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Procedures and mechanisms facilitating the implementation of the Protocol: reporting mechanism

Synthesis report on the implementation of the Protocol on Pollutant Release and Transfer Registers

Prepared by the Compliance Committee with the support of the secretariat

Summary

The present report was prepared pursuant to decision I/5 of 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 and Access to Justice in Environmental Matters (see ECE/MP.PRTR/2010/2/Add.1), which requests the secretariat to prepare a synthesis of the national implementation reports submitted by Parties for each session of the Meeting of the Parties and to identify significant trends, challenges and solutions.

The Working Group of the Parties to the Protocol at its third meeting (Geneva, 20–21 November 2013) took note of the decision by the Bureau to entrust the Protocol’s Compliance Committee with the task of preparing the synthetic report on the status of implementation of the Protocol (ECE/MP.PRTR/WG.1/2013/2, para. 20).

Pursuant to these decisions, the Committee prepared the present synthesis report under the leadership of the Committee Chair and with the assistance of the secretariat.

## Contents

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1–4</td>
</tr>
<tr>
<td>I. Procedural aspects of the reporting cycle</td>
<td>5–11</td>
</tr>
<tr>
<td>II. General provisions (articles 3, 4 and 5)</td>
<td>12–33</td>
</tr>
<tr>
<td>III. Legislative, regulatory and other measures that implement article 7</td>
<td>34–57</td>
</tr>
<tr>
<td>IV. Reporting cycles (article 8)</td>
<td>58–67</td>
</tr>
<tr>
<td>V. Legislative, regulatory and other measures ensuring the collection of data and the keeping of records, and establishing the types of methodologies used in gathering the information on releases and transfers (article 9)</td>
<td>68–71</td>
</tr>
<tr>
<td>VI. Rules, procedures and mechanisms ensuring the quality of the data contained in the national pollutant release and transfer register (article 10)</td>
<td>72–82</td>
</tr>
<tr>
<td>VII. Ways in which public access to the information contained in the register are facilitated (article 11)</td>
<td>83–91</td>
</tr>
<tr>
<td>VIII. Confidentiality (article 12)</td>
<td>92–104</td>
</tr>
<tr>
<td>IX. Opportunities for public participation in the development of a pollutant release and transfer register system (article 13)</td>
<td>105–114</td>
</tr>
<tr>
<td>X. Access to justice (article 14)</td>
<td>115–122</td>
</tr>
<tr>
<td>XI. Promotion of public awareness of pollutant release and transfer registers (article 15)</td>
<td>123–141</td>
</tr>
<tr>
<td>XII. International cooperation (article 16)</td>
<td>142–161</td>
</tr>
<tr>
<td>XIII. Conclusions</td>
<td>162–183</td>
</tr>
</tbody>
</table>

## Annex

Internet addresses of national pollutant release and transfer registers and links to other databases and pollutant release and transfer registers | 34
Introduction

1. In accordance with article 17, paragraph 2, of the Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs) to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and further to decision I/5 of the Meeting of the Parties to the Protocol (see ECE/MP.PRTR/2010/2/Add.1), Parties must report on their implementation of the Protocol and agree to make their national implementation report publicly available.

2. The Working Group on Pollutant Release and Transfer Registers, at its fifth meeting, held from 22 to 24 October 2007 in Geneva, Switzerland, had considered a proposal from its Bureau on reporting requirements for the Protocol. In preparing the document, the Bureau had taken into account the experience under the Aarhus Convention with national implementation reporting and the guidance provided to the Parties by the Compliance Committee of the Aarhus Convention.

3. That proposal formed the basis of decision I/5, which requested each Party to submit to the secretariat, in advance of the second ordinary session of the Meeting of the Parties, a report in accordance with the format set out in the annex to decision I/5 on: (a) the necessary legislative, regulatory or other measures that it had taken to implement the provisions of the Protocol; and (b) their practical implementation. The decision also invited Signatories and other States not party to the Protocol to submit reports on measures taken to apply the Protocol, as well as international, regional and non-governmental organizations (NGOs) to report on their programmes or activities and lessons learned in providing support to Parties and/or other States in the implementation of the Protocol.

4. The present report is based on the national implementation reports (NIRs) submitted by Parties during the first reporting cycle. Its objective is to provide a strategic overview of the implementation of the Protocol rather than to evaluate the information provided in the NIRs. It also does not check the accuracy and completeness of the contents of the NIRs or review compliance on the basis of those reports’ contents. The report should be read with these limitations in mind.

I. Procedural aspects of the reporting cycle

5. In accordance with paragraph 4 of decision I/5 the deadline for submitting national implementation reports to the secretariat was 30 January 2014, i.e., five months before the second session of the Meeting of the Parties.

6. As of 20 March 2014, the secretariat had received NIRs from 27 of the 33 Parties, or well over two thirds of the total reports to be prepared.

7. The NIRs submitted on time were from Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Hungary, Ireland, Israel, Lithuania, Luxembourg, the Netherlands, Poland, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and the United Kingdom of Great Britain and Northern Ireland.

8. After the deadline, three further reports were submitted, namely those from the European Union (EU), Latvia and Norway. As of 20 March 2014, no reports had been

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4 The Republic of Moldova, although a Party to the Protocol, was not due to submit an NIR, as it only ratified the Protocol on 23 December 2013.
submitted by five Parties — Albania, Cyprus, Finland, Portugal and Slovenia — which made it very challenging for the Compliance Committee to prepare a full report.

9. No alternative reports were submitted by any stakeholder.

10. Germany and Romania submitted their NIRs in all three United Nations Economic Commission for Europe (ECE) languages. Estonia, France and Spain submitted their report in two ECE languages.

11. The synthesis report was prepared by the Compliance Committee, taking into consideration comments provided by the Bureau. Each member of the Compliance Committee worked on selected issues addressed in the NIRs; the Chair was the lead author of the report. In preparing their sections of the report, Committee members referred to the answers to questions in the questionnaire that corresponded to the issues on which they reported. The Compliance Committee did most of the substantive work at its second meeting (Geneva, 1–2 April 2014) and completed the first draft of the report electronically soon afterwards.

II. General provisions (articles 3, 4 and 5)

(a) Measures to implement the Protocol including enforcement measures (article 3, para. 1)

12. In terms of measures to implement the Protocol, many Parties’ answers do little more than name the respective laws within their legislative framework. Several Parties, however, go into further detail, briefly explaining the history and operation of their national legislation in this regard.

13. Concerning enforcement, the responses were less complete, with only some Parties discussing possible remedial action, charges or sanctions. Measures other than legislative and regulatory measures, for example, the establishment of a working group, are described only by a few Parties.

(b) Measures taken to implement more extensive or more publicly accessible PRTRs (article 3, para. 2)

14. With regard to public accessibility, several Parties remind us that the Protocol requires easily accessible PRTRs and do not describe additional action to make theirs more publicly accessible, while many Parties provide no answer. A few countries provide details on public accessibility that relates closely to what is required by the Protocol, but with some refinements: Croatia describes broader reporting which covers facilities not expressly required to make reports; and Slovakia has wider-spread access points to PRTR data, with links from a variety of web portals, and comments, remarks suggestions and questions from the public.

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5 Portugal submitted its NIR in the national language before the deadline. However, in the absence of a report in one of three ECE languages, it was impossible for the Compliance Committee to analyse the report in time to be included in the present report.

6 Austria, Belgium, Bulgaria, Denmark, EU, Ireland, Latvia, Lithuania, Norway and the former Yugoslav Republic of Macedonia.

7 Croatia, Czech Republic, France, Germany (i.e., the federal system), Hungary, Netherlands, Poland, Serbia, Spain, Sweden, Switzerland and United Kingdom.

8 Israel, Netherlands, Serbia, Slovakia, Sweden, Switzerland and United Kingdom.

9 Estonia, Netherlands and Switzerland.

10 Estonia, EU, Hungary, Ireland, Switzerland and United Kingdom.

11 Austria, Belgium, Bulgaria, Denmark, France, Israel, Latvia, Lithuania, Netherlands, Norway, Poland, Spain, Sweden (help guidelines for reporting facilities were developed) and the former Yugoslav Republic of Macedonia.
15. Serbia mentions that the search function is under construction.

16. Parties report that measures to improve user-friendliness include:
   (a) The possibility to download search results in file format;\textsuperscript{12}
   (b) The possibility to search for data marked as confidential and the reasons for confidentiality;\textsuperscript{13}
   (c) The inclusion of optional data (e.g., production volume);\textsuperscript{14}
   (d) Supplementary information;\textsuperscript{15}
   (e) The inclusion of background documents;\textsuperscript{16}
   (f) The possibility to download the whole dataset;\textsuperscript{17}
   (g) The inclusion of time series;\textsuperscript{18}
   (h) The inclusion of explanations.\textsuperscript{19}

17. Apart from Parties that implemented the minimum requirements of the Protocol,\textsuperscript{20} there were two further groups, namely Parties:
   (a) Encouraging and providing for additional voluntary reporting (Switzerland);
   (b) Having legislative and regulatory measures that exceed the Protocol’s minimum standard.

18. Most Parties have legislative and regulatory measures that exceed the Protocol’s minimum standard, including:
   (a) Belgium (European Pollutant Release and Transfer Register (E-PRTR), stricter thresholds, additional pollutants; refinements regarding reporting time frames, data collection procedures and completing pollutant release and transfer register (PRTR) waste data with those waste volumes below PRTR reporting thresholds in order to allow calculation of the full amount of waste produced (Flanders Region));
   (b) Croatia (128 pollutants, more activities, lower thresholds);
   (c) Czech Republic (more pollutants than in E-PRTR and no restriction to E-PRTR activities, lower threshold than required by the Protocol for some substances);
   (d) Denmark (certain enterprises must report additional information on water, energy and substantial resource consumption in a three-yearly environmental report);
   (e) Estonia, Bulgaria, Germany, Ireland, Norway, Poland, the United Kingdom (E-PRTR);
   (f) France (more pollutants, more facilities);
   (g) Israel (annual water and energy consumption, additional non-public information concerning quality control or development of environmental efficiency indicators is collected);

\textsuperscript{12} Germany, Switzerland
\textsuperscript{13} Germany
\textsuperscript{14} Germany
\textsuperscript{15} Germany
\textsuperscript{16} Germany
\textsuperscript{17} Germany, Switzerland
\textsuperscript{18} Switzerland
\textsuperscript{19} Switzerland
\textsuperscript{20} Hungary, Lithuania (a separate, unpublished database exists, which can be accessed upon request).
(h) Latvia (information also from smaller facilities);
(i) Netherlands (E-PRTR and more as stated in their answer);
(j) Slovakia (E-PRTR and waste and emission reporting without taking into account thresholds);
(k) Spain (115 substances require reporting and emission and waste reporting is done without thresholds. Wastes are reported individually, using the European List of Waste and per each case the corresponding final destination using recovery and disposal (R and D) codes);
(l) Sweden (E-PRTR and lower thresholds for about half the pollutants, further carbon dioxide (CO₂) emissions are reported separately for biogenic and fossil fractions).

(c) Measures taken to protect those that report violations (article 3, para. 3)

19. A number of Parties²¹ say their PRTR-related and general environmental legislation protects those reporting violations. Other Parties²² explain that there is protection in constitutional or other legislation for citizens exercising their rights.

20. In several cases²³ there is confidentiality as part of an established complaint system.

21. A few Parties²⁴ do not comment precisely on how national legislation may protect those who report violations, but Bulgaria refers to penalties for deficiencies in reporting by facilities.

22. Ireland mentions its new Protected Disclosures Bill, which it claims closely reflects international best practice (e.g., from the Group of 20/Organization for Economic Cooperation and Development (OECD), the United Nations and the Council of Europe) on whistle-blower protection.

23. Lithuania distinguishes between mandatory and voluntary reporting, referring to the obligation of citizens to report on certain provisions of national law. There is no special mechanism in national legislation to guarantee protection of whistle-blowers.

(d) Integration into other reporting mechanisms, elimination of duplicative reporting; special challenges (article 3, para. 5)

24. A few Parties²⁵ have established new electronic tools, while most Parties integrate their PRTR system with:

(a) Data from the existing waste management and emission recording systems;²⁶
or

(b) General environmental reporting or environmental information systems,²⁷ eliminating duplication in reporting at varying levels.

25. Systems for environmental information allow for cross institutional²⁸ and cross sectorial²⁹ use of the same electronic tool. In the case of Serbia, the PRTR system is and

²¹ Austria, Czech Republic, Germany, Hungary, Latvia and Spain.
²² Belgium, Croatia, Denmark, Estonia, EU, Israel, Netherlands, Norway, Slovakia, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom
²³ Belgium, Czech Republic, Estonia, Ireland, Latvia, Lithuania, Slovenia, Slovakia, Sweden and Switzerland.
²⁴ France, Poland and Serbia.
²⁵ EU, France and Spain.
²⁶ Austria, Bulgaria, Estonia, Lithuania, Slovakia, Switzerland and United Kingdom.
²⁷ Belgium, Croatia, Czech Republic, Denmark, Germany, Hungary, Ireland, Israel, Netherlands, Norway and Sweden.
will be used as basis to cover all reporting obligations and thus avoids any duplication of reporting.

26. Other Parties are developing software in conformity with the Protocol. For example, the Polish PRTR reporting is separate from other reporting obligations but Poland is currently developing an integrated solution for PRTR reporting. Furthermore, the former Yugoslav Republic of Macedonia plans to establish an integrated information system, part of which will be a PRTR.

27. A specific characteristic of the reporting system in Israel is that when reporting to a PRTR, facilities can see existing data, for their facility, originating from other databases of the ministry. Turning to challenges, a number of Parties noted that the complete removal of duplicative reporting is often linked to extensive changes to the relevant constituent legislation.

28. Further problems were encountered with regard to: standardizing interfaces and identification codes, coordinates, addresses, etc.; diffuse emissions from livestock; and formatting. In addition, there are difficulties such as inconsistencies among the various reports by a single Party to different international instances (e.g., United Nations Framework Convention on Climate Change (UNFCCC)) owing to variations in the definitions and categorizations for reporting and differences in the reporting periods.

29. There were reported synergies, inter alia, with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the ECE Convention on Long-range Transboundary Air Pollution (CLRTAP), the EU Industrial Emissions Directive, the EU Integrated Pollution Prevention and Control Directive (IPPC Directive), the EU Large Combustion Plants Directive, the European Emissions Trading System (ETS) and the EU Urban Waste Water Directive, as well as other wastewater discharge authorization regulations.

30. While the majority of the reporting countries provided for all of the search categories defined in article 5, paragraph 1, of the Protocol, some countries added the following options to their search engine:

(a) Year;

(e) How releases and transfers can be searched and identified (article 5, para. 1)

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28 Belgium, Czech Republic and Denmark.
29 Croatia — work in progress.
30 E.g., Estonia.
31 Croatia, Czech Republic and Slovakia.
32 Germany.
33 Hungary.
34 United Kingdom.
35 Netherlands.
40 Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, EU, Germany, Hungary, Latvia, Lithuania, Netherlands, Poland, Sweden, Switzerland, the former Yugoslav Republic of Macedonia (website public in the first half of 2014) and United Kingdom.
(b) Watershed/river basin district/catchment;\(^{42}\)
(c) Hazardous/non-hazardous waste;\(^{43}\)
(d) Synthesis by substance or activity;\(^{44}\)
(e) Confidentiality;\(^{45}\)
(f) Method of calculation/measurement/estimation;\(^{46}\)
(g) Total or accidental pollutant releases;\(^{47}\)
(h) Statistical Classification of Economic Activities in the European Community (NACE code);\(^{48}\)
(i) National licence number or equivalent;\(^{49}\)
(j) Download of the full database;\(^{50}\)
(k) Time series by facilities, emissions and waste transfer;\(^{51}\)
(l) Total emissions per county/municipality;\(^{52}\)
(m) Generation of graphic data display;\(^{53}\)
(n) Regulatory authority of the facility.\(^{54}\)

31. Some reports do not specify available search functions or only partially cover the categories listed in the Protocol: Ireland and Israel do not yet include environmental media or the destination of waste transfers; Norway does not include searches by activity or destination of waste transfers; Serbia still allows searches only by the name of the operator and the site; Slovakia allows searches according to reporting year and facility operator, with other search criteria retrieved on demand; and Spain does not include searches by owner or operator, and, as appropriate, company, but by facility.

32. Few countries have no national database with appropriate search functions as required by the Protocol. Estonia currently has its data only indirectly available through the website and search functions of E-PRTR.

(f) Information on links from Parties’ registers

33. Tables one and two in the annex to the present report contain the Internet addresses of national PRTRs (table 1) as well as a list of links to other databases and PRTRs (table 2).

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\(^{41}\) Croatia, Czech Republic, France, Germany, Hungary, Ireland, Lithuania, Spain, Switzerland and the former Yugoslav Republic of Macedonia.
\(^{42}\) France, Germany, Hungary, Ireland, the former Yugoslav Republic of Macedonia and United Kingdom.
\(^{43}\) France, Germany and Hungary.
\(^{44}\) France and Spain.
\(^{45}\) Germany.
\(^{46}\) Germany.
\(^{47}\) Germany.
\(^{48}\) Germany.
\(^{49}\) Hungary, Ireland and Israel.
\(^{50}\) Germany and Israel.
\(^{51}\) Spain.
\(^{52}\) Sweden.
\(^{53}\) Sweden.
\(^{54}\) United Kingdom.
III. Legislative, regulatory and other measures that implement article 7

(a) Are reporting requirements required by the national system (article 7, para. 1 (a) and (b))?  
34. Almost all of the Parties\(^{55}\) report that they have chosen the capacity threshold to identify the reporting facilities under article 7, paragraph 1 (a). Some of those that are also EU member States refer to the E-PRTR Regulation,\(^{56}\) which also implements this provision. Bulgaria reports that it implements both subparagraphs (a) and (b) of article 7, paragraph 1. The answer of three Parties\(^{57}\) is not clear.

(b) Is it the owner or the operator of each individual facility that is required to fulfil the reporting requirements (article 7, paras. 1, 2 and 5)?  
35. In almost all Parties\(^{58}\) it is the operator who is required to fulfil the reporting obligations. In Israel the owner and the operator are both obliged to report, and in Switzerland the owner or the operator is required to do so. In Slovakia the national law obliges the owner to report, but in practice it is often the operator who does so.

(c) Is there any difference between the list of activities for which reporting is required under the Protocol, or their associated thresholds, and the list of activities and associated thresholds for which reporting is required under the national PRTR system (article 7, para. 1, and annex I)?  
36. The NIRs submitted by Parties were not entirely clear in all respects with regard to differences between the list of activities for which reporting is required under the Protocol, or their associated thresholds, and the list of activities and associated thresholds for which reporting is required under the national PRTR system. For example, some EU member States’ answers do not adequately distinguish between information is in their national Registers and their reporting obligations to the E-PRTR.

37. Article 3, paragraph 2, of the Protocol provides for more extensive PRTRs than required by the Protocol; it follows that Parties might cover more activities or lower capacity thresholds than article 7, paragraph 1, and annex I of the Protocol strictly require.

38. Many Parties\(^{59}\) do not report any additional activities or lower capacity thresholds. Three Parties\(^{60}\) report that they have additional activities and lower capacity thresholds than listed in annex I to the Protocol. Two Parties (Latvia and Slovakia) only have lower capacity thresholds, and Norway only for some facilities the competent authorities decided on. Two Parties (Israel and Belgium (Flanders Region)) report additional activities. Germany states that it has only a small extension of activity 3b (Opencast Mining) where

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55 Austria, Belgium, Czech Republic, Denmark, Estonia, EU, France, Germany, Hungary, Ireland, Israel, Lithuania, Luxembourg, Netherlands, Poland, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.


57 Croatia, Latvia and Norway.

58 Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, EU, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Romania, Serbia, Sweden, the former Yugoslav Republic of Macedonia and United Kingdom.

59 Austria, Belgium (Brussels and Wallloon Regions), Bulgaria, Denmark, Estonia, EU, Hungary, Ireland, Luxembourg, Netherlands, Serbia, Sweden, Switzerland and United Kingdom.

60 Croatia, Czech Republic and France.
Quarries above 25 hectares are covered pursuant to the E-PRTR Regulation. Three Parties report that they have no additional activities but do also refer to the E-PRTR Regulation. Spain reports that it initially had no additional activities, but since 2013 additional activities were brought into the regime. Lithuania reports that it includes in the national register facilities that are below the capacity threshold but at the same time above the pollutant thresholds.

(d) Is there any difference between the list of pollutants for which reporting is required under the Protocol, or their associated thresholds, and the list of pollutants and associated thresholds for which reporting is required under the national PRTR system (article 7, para. 1, and annex II)?

39. Parties may also have additional pollutants or lower emission thresholds in their national PRTRs. A large number of the Parties to the Protocol are EU member States. The EU extended annex II to the E-PRTR Regulation to include a further five pollutants, lowered the emission threshold for polychlorinated dibenzodioxins (PCDDs)/polychlorinated dibenzofurans (PCDFs) and provided for five additional thresholds for releases into water. Four Parties report that they extended their national registers to cover those five additional pollutants. Five Parties simply mention that their reported pollutants differ from annex II to the Protocol because of the E-PRTR Regulation requirements. In these cases no further specifications were given. Serbia and Slovenia report that the pollutants have to be reported without any emission threshold. Four Parties explicitly mention the additional five pollutants and the six lower thresholds (PCDDs/PCDFs and water). Four Parties mention conformity with annex II to the Protocol; France in addition reports more pollutants than listed in annex II but does not specify them. A further three countries refer to the E-PRTR Regulation with its additional five pollutants and six lower thresholds; the Czech Republic reports on an additional 26 pollutants in waste, Germany on CO\textsubscript{2} from biomass and the Netherlands on an additional 22 lower thresholds. Norway states that it has more pollutants than listed in annex II to the Protocol, but without a fixed list of pollutants.

40. Spain reports on 115 pollutants in its national register — 91 E-PRTR-Pollutants, 6 additional air pollutants and 18 additional water pollutants. For the Spanish national register no emission thresholds are applicable.

41. Sweden also reports on the additional five E-PRTR pollutants and on CO\textsubscript{2} from biomass and fossil fuels. For 29 pollutants there are lower thresholds than in annex II of the Protocol. A specific feature of the Swedish national register is that 26 pollutants from annex II to the Protocol were not included because they had been banned or phased out in Sweden some time ago. The Swedish report adds, “However, in the case of unintentional formation of one of these substances, any emissions that exceed the threshold given in the E-PRTR regulation must be reported.” Furthermore, releases to land are not included in the Swedish national register. This was based on the conclusion of Swedish experts that relevant releases to land did not exist in Sweden.

42. Croatia reports on 128 pollutants in its national register in total; lower emissions thresholds are fixed for 25 water pollutants, 39 air pollutants and 1 soil pollutant.

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61 Poland, Romania and the former Yugoslav Republic of Macedonia.
62 Austria, Bulgaria, Hungary and Ireland.
63 Luxembourg, Poland, Serbia, Slovakia and United Kingdom.
64 Belgium, Lithuania, Romania and the former Yugoslav Republic of Macedonia.
65 Denmark, Estonia, France and Latvia.
66 Czech Republic, Germany and Netherlands.
43. Israel reports on 114 pollutants in its national register and some lower emission thresholds.

44. The only Party with no differences from annex II to the Protocol is Switzerland.

(e) Does the Party apply a type of threshold for any particular pollutant or pollutants listed in annex II to the Protocol other than those referred to in subsection (a) above and, if so, why (article 7, para. 3, and annex II)?

45. Article 7, paragraph 3, allows an exception from the chosen approach according to article 7, paragraph 1. Parties could choose this exception in order to extend reporting. It was originally included in the Protocol for those countries that use the “manufacture, process or use-threshold” for reporting of, for example, climate gases such as CO\textsubscript{2}, etc.

46. None of the Parties has made a decision to use the thresholds provided for in article 7, paragraph 3.

(f) Which is the competent authority designated to collect the information on releases of pollutants from diffuse sources specified in paragraphs 7 and 8 (article 7, para. 4)?

47. In many Parties\textsuperscript{67} the competent authority for the collection of emissions from diffuse sources is a national environment agency. In two Parties\textsuperscript{68} the environment ministry is the competent authority, and for the EU it is the Commission. Several Parties reported different authorities.\textsuperscript{69} France reports that only diffuse emissions from facilities but no emissions from diffuse sources are included in the national register. In Croatia emissions from diffuse sources are not yet defined in detail. Similarly, the former Yugoslav Republic of Macedonia and Latvia do not yet include emissions from diffuse sources. It is not clear which competent authority is responsible in Norway for emissions from diffuse sources. Some Parties appoint more than one competent authority to cover different areas of responsibility.

(g) Are there any differences between the scope of information to be provided by owners or operators under the Protocol and the information required under the national PRTR system, and is the national system based on pollutant-specific (para. 5 (d) (i)) or waste-specific (para. 5 (d) (ii)) reporting of transfers (article 7, paras. 5 and 6)?

48. All Parties report that they use the waste-specific approach provided for in article 7, paragraph 5 (d) (ii), so operators report the amounts of hazardous waste and other waste if they transfer quantities of these wastes in excess of 2 tons per year in the case of hazardous wastes and 2,000 tons per year in the case of other wastes. Most of the Parties clearly explained this; some Parties\textsuperscript{70} hinted at this by referring to their reporting under the EU E-PRTR-Regulation or by referring to the waste thresholds. A few Parties\textsuperscript{71} did not answer the question about the waste or pollutant-specific approach. Two Parties\textsuperscript{72} reported that they also implemented the pollutant-specific approach. The Czech Republic implemented pollutant-specific reporting for waste for 26 pollutants.

\textsuperscript{67} Austria, Bulgaria, Czech Republic, Denmark, Estonia, Germany, Ireland, Lithuania, Romania, Serbia and Sweden.

\textsuperscript{68} Czech Republic and Israel.

\textsuperscript{69} Such as Inspectorates (Czech Republic and Hungary), National Centres (Poland), Institutes (Slovakia), Federal Offices (Switzerland), Departments (Spain and United Kingdom) and environmental administration in general (Luxembourg).

\textsuperscript{70} Croatia, Czech Republic, Netherlands, Poland, Romania and United Kingdom.

\textsuperscript{71} EU, Luxembourg and Serbia.

\textsuperscript{72} Czech Republic and Israel.
49. Bulgaria reported that it did not implement the reporting of extraordinary events for pollutants in wastewater and for waste.

50. The Croatian register does not differentiate between releases and transfers of pollutants in wastewater, nor does it differentiate between waste destined for recovery or disposal.

51. France reported that it did not report the waste destination and the recovery or disposal activities.

52. Several Parties report additional information in their national registers. Some of them explain that the E-PRTR Regulation requires additional information in their national registers. Others report additional information in their national registers, for example, reporting of waste codes. In the Croatian register, waste thresholds are lower than in the Protocol: 50 kilograms per year for hazardous waste and 2 tons per year for non-hazardous waste. Ireland reports on additional waste reporting requirements for its national waste compilation. Israel has information on water and energy consumption in its register. Similarly, in the Dutch register there is also information on water consumption; moreover, amounts of hazardous or non-hazardous waste have to be reported to the Netherlands. The United Kingdom reports that it implements the Nomenclature of Territorial Units for Statistics (NUTS) codes, the NACE codes and the river basin districts in their national register pursuant to the E-PRTR Regulation. The E-PRTR contains voluntary information on production volumes, the number of installations, operating hours or employees and an additional field for textual information of the companies.

(h) Which diffuse sources have been included in the register and how can they be searched and identified by users in an adequate spatial disaggregation; where diffuse sources have not been included, what measures have been taken to initiate reporting on them (article 7, paras. 4 and 7)?

53. Seven Parties directly enter emissions from diffuse sources in their national registers, two of them for emissions to air only. Five Parties give links to web pages with information on emissions from diffuse sources. Four Parties refer to the E-PRTR, where emissions from diffuse sources from those Parties are included. Ten Parties neither include emissions from diffuse sources in their register nor link to websites containing emissions from diffuse sources. Several Parties undertake measures to enter emissions from diffuse sources directly into their national registers. Some are planning first steps (e.g., by incorporating the obligations in laws or ordinances) or have already fixed the obligations in their laws; others have current projects for introducing the data. Only France reports no plans to include emissions from diffuse sources in the short term. Several Parties refer to national reporting obligations according to international treaties. As far as emissions from diffuse sources into water are concerned, most Parties focus on nitrogen and phosphorous emissions.

73 Croatia, Netherlands and Spain.
74 Belgium (Flanders Region), Denmark, EU, Netherlands, Norway, Sweden and Switzerland.
75 Denmark and Sweden.
76 Austria, Czech Republic, Germany, Spain and United Kingdom.
77 Estonia, Ireland, Lithuania and Romania.
78 Belgium (Walloon and Brussels Regions), Bulgaria, Croatia, France, Hungary, Israel, Poland, Serbia, Slovakia and the former Yugoslav Republic of Macedonia.
79 E.g., Croatia.
80 Israel.
81 E.g., Germany and the EU for water.
82 E.g., CLRTAP and the United Nations Framework Convention on Climate Change.
What methodologies are used to derive the information on diffuse sources (article 7, para. 8)?

54. When applying the methodologies for data collection of emissions from diffuse sources, air and water emissions were taken into account by the Parties.

55. Several Parties had methodologies for reporting emissions to air related to their other reporting requirements under EU regulations, CLRTAP or UNFCCC (e.g., the EMEP/EEA air pollutant emission inventory guidebook or Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories). Hungary added that operators reported emissions on agriculture and pharmaceutical companies. Some Parties do not have applicable methodologies for reporting of emissions from diffuse sources. A couple of them reported that they have already started examination of possible methodologies or started with reporting on one sector. A few Parties did not describe their methods, but sent links to websites containing the descriptions.

56. Germany did not describe its methodology; it referred to a current research project. Two Parties stated that their methodologies depend on the respective sector and pollutant. Switzerland explained that reporting on emissions from diffuse sources is based on internal reporting on air and climate.

57. Significantly less information was reported about water; a few Parties reported that for water, in principle, an activity rate is multiplied by an emission factor. In Switzerland the Rhine data from 2005–2007 are the basis of water emissions from diffuse sources. In Austria the methodology is based on the Modelling Nutrient Emissions in River Systems (MONERIS) approach.

IV. Reporting cycles (article 8)

(a) The reporting year (the calendar year to which the reported information relates)

58. Most Parties reported on the beginning of reporting to their national registers and the available reporting years. Many of the Parties reported that their first reporting year for their national PRTR was 2007. Most of them also had to report their data to the European Commission and its E-PRTR according to the E-PRTR Regulation. In Belgium, the Walloon Region started in 2008 and the Brussels and Flanders Regions in 2010. The Croatian and Serbian PRTR started in 2008; in Croatia 2007 was a transitional reporting year. The Czech Republic started in 2009. Latvia reported that its first reporting year was 2010.

59. In Bulgaria the Protocol entered into force in 2010 and the first reporting year was 2011. For the former Yugoslav Republic of Macedonia the Protocol entered into force in 2013 and the first reporting year was 2014. Norway has had its national register since 1994,
but some requirements of the Protocol were implemented later or are not yet implemented (e.g., reporting on aquaculture and landfills). In Luxembourg the first reporting year was 2001. Denmark reported that 2011 was the relevant reporting year for its implementation report, and for France and Israel their NIR information related to 2012.

(b) Deadlines by which owners or operators of facilities were required to report to the competent authority

60. Many Parties\(^93\) required the operators to report by the end of March of the year following the reporting year. Croatia, Latvia, Lithuania and Norway set the first of March of the year following the reporting year, the Flanders Region of Belgium 15 March and there were a number of different dates for the United Kingdom.\(^94\) Estonia has earlier deadlines\(^95\) for the operators. In three Parties\(^96\) the deadline for operators is the end of May in the year following the reporting year. In Romania it is the end of April, in the Brussels Region of Belgium it is the end of June and in Luxembourg and Switzerland the end of July in the year following the reporting year. Several Parties report on the possibility to extend the deadline or report that the deadline for the first reporting year was later. Spain reports that setting deadlines for reporting from facilities is a regional competence. However, for the reporting of the regions themselves there is a mandatory deadline at the national level of 30 June in the year following the reporting year.

61. The EU set the deadline for its member States at the end of March in the second year following the reporting year (i.e., 15 months after the end of the reporting year).

(c) The date by which the information was required to be publicly accessible

62. In order to provide the public with up-to-date information on pollutant releases and transfers, the Protocol set a maximum deadline of 15 months after the end of the reporting year for making the reported data publicly available in the registers. Twelve Parties make the data available within 12 months after the end of the reporting year.\(^97\) Some Parties\(^98\) make use of the whole 15-month period; seven Parties\(^99\) need only 14 months. Three Parties\(^100\) state that they make the data publicly available within 16 months after the end of the reporting year and refer to the E-PRTR Regulation.

63. The former Yugoslav Republic of Macedonia states that its national laws do not yet make any provision on this issue.

64. The EU reports that they publish the data in the register 16 months after the end of the reporting year.

93 Belgium (Walloon Region), Bulgaria, Czech Republic, France, Hungary, Ireland, Israel, Netherlands, Poland, Serbia, Slovakia, Spain, Sweden and the former Yugoslav Republic of Macedonia.
95 End of January for air and waste reporting and the beginning of February or March for water.
96 Austria, Denmark and Germany.
97 Sweden, daily update; Serbia, immediately after verification; Bulgaria, 1 June; Norway, 1 July; Czech Republic, 30 September; Spain, 15 November; Israel, 1 December; Croatia, 15 December; United Kingdom, third Monday in December; Slovakia and France, 31 December; Poland, immediately after reporting but within 15 months after the end of the reporting year by the latest.
98 E.g., Netherlands and Romania.
99 Belgium, Denmark, Germany, Hungary, Latvia, Luxembourg and Switzerland.
100 Austria, Ireland and Lithuania.
65. Almost all Parties report that in general the reporting deadlines were met by the operators. Only four Parties\textsuperscript{101} had a significant number of facilities with delayed reporting. Reasons for delays include technical problems, information technology problems, technical difficulties with online forms, adjustments to changed requirements, replacement of employees, negligence, forgetfulness and lack of awareness about the reporting requirements.

66. Even Parties where the deadlines were met report some reasons for delays. Poland reports on problems with the deadline for publication of the data on the Internet (due to technical problems with the Internet platform). Some Parties\textsuperscript{102} do not give any information or clear information on this subject. Norway reports that some activities, such as aquaculture and landfills, are not yet in the register and therefore not published on time. Serbia did not report on this subject at all.

67. Electronic reporting is used by most of the Parties;\textsuperscript{103} several Parties\textsuperscript{104} additionally use online reporting. However, reporting on paper is still done by some Parties or sectors, for example, in Hungary a majority of operators prefer paper reporting. In Slovakia a majority reports by e-mailing editable documents. Spain reports that many owners/operators (around 40 to 50 per cent) of intensive livestock farming facilities still report using paper forms. Croatia reports that the paper-reporting quota depends on the demographic structure and the kind of facilities in the different regions. Poland requires signed hard copies in addition to electronic reporting.

V. Legislative, regulatory and other measures ensuring the collection of data and the keeping of records, and establishing the types of methodologies used in gathering the information on releases and transfers (article 9)

68. All reporting countries have the basic legislative, regulatory and other measures required by article 9 of the Protocol. Mostly measures were developed earlier and have been incorporated in environmental protection laws and special laws relating to specific media or issues (for example, air protection, surface water, groundwater, land and waste management laws and regulations).

69. The EU, in parallel with the Protocol on PRTRs, also established its own European register (i.e., E-PRTR) through the E-PRTR Regulation. A considerable number of the reporting Parties are EU member States. The E-PRTR Regulation is directly applicable for

\textsuperscript{101} Croatia, France, Poland and Sweden.

\textsuperscript{102} Croatia, Hungary, Slovakia, Switzerland and United Kingdom.

\textsuperscript{103} Austria, Belgium (two regions), Bulgaria, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Ireland, Israel, Latvia, Luxembourg, Netherlands, Norway, Poland, Romania, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

\textsuperscript{104} Bulgaria, Croatia, Denmark, France, Germany, Israel, Netherlands, Romania, Spain, Sweden, Switzerland and United Kingdom.
the EU member States. Seventeen EU countries reported that the E-PRTR Regulation applies in their national legal system and is part of the national PRTR regulatory system. Several countries apply their own regulations for the national PRTR.

70. All the reporting States have their own regulatory measures for establishing the types of methodologies used in gathering the information on releases and transfers. In addition, operators are required to report on which procedures are applied under article 5, paragraph 1, of the E-PRTR Regulation.

71. Article 9 provides for record-keeping and storing of derived data for a period of five years, using the best available information. In most reporting Parties, operators report electronically and data are stored in electronic databases. However, some reports failed to answer certain questions, particularly those relating to the record-keeping, data storage and using the best available information. A number of the reporting Parties do not mention this in their NIRs. Most Parties report that legislation implementing the Protocol requires data to be stored for five years. Many States further mention that operators must use the best available information.

VI. Rules, procedures and mechanisms ensuring the quality of the data contained in the national pollutant release and transfer register (article 10)

72. Pursuant to article 10, paragraph 1, of the Protocol, all countries have developed measures, rules, procedures and mechanisms to ensure the quality of the data contained in the national PRTR.

73. In several countries it is necessary to assess the quality of the data with regard to completeness, consistency and credibility following the E-PRTR guidance. Many Parties have developed their own methodology to ensure the quality of the data in the PRTR report. Belgium has given detailed information on its methodology for validation. In addition to regular controls and data comparison for quality control, Luxembourg points out that they have further practical measures to guarantee better data quality — namely their capacity-building activities and by making calculation methodologies available to concerned facilities. The procedure for assessing the PRTR report is laid down by means of a “road map” in the Dutch PRTR Guidelines. The Croatian Environment Agency plans to prepare a “Manual for Keeping the Environmental Pollution Register”, which will contain instructions for working with the Environmental Pollution Register and procedures for data quality assurance. In three States the data quality assurance is required by the conditions of the applicable permit. Additionally, a few Parties use automatic tools for data validation.

74. In 2013 the Danish Environmental Protection Agency introduced automatic quality assurance of PRTR information reported through green accounts at www.virk.dk. The Croatian Environment Agency prepares the “Manual for Keeping the Environmental Pollution Register” containing instructions for work with the Environmental Pollution Register and procedures for data quality assurance. In Israel there are two types of quality assurance.

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105 Croatia (a new EU accession country), France, Ireland, Israel, Norway, Serbia, Spain, Switzerland and the former Yugoslav Republic of Macedonia.
106 Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Ireland, Netherlands, Romania and Spain.
107 Belgium, Croatia, Luxembourg, Netherlands, Poland, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.
108 Lithuania, Norway and Romania.
109 Denmark, EU and Ireland.
assessment: limited and extended quality assessment. In Spain a working group deals with every PRTR issue and analyses the reporting exercise each cycle. Its main aim is to find consensus, to the extent possible, on setting harmonized validation criteria.

75. Three Parties said the quality of data reported was good; the others did not comment.

76. In Austria, the experience from the consistency checks at the national level shows that consistency of PRTR data with data reported under other reporting obligations is high because only few errors are detected.

77. In Croatia, a continuous improvement in terms of the quality of the submitted data has been recorded since the establishment of the Environmental Pollution Register system in 2008.

78. In Denmark, an overall assessment of the quality of the forwarded PRTR information has not yet been carried out. However, in 2010 a number of entry errors were found and the scope of these errors has not been calculated. In 2011, the number of entry errors found was considerably lower.

79. In Hungary, the completeness of data provided by the operator is generally good. According to the competent authority, the credibility of data reported by the operators is satisfactory; the competent authority acts in accordance with the procedures prescribed by the applicable laws and issues the permit for the operator, which provides the field-related data in compliance with the provisions contained in the permit.

80. In Ireland, the manual validation process has improved the quality of data reported by operators by highlighting changes from previous years.

81. In Switzerland, the verification system has proven to be useful in detecting inconsistencies in the data and obvious entering errors.

82. In the United Kingdom, the quality of data has seen year-on-year improvements since additional checks were introduced.

VII. Ways in which public access to the information contained in the register are facilitated (article 11)

83. Article 11 provides for public access to information in the PRTRs. Almost all Parties reported complete accessibility of PRTR data via direct electronic means (for Internet addresses of national PRTRs, see annex, table 1).

84. Three Parties are still developing PRTR systems to provide electronic access to data. Estonia is still designing its PRTR system, and so its data publishing remains incomplete. The development of Serbia’s PRTR web page is being supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety; at the moment the web page provides data for 2010–2012. The launch of the complete web portal of PRTR of the former Yugoslav Republic of Macedonia is scheduled for the first half of 2014.

85. Romania reports that the access to data covered by the Protocol is being provided via E-PRTR.

86. Parties emphasize also the user-friendliness and comprehensibility of data held in national PRTRs. The web pages of Denmark and Switzerland provide explanatory information on how to use PRTR data by applying relevant filters. The interfaces and basic

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110 Estonia, Serbia and the former Yugoslav Republic of Macedonia.
111 See http://prtr.anpm.ro.
search tools of Austrian, Belgian (Flanders), Dutch, Irish, Norwegian, Swedish and Swiss
PRTR web pages are also available in English. The Spanish PRTR web page is available in
English, Spanish, Catalan, Galician and Basque. The Irish PRTR data can be accessed from
several locations on the Irish Environmental Protection Agency home page, including under
“data reporting and data sets” (www.epa.ie/data), “enforcement” (epa.ie/enforcement) and
“map my area” (http://gis.epa.ie).

87. Only a few Parties\textsuperscript{112} referred to administrative procedures that ensure provision of
data upon request within the meaning of article 11, paragraph 5. Spain reports that 95 per
cent of data enquiries are made through the electronic database, so only 5 per cent of
enquiries are through administrative procedures. In Croatia, an environmental pollution
registry helpdesk has been operating since 2008 and is responsible for providing data when
requested by the public and competent authorities. The Ministry of Environment of the
Czech Republic also provides, on request and in cooperation with the Czech Environmental
Information Agency, individualized outputs from the PRTR system according to an
applicant’s specific requirements.

88. Countries emphasize that there is free accessibility of PRTR data from direct
sources; however, there was no discussion of charges for reproducing and mailing
information upon a request by a member of the public or other concerned entities.

89. In order to promote wider access to PRTR web pages, Parties regularly disseminate
materials in the form of summary reports, reviews, soft copies, guidance, etc. In Spain
events are often organized either to announce publication of new data or to present new
design or functionalities of the website. The United Kingdom announces each year’s PRTR
data publication on the website of the Department for Environment, Food and Rural Affairs
(Defra) as well as on other government websites.

90. Frequently, web pages disseminating environmental information cross-refer to the
PRTR page and vice versa. It is notable that five Parties\textsuperscript{113} reported collection of statistical
data on the acquisition of PRTR pages. Switzerland monitors the number of visitors and
database queries per month as a criterion for awareness about the Swiss PRTR.

91. Sweden reports that the number of visitors to its PRTR has increased by 50 per cent
in three years: from approximately 16,000 per year in 2011 to approximately 24,000 per
year in 2013. In Croatia, for the period from 1 March 2010 until 18 September 2013, the
total number of visits was 227,087, i.e., on average 56,771 visits per year. From
12 December 2012 until 18 September 2013 the percentage of new visitors increased by
73.87 per cent. In order to make it easier to use the Swedish PRTR, it will be integrated
with the Swedish Environmental Protection Agency website (www.naturvardsverket.se) at
the beginning of 2014. This is being done in response to a 2010 user review of the PRTR
site.

VIII. Confidentiality (article 12)

\textbf{Legislation}

92. A number of countries do not report on the legal basis for withholding confidential
information, but only give information on their practical experience with confidentiality
claims. In contrast, France and Spain only report on the legal transposition of article 12 into
national legislation and not on the practical experience. In Spain, the mandatory data
included in the PRTR-España Register are considered to be “environmental information”
which cannot be subject to confidentiality claims.

\textsuperscript{112} Croatia, Czech Republic, Estonia, Lithuania and Spain.
\textsuperscript{113} Austria, Croatia, Spain, Sweden and Switzerland.
Israel’s legislation is more restrictive compared, for example, to EU legislation. Israel reports that in order to prevent damage to various interests, such as State security and public safety, or the protection of trade secrets, sections 12 (b) and (c) of the Environmental Protection Law provides that a number of categories of information are not available to the public.  

Serbia reports that data about emissions into air, water and soil and concerning waste management cannot be considered as confidential. All data must be submitted, but the Serbian Environmental Protection Agency is responsible for data confidentiality for data that need to be protected; fuel and chemicals consumption or production data are not published and they are not available to anyone other than PRTR administrators. These data are used only in the verification process of submitted data.

Croatia reports that data marked as confidential are available only to employees who are responsible for Environmental Pollution Register-related activities in the Environmental Protection Inspectorate and the Croatian Environment Agency.

Practical experience

Many countries\textsuperscript{115} report that there are no cases where information contained in the register is treated as confidential. Sweden reports that there was one confidentiality claim, but the facility concerned decided that protection of the information was not needed and stopped claiming confidentiality.

Some countries\textsuperscript{116} report that a number of companies that are obliged to report data under the Protocol requested confidential treatment of the information. Bulgaria has accepted all such confidentiality claims.

Croatia reports that data confidentiality requests submitted by State-owned companies and institutions mainly refer to the data relating to company organization, the number of employees and geographical location, while private firms request confidentiality concerning production capacities and the technologies used.

In several countries\textsuperscript{117} only data on waste generation and shipment were requested to be dealt with as confidential. For example, in Luxembourg an operator from the hazardous waste treatment sector claimed commercial confidentiality each year with respect to information on shipments of hazardous waste abroad. In most countries, companies did not request confidentiality with respect to emissions to air and wastewater. In Denmark companies explained that competing companies could gain insights into sensitive financial information, and that there were very few enterprises in the relevant sector, so disclosing the figures could give competing enterprises an unintentional competitive advantage.

Israel reports that the information provided to the public does not include full details about the type of waste transferred from a facility as it is reported to the Ministry of Environmental Protection, but includes the total amounts of hazardous and of non-hazardous wastes transferred by each facility. The Netherlands reports that only one

\textsuperscript{114} Namely: (a) information regarding the party to whom waste was transferred for treatment, on the grounds that this constitutes a trade secret, except where that party is treating hazardous waste outside Israel; (b) information regarding a facility’s energy and water consumption. The information is not publicized on the grounds that it is a trade secret; (c) information the disclosure of which a senior defence official has confirmed in writing and signed may harm State security; and (d) information the Registrar has decided not to publicize on the grounds of a reasonable assumption that it is not correct or is incomplete.

\textsuperscript{115} Austria, Belgium (Brussels and Walloon Regions), Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia.

\textsuperscript{116} Belgium (Flanders Region), Bulgaria, Croatia and Denmark.

\textsuperscript{117} Including Denmark, Ireland and Luxembourg.
request for confidentiality was made, related to ammonia emissions from an installation for the intensive rearing of poultry.

101. Germany reports that if the competent authority considers that a public interest in disclosure prevails, then certain procedural safeguards apply in order to protect the enterprise claiming confidentiality. For example, the information may be included in the PRTR only after a hearing. Germany mentions that a number of individual operators have relied on confidentiality provisions in recent years, but the amount of information dealt with as confidential is declining. Germany provides tables with an overview of the reasons for confidentiality claimed in 2007–2011 (in most cases these concern confidentiality of commercial or industrial information and infringement of intellectual property rights).

102. Similarly, Switzerland reports that in 2011 7 facilities out of 263 had claimed confidentiality for part of their data on the grounds of the confidentiality of commercial or industrial information. Four claims were granted and three were refused. In order to make sure that all facilities are treated equally, claims and decision criteria were reviewed yearly by a team of PRTR and legal experts. The Swiss report stated, “The challenge was the start in the first two years, when similar claims (or identical claims with different justifications) had to be distinguished without having long-term experience. In this phase, it was important to build up a system of decision criteria that could be applied to yet unknown cases in future.”

103. The United Kingdom reports that the position on confidentiality is well understood by industry and regulators. There have been no particular challenges around confidentiality as it has been strictly interpreted and only used where there is a strong and justifiable case and the balance of the public interest lies against disclosure. Information on quantities of off-site waste transfers for a very small number of waste sites has been kept confidential on the grounds of commercial confidentiality.

104. The EU reports that very few cases of confidentiality have been claimed: 9 out of 29 countries claimed confidentiality concerning part of their E-PRTR data. Confidentiality was mostly claimed for information regarding the operators’ transfers of hazardous and non-hazardous waste. For one country confidentiality was also applied to the pollutant. The most common reason for claiming confidentiality was the protection of commercial or industrial information for legitimate economic interest, including tax or statistical secrecy.

IX. Opportunities for public participation in the development of a pollutant release and transfer register system (article 13)

105. The majority of the reporting countries described opportunities for the public to submit questions or comments to public authorities relating to the PRTR system or newly developed adopted laws.

106. Many countries reported the active development of various electronic tools to make information more easily available, for example through governmental websites (see also the reporting on article 11). In most of these States the website resources are used not only for publication of the data related to the PRTR reporting or relevant draft legislation, but also for obtaining comments, suggestions and/or questions from the public that can be used for proper development of the PRTR system.

118 Belgium, Bulgaria, Czech Republic, Denmark, Germany, Ireland, Israel, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

119 Belgium, Croatia, France, Germany, Hungary, Ireland, Norway, Romania, Slovakia, Spain, Sweden, Switzerland and United Kingdom.
107. Some countries\textsuperscript{120} reported that they used meetings or workshops to deliver public participation, distribute information and/or to obtain comments with regard to PRTRs. Latvia added that in order to raise awareness information on the possible impacts of chemical substances on the environment is provided for their general public.

108. Only the United Kingdom addressed in the report the issue related to the price of the information provided to the public; as an example, they mentioned “the Defra PRTR team has supplied the overall United Kingdom data set for 2007 to 2010 to organisations requesting them without a charge. In Northern Ireland, the competent authority makes paper copies additionally available, but this is by appointment”.

109. A number of countries\textsuperscript{121} indicated that they had already ensured public participation in decision-making with respect to the establishment of PRTRs. NGOs and representatives of the public were consulted in user tests of the PRTR web page in Norway.

110. The EU reported that the E-PRTR Regulation has been adopted following the ordinary legislative procedure of the EU; when making the legislative proposal for the Regulation the European Commission provided an impact assessment report that was developed through various consultations with stakeholders and the general public. The results of these discussions were considered in developing a working draft for the proposal, which was the basis for discussions on the IPPC article 19 meeting on 5 April 2004 with member States and accession countries and also with stakeholders at the second meeting of the ad hoc working group on the development of the European PRTR on 6 April 2004.

111. Some countries\textsuperscript{122} also referred to their obligations vis-à-vis public participation under the E-PRTR Regulation or their efforts to implement requirements of E-PRTR.

112. Six Parties\textsuperscript{123} described the opportunities for the public in their countries to participate in drafting the new legislation/regulations. In most of these States the drafts are published and open for public comments.

113. Some countries described specific laws, regulations and strategy documents directly related to PRTRs, and partly also related to public participation; those instruments had been drafted and adopted following the usual, transparent legislative processes. In particular, Germany described its PRTR Law of 2007 and the 2006 public participation strategy for the development of the national PRTR. Ireland described the Pollutant Release and Transfer Register Regulations 2011, which provide for on-going opportunities for public participation in the further development of the register, and the Irish Integrated Pollution Control, Industrial Emissions, Waste, and Waste Water Discharge Application licensing codes. The PRTR reporting obligations on operators have been incorporated in these codes.

114. Lithuania, Poland and Slovakia reported obstacles to the implementation of article 13. Slovakia reported “a lack of capacities in development of the new National PRTR, and a lack of financial sources to provide faster realization”. Lithuania said there were technical and financial problems. Poland regretted the lack of involvement of civil society in the process of development of the national PRTR system.

X. Access to justice (article 14)

115. Parties described the accessibility of both administrative and judicial review procedures to any person who considers that a request for information has been ignored,
wrongfully refused or otherwise not dealt with according to the provisions of article 14 of the Protocol.

116. The majority of the reporting countries refer to legislation setting the framework for environmental protection, freedom of information (including environmental information) and access to review procedures\textsuperscript{124} as the main sources of rules on access to justice with regard to requests for data from PRTRs. Moreover, Austria,\textsuperscript{125} Denmark\textsuperscript{126} and Romania\textsuperscript{127} adopted specific rules covering access to environmental information together with possible remedies in case of a breach of the relevant provisions.

117. Within the EU, access to justice is addressed in article 13 of the E-PRTR Regulation; access to justice in matters relating to public access to environmental information is provided for by article 6 of Directive 2003/4/EC\textsuperscript{128} and, where the institutions of the Community are involved, in accordance with articles 6, 7 and 8 of Regulation (EC) No. 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents.

118. A few Parties\textsuperscript{129} report on the right of individuals to appeal respective decisions before the administrative authorities, while others\textsuperscript{130} emphasize the possibility to resort to judicial review procedures. It is significant that in several legal systems specific administrative authorities\textsuperscript{131} are empowered to review decisions concerning provision of environmental information, which includes data derived from PRTRs.

119. Some Parties\textsuperscript{132} say there is an absence of cases initiated with regard to requests for PRTR database information. Ireland underlines that the responsible public authority, the Environmental Protection Agency, has not refused any request for PRTR information to date. Accordingly, no review of a decision by the Agency has arisen specifically in relation to PRTR information.

120. As far as article 14, paragraph 2, of the Protocol is concerned, the Parties do not specify any rights and obligations dealing with review procedures that arise under existing treaties and are applicable between them.

121. The reports provide no insight into any other characteristics of review procedures, such as the effectiveness of remedies, fairness and timeliness. Only in Ireland and Romania are administrative review procedures reported to be free of charge.

122. No Parties describe any obstacles that hamper the administrative review procedures of decisions concerning the provision of environmental information.

\textsuperscript{124} E.g., the Code of Administrative Procedure of Poland, the Freedom of the Press Act of Sweden and the Law on “General Administrative Procedure” and the Law on “Environment” of the former Yugoslav Republic of Macedonia.\n
\textsuperscript{125} Environmental Information Act.\n
\textsuperscript{126} Act on “Access to Environmental Information”.\n
\textsuperscript{127} Government Decision No. 878/2005 on “Public access to environmental information”.\n
\textsuperscript{129} Austria, Czech Republic and Denmark.\n
\textsuperscript{130} Bulgaria, Hungary, Israel, Luxembourg and Switzerland.\n
\textsuperscript{131} Administrative tribunals in the Länder (Austria), Environmental Board of Appeal (Denmark), Specialized Information Commissioner (Croatia), Council of State/Commission on Access to Administrative Documents (France), Commission for Environmental Information (Ireland) and the Information Commissioner’s Office (United Kingdom).\n
\textsuperscript{132} Czech Republic, France, Ireland, Slovakia and Switzerland.
XI. Promotion of public awareness of pollutant release and transfer registers (article 15)

(a) Capacity-building for and guidance to public authorities and bodies

123. Many countries provide national guidance documents on PRTRs that clarify the tasks of the different bodies involved and which should help authorities in fulfilling these tasks.\footnote{E.g., Austria, Croatia, Czech Republic, EU, Ireland, Israel and Spain.} Switzerland reports on a checklist for data validation. Germany provides an expert wiki, which is regularly updated.

124. A number of countries have established working groups on PRTR or organize regular meetings or training.\footnote{Belgium, Bulgaria, Hungary, Ireland, Israel, Netherlands and Spain.} Switzerland furthermore reports on annual training courses offered to the cantons.

125. Estonia has specific trainings for ambient air specialists and in the fields of waste and water. Spain uses a member’s area accessible for authorities as part of the “PRTR platform”. Slovakia says it has established a specific integrated pollution prevention and control (IPPC) training centre, which also provides training and information on PRTRs, both for authorities and the public.

126. Several countries report that assistance via telephone and e-mail is offered to the civil servants in charge.\footnote{E.g., Denmark and Latvia.}

127. Germany and Spain report that questions or problems are shared and answered by the competent authorities and in the context of the cooperation between the national and the regional governments. In Germany there is also an annual exchange of experiences between competent authorities.

128. Croatia reports that the authorities do site visits at entities falling under the PRTR reporting obligations.

129. In the former Yugoslav Republic of Macedonia, donor-funded support projects provided capacity-building for the PRTR, both for the public authorities and the general public.

(b) Assistance and guidance to the public

130. Most countries provide online information tools, e.g., special sections on a web page.\footnote{E.g., Belgium, Bulgaria, Croatia and Spain.} Some countries provide “question and answer” sections on their webpage.\footnote{E.g., Denmark.}

131. Many countries report that members of the public can contact the authority in charge for PRTR maintenance via telephone or e-mail.\footnote{E.g., Estonia and France.} Related to this, Germany reports that questions from the public posted on www.thru.de become part of an Open Ticket Response System and are answered within 10 days.

132. Ireland reports that its Environmental Protection Agency has established an Environmental Queries Unit, which also deals with PRTR-related questions. The public can contact this dedicated unit with any query of an environmental nature via e-mail, a local number or in person (see www.epa.ie/).

133. Israel mentions that a video designed to explain how to use the register was posted on the website of the Ministry of Environmental Protection (as well as on YouTube). In
addition, a question-and-answer page, as well as explanations regarding the PRTR, are posted on the Ministry’s website.

134. Lithuania relates that it has designed its PRTR to be “intuitively accessible”, which means that the user should be able to access the data without the help of user manuals.

135. When launching or upgrading national PRTRs, some countries sent out press releases. Norway reports that press releases are issued when new data are available and has undertaken awareness-raising campaigns for journalists on how to use the PRTR web page.

136. Poland and Switzerland report that articles on their PRTRs have been published in environmental magazines.

137. Serbia says that every year the Environmental Protection Agency — in cooperation with the media — promotes the National Register of Pollution Sources and the Serbian PRTR register on television or in newspapers. In the future they envisage cooperation with the Serbian Aarhus Centre in promoting the PRTR and want to prepare briefings to help to interpret the published data on emissions to air, water, soil and on waste management.

138. The Czech Republic provides a summary report every year. These publications provide analysis of data reported in the course of the relevant reporting year. The reader may find there aggregated outputs in the form of tables and graphs, with relevant comments.

139. Spain reports that information on the national PRTR is disseminated via social networks (Twitter, Facebook). National and international conferences have also been held to promote the PRTR.

140. In Sweden, the PRTR website has been demonstrated at universities with a special focus on how it can be used and integrated into education.

141. The United Kingdom reports on the sectoral expertise available in each of the main public agencies to assist and guide industry in providing credible data.

XII. **International cooperation (article 16)**

(a) *International actions in support of the objectives of the Protocol in accordance with paragraph 1 (a)*

142. Some Parties have been involved in EU twinning projects that supported the implementation of PRTRs, in particular through annual exchanges of information on data analysis and the examples of good practice during the meeting of the E-PRTR Committee.

143. A few Parties reported an exchange of information about PRTR reporting at the annual meetings of the Committee convened under article 19 of the E-PRTR Regulation. Some Parties stress their close cooperation with other Parties and EU member States at meetings and workshops, and also through personal contacts; there have also been opportunities for cooperation during their participation in negotiations concerning E-PRTR. Lithuania mentioned that there is data exchange through the E-PRTR. Only the former Yugoslav Republic of Macedonia explained that it was not able to cooperate and assist other countries because its PRTR was still being developed.

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139 Austria, Germany and Poland.
140 Austria, France, Israel, Poland, Romania and Spain.
141 Bulgaria, Poland and United Kingdom.
142 Croatia, Denmark, Latvia, Norway, Serbia, Slovakia and Spain.
(b) Mutual agreements between the Parties concerned in implementing national systems in pursuance of the Protocol in accordance with paragraph 1 (b)

144. A few Parties\textsuperscript{143} have, with the support of the European Environment Agency (EEA) or in partnership with other countries in their region, organized international or national workshops promoting modern environmental information systems including PRTRs. Some Parties indicated that in the framework of negotiations on E-PRTR, experience has been exchanged with national PRTRs.

145. Germany and Hungary have been involved in an important partnership that features twinning and advisory assistance programmes and engages with the systems and technologies of Israel, Serbia and the former Yugoslav Republic of Macedonia.

146. Similarly, Hungary has organized a consultation session for operators of sites falling within the scope of the PRTR.

147. Other environmental partnerships have emerged in the context of a working group for economic cooperation between Israel and Japan.

148. A couple of Parties\textsuperscript{144} have not approached others bilaterally because they lack the capacity to do so. Nevertheless, presentations at E-PRTR working group meetings have been helpful for some Parties, such as Slovakia. Similarly, several countries have shared projects and capacity-building activities with technical support from Spain. Finally, the United Kingdom has had discussions with others Parties seeking advice, in particular on geographical information systems or the development of PRTR systems.

(c) Sharing information under the Protocol on releases and transfers within border areas, in accordance with paragraph 1 (c)

149. Some Parties\textsuperscript{145} have indicated that their PRTR data on releases and transfers within border areas were publicly available for other Parties on its national PRTR website. Moreover, some Parties\textsuperscript{146} have established working groups on specific topics on the protection of transboundary waters pursuant to bilateral treaties. For other Parties\textsuperscript{147} data reported to the national PRTR constitute an important support source for addressing transboundary environmental problems. Other Parties\textsuperscript{148} have taken measures in this context to make available their PRTR data on their PRTR website and have offered information on development plans and their experience regarding data provision.

150. There is close cooperation among EU member States through the E-PRTR. Similarly, bilateral cooperation related to PRTRs has been carried out by other Parties, in particular between Israel and Japan regarding the development of diffuse emissions inventories, and also between Switzerland and Liechtenstein, with Liechtenstein using the Swiss electronic database for reporting.

151. Poland indicated that it does not cooperate with neighbouring countries yet.

(d) Sharing information under the Protocol concerning transfers among Parties, in accordance with paragraph 1 (d)

152. PRTR data concerning transfers among Parties are publicly available to other Parties on the Austrian PRTR website. Several Parties stress that they cooperate closely with other

\textsuperscript{143} Austria, Denmark and Germany.
\textsuperscript{144} Serbia and Switzerland.
\textsuperscript{145} Austria, Ireland, Norway and Serbia.
\textsuperscript{146} E.g., Slovakia.
\textsuperscript{147} E.g., Czech Republic.
\textsuperscript{148} Germany, Hungary and United Kingdom.
EU member States through the EU and the E-PRTR. Technical assistance has been provided by the Netherlands to Armenia, Croatia and Bulgaria on the implementation of national PRTRs and in particular on the validation of PRTR reports by competent authorities.

153. Some Parties do not cooperate with countries to which wastes are transferred. Serbia explains that data concerning transfers to other countries constitutes part of the data set delivered to the E-PRTR Register. Slovakia has not been requested by any other Party for information related to transfers. The United Kingdom complies with its obligations by providing through its PRTR website free access to waste transfer data, including information on the origin and destination of waste, both within and outside the United Kingdom.

(e) The provision of technical assistance to Parties that are developing countries and Parties with economies in transition, in accordance with paragraph 2 (c)

154. Several environmental agencies cooperate with other Parties; for example the German Federal Environment Agency has an advisory assistance programme in Serbia and the former Yugoslav Republic of Macedonia, as well as a twinning project with Israel concerning the establishment of a national PRTR and the development of environmental indicators based on PRTR data.

155. The Croatian Environment Agency hosted a delegation from Bosnia Herzegovina to discuss future cooperation and provision of technical assistance in creating a PRTR database and portal for the country. The Czech Environmental Ministry has undertaken a similar initiative to host discussions and seminars focused on technical aid to developing countries or countries with economies in transition, in particular by describing experience in purely electronic reporting to the national PRTR.

156. Poland has provided technical assistance to Belarus by organizing a workshop for representatives of that country on the implementation of a national PRTR.

157. Slovakia provided relevant technical support to other Parties with economies in transition:

149 two projects provided information on the administration and operation systems for IPPC and the National Pollution Register, as well on working with the public in the development of such systems.

158. Financial and technical assistance for the Central American region to promote PRTR activities has been provided by Spain, which also lent technical support within a United Nations Environment Programme/United Nations Institute for Training and Research (UNITAR)/Global Environment Facility initiative (in Peru, Ecuador, the Dominican Republic, Costa Rica and El Salvador) and provided official translation into Spanish of the ECE Guidance on Implementation of the Protocol on Pollutant Release and Transfer Registers.150

159. Norway assisted Poland through a bilateral project on the development of a web page for the Polish PRTR.

160. Several Parties151 similarly support UNITAR projects and the activities of the OECD Task Force on PRTRs that benefit countries building up a PRTR system.

161. More generally, some Parties, such as the United Kingdom, have developed resources and guidance after discussions with countries with economies in transition in

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149 These projects were supported by the EU in Croatia and Serbia.
151 Including Switzerland and Sweden.
order to identify how these resources and guidance could help agencies and industry estimate and provide data.

XIII. Conclusions

162. In decision I/5 the Parties to the Protocol requested a synthesis report that not only summarized the NIRs, but also identified “significant trends, challenges and solutions” (para. 5).

163. This part of the report gives a strategic overview of the implementation of the Protocol, and digests the detail of what Parties have said in order to explain what patterns emerge, what issues are faced and how they may be resolved.

General provisions (articles 3, 4 and 5)

Trends

164. A consideration of those parts of the NIRs that related to general provisions led to the identification of the following trends:

(a) PRTRs are most often integrated into existing legislation and regulations, and not introduced in a single, separate law relating only to PRTRs;

(b) Enforcement measures or procedures are rarely described, if mentioned at all, by Parties;

(c) Several Parties consider a thorough and careful implementation of the provisions of the Protocol will ensure that PRTRs are accessible; they consider that the Protocol is sufficiently thorough in this regard, so that further national measures on accessibility may not be necessary;

(d) Search functions are crucial to user-friendliness, but in a number of countries search functions are still being developed or need improvement;

(e) Almost all Parties’ PRTRs are more extensive than the minimum requirements in the Protocol (e.g., by covering more activities or pollutants or lower thresholds). This is often because of the combined implementation of E-PRTR. What is more, Parties report a number of independent measures taken to further increase the scope of their PRTRs;

(f) Protection of whistle-blowers is mostly perceived as a fundamental part of the Parties’ existing law and constitution. In addition, a group of Parties add laws to their environmental and, in particular, PRTR-related legislation to this effect;

(g) It seems particularly effective to implement or develop fully cross-institutional and cross-sectoral information tools that use information and data contained in PRTRs.

Challenges and solutions

165. There are also the following challenges and, where available, solutions:

(a) Minimizing duplicative reporting by analysing existing legislation through, e.g., the establishment of a national working group for PRTR implementation;

(b) Helping stakeholders to be aware of the availability of PRTR data; this could be achieved by increasing the user-friendliness of web portals and providing a number of access points to them;
(c) Ensuring the confidentiality of information received through whistle-blowers. Keeping the identity of an informant secret is vital to encourage citizens to take the risk to alert the authorities where appropriate;

(d) Fostering harmonization where minimum standards are exceeded: is it feasible for Parties to adjust, e.g., thresholds, the number of pollutants, activities, water, energy, resource consumption, source-type of greenhouse gas emissions (fossil versus non-fossil)?

**Legislative, regulatory and other measures (article 7)**

_Trends_

166. A consideration of those parts of the NIRs that related to legislative, regulatory and other measures led to the identification of the following trends:

(a) Almost all Parties:

(i) Have chosen the capacity threshold for identifying the reporting facilities;

(ii) Have chosen the waste-specific approach (reporting of waste amounts);

(iii) Provide that it is the operator who reports the data to the competent authority;

(b) Most of the Parties do not report on additional activities in their national PRTRs. But most of them added pollutants and lowered reporting thresholds;

(c) Parties report a wide range of ways of recording emissions from diffuse sources. The only clear trend in that regard is that for air emissions from diffuse sources several Parties use methodologies related to UNFCCC or CLRTAP reporting, their national inventories and the respective EMEP/EEA or IPCC guidelines. However, several Parties neither include nor link to sources of information on diffuse emissions, as, for example, through links to special web pages or reference to the E-PRTR, where national data are included. Some of those Parties that do not have applicable methodologies have made the first steps towards dealing with emissions from diffuse sources. For water emissions from diffuse sources even fewer methodologies were reported.

_Challenges and solutions_

167. There are also the following challenges and, where available, solutions:

(a) To complete the missing data in the national Registers and complete or revise related legislation by adopting the necessary measures fully to implement the Protocol;

(b) Taking into account the efforts already made, to encourage Parties and operators to use their Registers to report on additional subjects such as additional pollutants and sources of pollution, energy consumption, changes in production volumes, emission reduction below existing thresholds and parameters related to sustainable production in general;

(c) To complete the national Registers concerning emissions from diffuse sources; by encouraging the Parties to undertake the necessary steps to report on releases of relevant pollutants from diffuse sources in accordance with their national priorities.

**Reporting cycles (article 8)**

_Trends_

168. A consideration of those parts of the NIRs that related to reporting cycles led to the identification of the following trends:
For many of the Parties 2007 was the first reporting year of their national PRTR;

For many Parties, the deadline for reporting by operators to competent authorities is the end of March of the year following the reporting year. This deadline is met in general in almost all Parties, but reasons for delay include technical and organizational problems as well as a lack of awareness of the requirement to report;

A large number of the Parties make data publicly available in their registers within 12 months after the end of the reporting year, which means that they need 3 months less than the Protocol requires;

Almost all Parties enable electronic reporting by operators, for example through online reporting tools or by filling in a form to be sent to the authorities by e-mail.

Challenges and solutions

There are also the following challenges and, where available, solutions:

(a) Ensuring that operators/owners meet their reporting deadlines through awareness-raising on reporting requirements and their importance at the PRTR facilities, by improving reporting tools in order to avoid technical problems and by improving the organization of the reporting process;

(b) Meeting the Protocol’s requirements to publish data not later than 15 months after the end of the reporting year;

(c) Making registers more up to date by encouraging those Parties that publish their data later than 12 months after the end of the reporting year to consider earlier deadlines for reporting;

(d) Improving electronic reporting in order to facilitate reporting by facilities and competent authorities.

Quality assessment (article 10)

A consideration of those parts of the NIRs that related to quality assessment led to the identification of the following trends:

(a) Nearly all reporting countries have a sufficient legal framework to handle requests for environmental information pursuant to article 4 of the Aarhus Convention and article 11, paragraph 4, of the Protocol;

(b) Most of the countries’ operators report data on the basis of the best available information.

Challenges and solutions

Checking the credibility of information presented a challenge in this area, with Parties reporting that this process was complicated and/or difficult. More references and more precise methodologies are needed.

Public access to information (article 11)

A consideration of those parts of the NIRs that related to public access to information led to the identification of the following trends:
(a) The overwhelming majority of Parties make all PRTR data available through direct electronic means. Those who do not are on the way to providing direct electronic access;

(b) Only a few of the Parties reported administrative procedures that ensure provision of data upon individual request as provided for in article 11, paragraph 5;

(c) Most Parties stress the user-friendliness of their PRTR web pages and provide advice on how to use the pages;

(d) Some Parties make PRTR web pages interfaces and, where possible, other parts of the pages available in English to improve user-friendliness for transboundary accessibility of data;

(e) It is common practice that authorities’ web pages disseminating environmental information cross-refer to the PRTR page and vice versa.

Challenges and solutions

173. There are also the following challenges and, where available, solutions:

(a) The level of awareness of the public about PRTR web pages should be constantly raised, and the functionality of the web page should be improved;

(b) The accessibility of PRTR web pages should be gradually improved because they are the key source of environmental information. Few Parties collect statistical data on the number and other characteristics of web page visitors, but those data might help to understand how the web page, and its accessibility, can be improved.

Confidentiality (article 12)

Trends

174. A consideration of those parts of the NIRs that are related to confidentiality led to the identification of the following trends:

(a) In most countries operators/owners obliged to report under the Protocol do not claim confidentiality very often, and in some countries confidentiality claims are decreasing from year to year;

(b) Most confidentiality claims are related to waste generation and waste shipment. In some countries commercial confidentiality claims are made to avoid disclosure of information related to production capacities and the technologies used by companies.

Challenges and solutions

175. There are also the following challenges and, where available, solutions:

(a) All the information contained in a PRTR should be considered as “environmental information” and any possible ground for refusal based on confidentiality should be interpreted in a restrictive way, taking into account the public interest served by disclosure; what is more, at least one country does not allow claims that “environmental information” is confidential;

(b) All claims for confidentiality submitted by different facilities should receive equal treatment;

(c) A solution could be to build up a system of decision criteria that might be applied in cases where confidentiality is claimed.
Public participation in the development of pollutant release and transfer registers (article 13)

Trends
176. A consideration of those parts of the NIRs that related to public participation in the development of pollutant release and transfer registers led to the identification of the following trends:

(a) Many of the Parties consider the web portals on PRTRs to be a good way to comply with their article 13 obligations;

(b) While it would be natural to infer from the wide availability of web portals that access is largely free of charge, nevertheless the reports (with one exception) do not contain information on the price of information provided to the public; and so it is not possible to determine whether there is free public access to relevant information as required by the Protocol. (This point is also relevant to article 11.)

Challenges and solutions
177. There are also the following challenges and, where available, solutions:

(a) Several countries, including some EU countries, report they are facing technical and financial problems in implementing article 13. It is important for the implementation of the Protocol for such Parties to obtain sufficient assistance;

(b) Some Parties report on the lack of involvement of civil society in the process of development of PRTRs; this is caused by the lack of interest of the civil society in the national PRTR systems. More effective measures (like development of relevant publications and the organization of training, workshops, seminars, etc.) need to be taken in order to raise public awareness on the importance of the national PRTR systems in general and public participation in the development of national PRTRs in particular.

Access to justice (article 14)

Trends
178. A consideration of those parts of the NIRs that relate to access to justice led to the identification of the following trends:

(a) Almost all Parties described the accessibility of both administrative and judicial review procedures with regard to a denial of access to PRTR information;

(b) In most reporting countries specific administrative authorities may review decisions concerning the provision of environmental information.

Challenges and solutions
179. There are also the following challenges and, where available, solutions:

(a) There has been no information provided about the judicial or administrative cases initiated regarding requests for PRTR database information, so it is not possible to assess the characteristics of such review procedures, such as the effectiveness of remedies, fairness and timeliness;

(b) The Aarhus Convention Task Force on Access to Justice identified a range of challenges and possible solutions, which may apply in this context, bearing in mind that most Parties to the Protocol are also Parties to the Aarhus Convention;

(c) None of the Parties describe any obstacles that hamper the administrative review procedures of decisions with regard to the provision of environmental information.
Capacity-building (article 15)

Trends

180. A consideration of those parts of the NIRs that related to capacity-building led to the identification of the following trends:

(a) Article 15 of the Protocol is framed in general terms, which allow Parties a considerable margin of discretion as to implementation. Parties report that their implementation of article 15 can be divided into two broad categories, namely, the provision of information to, and education of civil servants in charge of the PRTR and awareness-raising among the potential users;

(b) As far as awareness-raising is concerned, States have developed measures very creatively; measures include press releases, campaigns for journalists, videos available on the web, online tools, including questions and answers sections, etc.;

(c) Most countries also provide contact details of an official in charge or at least an e-mail address for individual questions;

(d) The use of social media, such as Facebook and Twitter seems promising, although not many countries report on their use yet.

Challenges and solutions

181. There are also the following challenges and, where available, solutions:

(a) Given the fact that the majority of countries have functioning PRTR systems in place at the time of reporting, in the future their focus should shift to the promotion of those systems;

(b) In this context special attention should be paid to the perspective of the user: surveys should be carried out of who is using the data already and on further potential users with a view to raising awareness for the potential added value PRTR data can generate. Such potential users may be found in the non-profit sector (governmental and non-governmental organizations), as well as in the business sector.

International cooperation (article 16)

Trends

182. A consideration of those parts of the NIRs that related to international cooperation led to the identification of the following trends:

(a) Most Parties, in particular developed countries, tried to work through article 16 to help States with economies in transition to establish national PRTRs;

(b) Some Parties recognized that they have no appreciable experience of international cooperation with respect to PRTR registers, having participated in few meetings and negotiations. Others gave no particular replies to the questionnaire because their national PRTR data are the same as the data submitted to the E-PRTR and so their cooperation with other States was focused on partners within the EU;

(c) Many Parties provided a rather general response with regard to their engagement in international cooperation, thus making it difficult to draw detailed conclusions;

(d) Several Parties indicated that they participate in workshops on PRTRs or are members of international groups and committees related to PRTRs without giving detailed explanations on the outcomes of such exercises;
It is encouraging to note that some Parties promote the Protocol by collaboration with non-Parties outside the ECE region, although, strictly speaking, that falls outside the ambit of this report.

Challenges and solutions

183. It seems that Parties with economies in transition face challenges in implementing their PRTRs because of financial constraints, a lack of human resources and technical facilities. Substantial and continuing international cooperation with, assistance to and support for such countries is a priority in order to deliver full compliance with the Protocol.
Annex

Internet addresses of national pollutant release and transfer registers and links to other databases and pollutant release and transfer registers

Table 1  
Internet addresses of national PRTRs

<table>
<thead>
<tr>
<th>Party</th>
<th>Internet addresses as specified in the report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td><a href="http://www.prtr.at">www.prtr.at</a></td>
</tr>
<tr>
<td>Belgium</td>
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Table 2

Links to other databases and PRTRs

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<td>Belgium</td>
<td>E-PRTR, ECE, OECD</td>
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<td>Bulgaria</td>
<td>E-PRTR</td>
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<td>E-PRTR, European Environment Information and Observation Network (EIONET) Central Data Repository (CDR)</td>
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<td>Party</td>
<td>Databases and PRTRs</td>
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<tr>
<td>Estonia</td>
<td>Under development</td>
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<td>European Union</td>
<td><a href="http://prtr.ec.europa.eu">http://prtr.ec.europa.eu</a></td>
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<td>France</td>
<td>E-PRTR, which publishes the post-2006 emissions data</td>
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<td>European Pollutant Emission Register (EPER), which publishes the historical emissions data (before 2007)</td>
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<td>French Air and Water releases (before 2004)</td>
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<tr>
<td></td>
<td>Links to regional historical inventory of industrial sites and service activities</td>
</tr>
<tr>
<td></td>
<td>BASOL — Database of polluted or potentially polluted sites and soils calling for government preventive or curative action</td>
</tr>
<tr>
<td></td>
<td>SANDRE — National Service for Water Data and Common Repositories Management</td>
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<td></td>
<td>CITEPA — Interprofessional Technical Centre for the Study of Atmospheric Pollution</td>
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<tr>
<td></td>
<td>International Office for Water, national website for the inspection of classified installations listing the various industrial plants that must have a permit to operate.</td>
</tr>
<tr>
<td>Germany</td>
<td>Links to:</td>
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<td></td>
<td>(1) PRTRs of other countries and of the EU</td>
</tr>
<tr>
<td></td>
<td>(2) Thematically related websites of the federal and Länder governments</td>
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<tr>
<td></td>
<td>(3) Further links relating to the issue of environmental information and PRTRs</td>
</tr>
<tr>
<td>Hungary</td>
<td>Links to PRTRs of other EU countries as well as globally</td>
</tr>
<tr>
<td>Ireland</td>
<td>E-PRTR, ECE, OECD, PRTR.net, Special Areas of Conservation, Special Protection Areas</td>
</tr>
<tr>
<td>Israel</td>
<td>Links to registries in other countries and to other databases via: prtr.net/en/links</td>
</tr>
<tr>
<td>Latvia</td>
<td>E-PRTR</td>
</tr>
<tr>
<td>Lithuania</td>
<td>E-PRTR</td>
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<tr>
<td></td>
<td><a href="http://gamta.lt">http://gamta.lt</a></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Links to more information on emissions (including E-PRTR, EEA, ECE), and organizations participating in the Dutch register</td>
</tr>
<tr>
<td>Party</td>
<td>Databases and PRTRs</td>
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<tr>
<td>Norway</td>
<td>E-PRTR, ECE, OECD, PRTR.net</td>
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<tr>
<td>Poland</td>
<td>No links to other websites</td>
</tr>
<tr>
<td>Serbia</td>
<td>Under development</td>
</tr>
<tr>
<td>Slovakia</td>
<td><a href="http://www.enviroportal.sk">www.enviroportal.sk</a></td>
</tr>
<tr>
<td>Spain</td>
<td>Links to other emissions to air, and water, as well as international and national PRTR links (<a href="http://www.en.prtr-es.es/conozca/Enlaces-interes-1205012014.html">http://www.en.prtr-es.es/conozca/Enlaces-interes-1205012014.html</a>)</td>
</tr>
<tr>
<td>Sweden</td>
<td>Aarhus Convention, environmental reports, E-PRTR, other pollution inventories</td>
</tr>
<tr>
<td>Switzerland</td>
<td>E-PRTR, ECE, OECD, PRTR.net</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>Under development</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Atmospheric Emissions Inventory with information on diffuse sources and emissions factors, United Kingdom Air resource website</td>
</tr>
</tbody>
</table>