilities on the reporting process and obligations in different regions and/or for specific sectors”. According to the survey, these needs could be met in part by Austria, the Czech Republic, Germany, the Netherlands, Ireland, Latvia, Norway, Poland, Spain or Slovakia;

(h) In addition, Albania offers an experience exchange, Israel offers to discuss their experience to date, Italy offers assistance with PRTR legislation and the United Kingdom offers advice in setting up and implementing PRTR systems and possibly, some documentation.

39. In relation to the question, “Is your country already involved in bilateral cooperation with another country or international organization in relation to PRTR development?”:

(a) Thirteen countries⁷¹ indicated “Yes”, they are currently involved in bilateral cooperation or have been in the past. Of these 13 countries, 9 indicated they are currently providing assistance or have provided assistance in the past; 3⁷² said they are currently

⁷⁰ Quality assurance.

⁷¹ Austria, Azerbaijan, Czech Republic, Denmark, Germany, Italy, Kazakhstan, Norway, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

⁷² Azerbaijan, Kazakhstan and the former Yugoslav Republic of Macedonia.

receiving assistance or have received assistance in the past; and 1⁷³ indicated it is involved in a multilateral exchange;

(b) Eleven⁷⁴ countries indicated 'No' they were not currently involved in bilateral cooperation and of these 11 countries, two countries⁷⁵ indicated they had provided assistance in the past;

(c) Three countries⁷⁶ provided incomplete responses that were difficult to assess;

(d) One country⁷⁷ indicated they have applied to include a PRTR in some bilateral relations.

40. In summary, the survey responses on bilateral cooperation indicate that 15 countries are willing to provide bilateral assistance covering multiple functional areas. This appears to provide ample possibilities for meeting the bilateral assistance needs of the seven countries that have stated a need for assistance or a willingness to be involved in cooperative projects.

⁷³ Denmark.

⁷⁴ Armenia, Belgium, Bulgaria, Estonia, Greece, Ireland, Latvia, Lithuania, Netherlands, Poland and Slovakia.

⁷⁵ Netherlands and Poland.

⁷⁶ Albania, France and Hungary.

⁷⁷ Israel.