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Third session
Budva, Montenegro, 15 September 2017
Item 4 (a) of the provisional agenda
Reporting and compliance mechanisms: reporting mechanism

Synthesis report on the implementation of the Protocol on Pollutant Release and Transfer Registers[1]

Prepared by the Compliance Committee with the support of the secretariat

Summary

The present report was prepared pursuant to decision I/5 and II/1 adopted by 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 at its first and second sessions (Geneva, 20–22 April 2010 and Maastricht, the Netherlands, 3 and 4 July 2014), which request 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 fifth meeting (Geneva, 23–24 November 2016) took note of the decision by the Bureau to entrust the Protocol's Compliance Committee with the task of preparing the synthesis report on the basis of national implementation reports and an overview of the progress in implementing the strategic plan for 2015–2020 for the Protocol (ECE/MP.PRTR/WG.1/2016/2, para. 33).

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.

[1] This document was not formally edited.

Contents

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),[2] 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 each 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 first synthesis report on the implementation of the Protocol on PRTRs ECE/MP.PRTR/2014/5[3] developed for the 2014 reporting cycle was prepared by the Compliance Committee based on the national implementation reports (NIRs) submitted by 27 of the 32 Parties with reporting obligation during the reporting cycle. The Meeting of the Parties welcomed the report and took note of the information provided in national implementation reports submitted by Parties and the synthesis report.

5. The Working Group of the Parties to the Protocol on PRTRs, at its fifth meeting (Geneva, 23–24 November 2016) endorsed the decision taken by the Bureau at its 10th meeting (Geneva, 7 July 2016) to assign the Compliance Committee with the task to prepare a synthesis report on the basis of national implementation reports and to prepare an overview of the progress in implementing the Strategic Plan for 2015–2020 ECE/MP.PRTR/WG.1/2016/2, para. 33.

6. The present synthesis report developed for the second reporting cycle was prepared by the Protocol's Compliance Committee for the third session of the Meeting of the Parties, Budva, Montenegro, 15 September 2017. It is based on the NIRs submitted by 30 of the 35 Parties before 23 May 2017. An overview of the progress in implementing the strategic plan for 2015–2020 for the Protocol is included in annex 1 of the report. Internet addresses of national pollutant release and transfer registers and links to other databases and pollutant release and transfer registers are included in annex 2 of the report.

Evaluation and metrics

7. In the course of considering the synthesis report and the overview on progress in implementation of the strategic plan, the Committee discussed the necessity for the

[2] Available from http://www.unece.org/env/pp/mopp1.html.
[3] Available from http://www.unece.org/env/pp/mopp2.html.

evaluation of the success of the Protocol and the desirability of the development of more indicators for the purposes of measuring progress towards the Protocol's goals.

8. A paper setting out the Committee's suggestions for more work on evaluation and indicators is annexed to the report on the Committee's fifth meeting, Geneva, 22–23 May 2017, for consideration by the Meeting of the Parties.

9. The objective of the present report is to provide a strategic overview of major trends and challenges in relation to 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

10. In accordance with paragraph 4 of decision II/1 the deadline for submitting NIRs to the secretariat was 14 April 2017, i.e., five months before the third session of the Meeting of the Parties.

11. As of 23 May 2017, the secretariat had received NIRs from 30 of the 35 Parties, or over four-fifth of the total reports to be prepared.

12. The NIRs submitted on time were from Albania, Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, European Union (EU), Estonia, Finland, France, Germany, Ireland, Israel, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and the United Kingdom of Great Britain and Northern Ireland.

13. As of 23 May 2017, no reports had been submitted by five Parties — Cyprus, Hungary, Malta, Slovenia and Ukraine — which made it challenging for the Compliance Committee to prepare a full report.

14. No reports were submitted by any stakeholder.

15. Germany submitted its NIR in all three United Nations Economic Commission for Europe (ECE) languages. Belgium, Estonia, France, Romania, Spain and Switzerland submitted their report in two ECE languages.

16. 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 fifth meeting and completed the first draft of the report electronically soon afterwards.

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

17. Most Parties were only responding to the sub-questions of the reporting form which as a rule lead to the omission of reporting on the implementation of article 4. Therefore, in some cases it was difficult to identify whether some Parties implemented national PRTR systems, as opposed to the detailed information available on implementation of legislative, regulatory and other measures under regional registers. The Republic of Moldova reported

that it had not yet established a national PRTR system[4] and Finland reported that it reported to E-PRTR but did not have a separate national register that would meet the obligations of the Protocol.[5] Only a few Parties[6] provided specific information on the implementation of article 4.

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

18. In terms of measures to implement the Protocol, many Parties' answers do little more than name the respective laws within their legislative framework.[7] Several Parties, however, go into further detail, briefly explaining the history and operation of their national legislation in this regard.[8] Several Parties reported on changes made to their legislative framework since the first NIR[9] or informed about amendments that were under preparation.[10]

19. Concerning enforcement, the responses were less complete, with only some Parties[11] 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.[12]

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

20. With regard to public accessibility many Parties[13] provide no answer. A few countries provide details on public accessibility of PRTR data 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. Sweden included additional administrative information on the operations: e.g. water district, organisation number, property designation, supervisory authority, environmental management system and link to the operator's webpage. Portugal and Spain collect information on all releases and transfers according to the European Pollutant Release and Transfer Register (E-PRTR) Regulation but without thresholds, however, only the data above the threshold is made available for public.

21. Parties report that measures to improve user-friendliness include:

(a) The possibility to download search results in file format;[14]

[4] Republic of Moldova.
[5] Finland.
[6] Bulgaria, Spain and United Kingdom.
[7] Albania, Austria, Belgium, Bulgaria, EU, Ireland, Latvia, Lithuania, Luxembourg, Norway, Portugal and the former Yugoslav Republic of Macedonia.
[8] Croatia, Czechia, Denmark, France, Germany (i.e., the federal system), Netherlands, Poland, Serbia, Spain, Sweden, Switzerland and United Kingdom.
[9] Albania, Croatia, Denmark, France and Spain.
[10] Slovakia.
[11] Czechia, Denmark, Israel, Netherlands, Poland, Romania, Serbia, Slovakia, Sweden, Switzerland and United Kingdom.
[12] Estonia, Netherlands and Switzerland.
[13] Albania, Austria, Belgium, Bulgaria, Czechia, Denmark, France, Estonia, Israel, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Sweden (help guidelines for reporting facilities were developed) and the former Yugoslav Republic of Macedonia.
[14] Germany, Spain and Switzerland.

(b) The possibility to search for data marked as confidential and the reasons for confidentiality;[15]

(c) The inclusion of optional data (e.g., production volume);[16]

(d) Supplementary information;[17]

(e) The inclusion of background documents;[18]

(f) The possibility to download the whole dataset;[19]

(g) The inclusion of time series;[20]

(h) The inclusion of explanations;[21]

(i) The visualisation of PRTR data;[22]

(j) User-friendly maps and a search function;[23]

(k) On-line help boxes, downloadable user manuals and help documents.[24]

22. Apart from some Parties that provided no answer with regard to measures taken to introduce a more extensive PRTR than required by the Protocol,[25] there were two further groups, namely Parties:

(a) Encouraging and providing for additional voluntary reporting;[26]

(b) Having legislative and regulatory measures that exceed the Protocol's minimum standard.

23. Most Parties have legislative and regulatory measures that exceed the Protocol's minimum standard, including:

(a) Belgium (with reference to the 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) Bulgaria (six additional pollutants and more stringent reporting thresholds for another six pollutants);

(c) Croatia (more pollutants, more activities (industrial and non-industrial), lower thresholds);

(d) Czechia (more pollutants than in E-PRTR and no restriction to PRTR and E-PRTR activities, lower threshold than required by the Protocol for some substances,

[15] Germany.
[16] Germany.
[17] Germany.
[18] Germany.
[19] Germany and Switzerland.
[20] Switzerland.
[21] Spain and Switzerland.
[22] Switzerland.
[23] Germany and Ireland.
[24] Spain.
[25] Albania, Austria, Lithuania (a separate, unpublished database exists, which can be accessed upon request), Luxembourg, Romania, Serbia
[26] Switzerland.

transfers of the quantity of waste as well as transfers of pollutants in waste (26 substances in transfers of waste);

(e) Denmark (certain enterprises must report additional information on water, energy and substantial resource consumption in a three-yearly environmental report);

(f) Estonia, Germany, Ireland, Lithuania, Norway, Poland, the United Kingdom (E-PRTR);

(g) France (more pollutants, more facilities);

(h) Israel (annual water and energy consumption, additional non-public information concerning quality control or development of environmental efficiency indicators is collected);

(i) Latvia (information also from smaller facilities);

(j) Netherlands (E-PRTR, more substances, lower thresholds, energy consumption, water consumption);

(k) Norway (additional pollutants, stricter thresholds, accidental releases, production data and energy consumption. More data on non-compliance, noise, use of accredited analysis and standards, annual accounts for waste treatment and transfer are reported and are available on request in PDF format. The audit reports for the last five audits in PDF format are published on the website);

(l) Portugal (E-PRTR, but without thresholds);

(m) Slovakia (E-PRTR and waste and emission reporting without taking into account thresholds);

(n) Spain (more industrial activity categories, 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);

(o) Sweden (E-PRTR and lower thresholds for about half the pollutants, further carbon dioxide (CO_2) emissions are reported separately for biogenic and fossil fractions).

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

24. A number of Parties[27] say their PRTR-related and general environmental legislation protects those reporting violations. Other Parties[28] explain that there is protection in constitutional or other legislation for citizens exercising their rights.

25. In several cases[29] there is confidentiality as part of an established complaint system.

26. A few Parties[30] 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.

[27] Austria, Czechia, Germany, Latvia and Spain.

[28] Bulgaria, Belgium, Croatia, Denmark, Estonia, EU, Israel (protection of employees), Luxembourg, Netherlands, Norway, Portugal, Romania, Slovakia, Sweden, Switzerland, the former Yugoslav Republic of Macedonia.

[29] Belgium, Czechia, Estonia, France, Ireland, Latvia, Lithuania, Netherlands, Slovakia, Sweden and Switzerland.

[30] Albania, France, Poland and Serbia.

27. 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.

28. Most of the Parties do not mention practical cases and only a few Parties reported that such cases were unknown.[31] The United Kingdom provided information from the call for views where approximately two-thirds of respondents agreed that the United Kingdom took measures to ensure that employees and members of the public who report a violation of national laws by a facility to a competent authority are not penalized, persecuted or harassed. The remaining third were unsure or did not have sufficient evidence to comment.

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

29. A few Parties[32] have established new electronic tools, while most Parties integrate their PRTR system with:

(a) Data from the existing waste management and emission recording systems;[33] or

(b) General environmental reporting or environmental information systems,[34] eliminating duplication in reporting at varying levels.

30. Systems for environmental information allow for cross institutional[35] and cross sectorial[36] use of the same electronic tool. In the case of Serbia, the PRTR system is and will be used as basis to cover all reporting obligations and thus avoids any duplication of reporting.

31. Other Parties[37] are developing software in conformity with the Protocol. For example, the former Yugoslav Republic of Macedonia plans to establish an integrated information system, part of which will be a PRTR.

32. 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.

33. Turning to challenges, a number of Parties[38] noted that the complete removal of duplicative reporting is often linked to extensive changes to the relevant constituent legislation. In addition, it was noted by one Party[39] that the issue of the national PRTR is not a priority in comparison to some other environmental areas (in particular, waste and air related issues).

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[31] Romania and Slovakia.
[32] EU, France and Spain.
[33] Austria, Belgium (the Brussels-Capital Region), Bulgaria, Estonia, Ireland, Slovakia, Switzerland and United Kingdom.
[34] Belgium (except the Brussels-Capital Region), Croatia, Czechia, Denmark, Germany, Ireland, Israel, Netherlands, Norway, Romania (new Environmental Integrated System is being developed) and Sweden.
[35] Belgium, Czechia, Denmark and Romania (a new Environmental Integrated System is being developed).
[36] Croatia.
[37] E.g., Estonia.
[38] Croatia, Czechia, Portugal and Slovakia.
[39] Czechia.

34. Further problems were encountered with regard to the attempts to establish links in order to integrate databases which in accordance with environmental protection regulations require retrieval of various types of data which are often not harmonised,[40] in a way that would enable them to be integrated into a consistent and unambiguous information product. There is also a lack of legislative harmonization to secure this outcome.

35. 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,[41] the European Emissions Trading System (ETS) and the EU Urban Waste Water Directive,[42] as well as other wastewater discharge authorization regulations.

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

36. While the majority of the reporting countries provided for all of the search categories defined in article 5, paragraph 1, of the Protocol,[43] some countries added the following options to their search engine:

(a) Year;[44]

(b) Watershed/river basin district/catchment;[45]

(c) Hazardous/non-hazardous waste;[46]

(d) Synthesis by substance or activity;[47]

(e) Confidentiality;[48]

(f) Method of calculation/measurement/estimation;[49]

(g) Total or accidental pollutant releases;[50]

(h) Statistical Classification of Economic Activities in the European Community (NACE code);[51]

(i) National licence number or equivalent;[52]

(j) Download of the full database;[53]

(k) Time series by facilities, emissions and waste transfer;[54]

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[40] Croatia.
[41] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).
[42] Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment.
[43] Austria, Belgium, Croatia, Czechia, Denmark, EU, Germany, Latvia, Lithuania, Netherlands, Poland, Portugal, Sweden, Switzerland, the former Yugoslav Republic of Macedonia.
[44] Bulgaria, Croatia, Czechia, France, Germany, Ireland, Lithuania, Spain, Switzerland and the former Yugoslav Republic of Macedonia.
[45] France, Germany, Ireland, Spain, the former Yugoslav Republic of Macedonia and United Kingdom.
[46] France, Germany, Ireland and Spain.
[47] Czechia, Denmark, France and Spain.
[48] Germany.
[49] Czechia and Germany.
[50] Germany.
[51] Czechia and Germany.
[52] Ireland and Israel.
[53] Germany, Israel and United Kingdom.
[54] Spain and United Kingdom.

(l) Total emissions per county/municipality;[55]

(m) Generation of graphic data display;[56]

(n) Global search for facilities with reporting obligations at all levels in the web structure;[57]

(o) Search for all facilities with permit, also smaller facilities with no reporting obligations;[58]

(p) Search by text of keywords;[59]

(q) Regulatory authority of the facility;[60]

(r) Diffuse sources;[61]

(s) Facility locations using Google Earth;[62]

(t) Destination of hazardous waste transferred out of country.[63]

37. 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 (together with the information on the facility information about the parent company is, however, provided).

38. A few countries have no national database with appropriate search functions as required by the Protocol.

(f) Information on links from Parties' registers

39. 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).

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))?

40. Almost all of the Parties[64] 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

[55] Sweden.
[56] Sweden and United Kingdom.
[57] Norway.
[58] Norway.
[59] Bulgaria.
[60] United Kingdom.
[61] Switzerland.
[62] United Kingdom.
[63] United Kingdom.
[64] Austria, Belgium, Croatia, Czechia, Denmark, Estonia, EU, Finland, France, Germany, Ireland, Israel, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

EU member States refer to the E-PRTR Regulation,[65] which also implements this provision. Bulgaria reports that it implements both subparagraphs (a) and (b) of article 7, paragraph.

(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)?

41. In almost all Parties[66] 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 Spain the owner is responsible for reporting. 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)?

42. 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 that is required for their national Registers and their reporting obligations to the E-PRTR.

43. 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.

44. Many Parties[67] do not report any additional activities or lower capacity thresholds. Three Parties[68] report that they have additional activities and lower capacity thresholds than listed in annex I to the Protocol. One of them, Czechia, reduced the number of additional activities in the meantime in order to minimize reporting burden of small facilities. Three Parties (Latvia, Finland and Slovakia) only have lower capacity thresholds. Four Parties (Israel, Belgium (Flanders and Walloon Regions), Norway and Spain) report additional activities. Germany and UK state that it has only a small extension of activity 3b (Opencast Mining) where quarries above 25 hectares are covered pursuant to the E-PRTR Regulation and its activities. Four Parties[69] refer to the E-PRTR Regulation. 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.

[65] Regulation (EC) No. 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC.

[66] Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, EU, Finland, France, Germany, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Sweden, the former Yugoslav Republic of Macedonia and United Kingdom.

[67] Austria, Belgium (Brussels Region), Bulgaria, Denmark, Estonia, EU, Ireland, Luxembourg, Netherlands, Portugal, Serbia, Sweden and Switzerland

[68] Croatia, Czechia and France.

[69] Poland, Romania, Slovakia and the former Yugoslav Republic of Macedonia.

(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)?

45. 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[70] report that they extended their national registers to cover those five additional pollutants. Five Parties[71] 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, Slovakia and Slovenia report that the pollutants have to be reported without any emission threshold. Six Parties[72] explicitly mention the additional five pollutants and the six lower thresholds (PCDDs/PCDFs and water). Four Parties[73] 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[74] refer to the E-PRTR Regulation with its additional five pollutants and six lower thresholds; Czechia reduced their original 26 additional pollutants in waste, but they discuss to include other additional pollutants which are relevant for other international reporting obligations. Germany reports on CO_2 from biomass. The Netherlands report on an additional 22 lower thresholds including the six EU E-PRTR emission thresholds and report on eleven additional substances (including the five additional E-PRTR substances): Acrolein, Acrylonitrile, Ethene, Formaldehyde, Styrene and the latest additional substance PM 2.5. Norway states that it has more pollutants than listed in annex II to the Protocol, but without a fixed list of pollutants.

46. Spain reports on 115 pollutants in its national register — 91 E-PRTR-Pollutants, six additional air pollutants and 18 additional water pollutants. For reporting to the Spanish national register no emission thresholds are applicable, but for the publishing in the register the PRTR Protocols annex II thresholds are relevant.

47. Sweden also reports on the additional five E-PRTR pollutants and on CO_2 from biomass and fossil fuels. For 31 pollutants there are lower thresholds than in annex II of the Protocol. 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.

48. Croatia reports on more pollutants and lower emission thresholds in the national register.

49. Israel reports on 114 pollutants in its national register and some lower emission thresholds.

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

[70] Austria, Bulgaria and Ireland.
[71] Luxembourg, Poland, Serbia, Slovakia and United Kingdom.
[72] Belgium, Lithuania, Portugal, Romania, United Kingdom and the former Yugoslav Republic of Macedonia.
[73] Denmark, Estonia, France and Latvia.
[74] Czechia, Germany and Netherlands.

(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)?

51. 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_2, etc.

52. 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)?

53. In many Parties[75] the competent authority for the collection of emissions from diffuse sources is a national environment agency. In two Parties[76] the environment ministry is the competent authority, and for the EU it is the Commission. Several Parties reported different authorities.[77] France reports that only diffuse emissions from facilities but no emissions from diffuse sources are included in the national register. In Portugal air emissions from diffuse sources are collected in the context of the CLRTAP and the UNFCCC . 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. In UK the responsibility for emissions from diffuse sources in the National Atmospheric Emission Inventory is held by a consortium of private contractors funded by several governmental Departments.

(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)?

54. 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[78] hinted at this by referring to their reporting under the EU E-PRTR-Regulation or by referring to the waste thresholds. A few Parties[79] did not answer the question about the waste or pollutant-specific approach. Two Parties[80] reported that they also implemented the pollutant-specific approach. Czechia implemented pollutant-specific reporting for waste for several pollutants.

55. Bulgaria reported that it did not implement the reporting of extraordinary events for pollutants in wastewater and for waste.

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[75] Austria, Bulgaria, Czechia, Denmark, Estonia, Germany, Ireland, Lithuania, Romania, Serbia and Sweden.

[76] Czechia and Israel.

[77] Such as Inspectorates (Czechia), National Centres (Poland), Institutes (Finland, Slovakia), Federal Offices (Switzerland), Departments (Spain) and environmental administration in general (Luxembourg).

[78] Croatia, Czechia, Netherlands and Romania.

[79] Luxembourg and Serbia.

[80] Czechia and Israel.

56. 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.

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

58. 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.[81] 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. In Spain there are no thresholds for reporting on waste amounts; each type and amount of waste transferred (hazardous waste and non-hazardous waste) must be reported (using the EU-waste codes). Then the electronic database system calculates the total amounts. When the waste amount thresholds are exceeded, then not only the total amounts of hazardous waste and non-hazardous waste are published on the website in the national register but also the specific waste codes and the corresponding amounts.

59. Furthermore, Israel has information on water and energy consumption in its register. Similarly, in the Dutch register there is also information on water consumption, energy consumption has to be reported if emissions into air are reported; moreover, amounts of both hazardous or non-hazardous waste have to be reported to the Netherlands when at least one of these thresholds has been exceeded; concerning waste also the EU-waste codes have to be reported. 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. Portugal, too, additionally implements county, NACE-Code and Hydrographic region. 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)?

60. Seven Parties[82] directly enter emissions from diffuse sources in their national registers, one of them[83] for emissions to air only. Norway reports that they have no adequate spatial disaggregation. Five Parties[84] give links to web pages with information on emissions from diffuse sources. Five Parties[85] refer to the E-PRTR, where emissions from diffuse sources from those Parties are included. Ten Parties[86] 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[87] are planning first steps (e.g., by incorporating the obligations in laws or

[81] Croatia, Netherlands and Spain.
[82] Belgium (Flanders Region), Denmark, EU, Netherlands, Norway, Sweden and Switzerland.
[83] Denmark.
[84] Austria, Czechia, Germany, Spain and United Kingdom.
[85] Estonia, Ireland, Lithuania, Romania and Portugal.
[86] Belgium (Walloon and Brussels Regions), Bulgaria, Croatia, France, Israel, Luxembourg, Poland, Serbia, Slovakia and the former Yugoslav Republic of Macedonia.
[87] E.g., Croatia.

ordinances) or have already fixed the obligations in their laws[88] or have created national calculating systems regarding emissions from diffuse sources into air;[89] others[90] have current projects for introducing the data. Only France still reports no plans to include emissions from diffuse sources in the short term. Several Parties refer to national reporting obligations according to international treaties.[91] As far as emissions from diffuse sources into water are concerned, most Parties focus on nitrogen and phosphorous emissions. The EU and Sweden (since 2016) also include diffuse emissions of metals into water. Norway considers - beside the common sectors transport, households and agriculture - also emissions from products in use and its typical pollutants. For emissions into air the UK includes energy industries, manufacturing industries and construction, non-road transport, small stationary combustion, fugitive emissions, industrial processes, agriculture and waste.

(i) What methodologies are used to derive the information on diffuse sources (article 7, para. 8)?

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

62. Several Parties[92] had methodologies for reporting emissions to air related to their other reporting requirements under EU regulations, CLRTAP or UNFCCC (e.g., the EMEP[93]/EEA[94] air pollutant emission inventory guidebook or Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories). Some Parties[95] do not have applicable methodologies for reporting of emissions from diffuse sources. A couple of them[96] reported that they have already started examination of possible methodologies or started with reporting on one sector.[97] A few Parties[98] did not describe their methods, but sent links to websites containing the descriptions.

63. Germany did not describe its methodology; it referred to a current research project which identified the sources and pollutants and prepared them for inclusion into the national register. Two Parties[99] 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 and is updated yearly. For the non-industrial sources into air the Netherlands use calculations based on the following principle: an activity-rate is multiplied by an emission-factor; the emission factors are based on measurements and calculations of modelling or international literature.

64. Significantly less information was reported about water; a few Parties[100] reported that for water, in principle, an activity rate is multiplied by an emission factor. In Switzerland the

[88] Israel.
[89] Finland.
[90] E.g., Germany and the EU for water.
[91] E.g., CLRTAP and the United Nations Framework Convention on Climate Change.
[92] Austria , Belgium, Croatia, Estonia, Finland, Lithuania, Luxembourg, Norway, Portugal, Romania, Spain, Sweden and United Kingdom.
[93] Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe.
[94] European Environment Agency.
[95] Bulgaria, France, Ireland, Israel, Lithuania, Luxembourg, Poland, Slovakia and the former Yugoslav Republic of Macedonia.
[96] Israel and Slovakia.
[97] E.g., Serbia.
[98] Czechia, Denmark and United Kingdom.
[99] EU and Netherlands.
[100] EU, Netherlands and Belgium (Brussels and Walloon Regions).

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. Lithuania reports that they started to use a modelling system allowing spatial and temporal assessment of diffuse sources which is used for preparation of river basin management plans. An example of good practice seems to be the description of the emissions from diffuse sources of the EU on the E-PRTR-website.

IV. Reporting cycles (article 8)

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

65. Most Parties reported on the beginning of reporting to their national registers and the available reporting years. Many of the Parties[101] 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. Czechia started in 2009. Latvia and Portugal reported that its first reporting year was 2010.

66. 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. Landfills were published in the register since 2016, the data from aquaculture are in the register, but are not yet published for technical reasons.. 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

67. Many Parties[102] required the operators to report by the end of March of the year following the reporting year. In France for those facilities which are also under the emission trading system have to report until 28 February. Finland, 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.[103] Estonia has earlier deadlines[104] for the operators. In four Parties[105] 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, in Luxembourg it is before 1 July and in 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.

[101] Austria, EU, Germany, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

[102] Belgium (Walloon Region), Bulgaria, Croatia, Czechia, France, Ireland, Israel, Netherlands, Poland, Serbia, Slovakia, Spain, Sweden and the former Yugoslav Republic of Macedonia.

[103] End of February for Scotland, end of January for Northern Ireland, end of March in Wales and end of May in England.

[104] End of January for air and waste reporting and the beginning of February for water.

[105] Austria, Denmark, Germany and Portugal.

68. 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

69. 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.[106] Some Parties[107] make use of the whole 15-month period; six Parties[108] need only 14 months. Three Parties[109] 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. The Netherlands makes the data available before June, which would also mean more than the required fifteen months. The answer of Finland is not clear in this respect.

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

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

(d) Were the various deadlines for reporting by facilities and for having the information publicly accessible on the register met in practice or, if they were delayed, what were the reasons for the delay?

72. Almost all Parties report that in general the reporting deadlines were met by the operators. Only four Parties[110] 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.

73. 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[111] do not give any information or clear information on this subject. Ireland reports on delays in publishing the national register because of technical issues. Serbia did not report on this subject at all.

[106] Sweden, daily update; Serbia, immediately after verification; Bulgaria, 1 June; Norway, 1 July; Czechia, 30 September; Spain, 15 November; Israel, 1 September; Croatia, 15 December; Slovakia and France, 31 December; Poland, immediately after reporting but within 15 months after the end of the reporting year by the latest.

[107] E.g. Denmark, Germany, Ireland, Luxembourg, Romania and United Kingdom.

[108] Belgium, Latvia and Switzerland.

[109] Austria, Lithuania and Portugal.

[110] Croatia, France, Poland and Sweden.

[111] Croatia, Slovakia, Switzerland and United Kingdom.

(e) Were methods of electronic reporting used to facilitate the incorporation of the information required in the national register and, if such methods were used, what was the proportion of electronic reporting by facilities and any software applications used to support such reporting?

74. Electronic reporting is used by most of the Parties;[112] several Parties[113] additionally use online reporting. However, reporting on paper is still done by some Parties or sectors. In Slovakia a majority reports by e-mailing editable documents. Croatia reports that the paper-reporting quota depends on the demographic structure and the kind of facilities in the different regions. Poland still requires signed hard copies in addition to electronic reporting. In Portugal after the end of the deadlines the communications are non-electronic; this is in sum ca. one per cent. For Lithuania it is unclear which kind of reporting they established.

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)

75. 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). However, there are countries that, in their responses, have little or no mention of their legal regulations and measures for data collection and record-keeping.

76. 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 the EU member States. Twenty 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[114] apply their own regulations for the national PRTR. The majority of Parties actively use the EU considerations described in the E-PRTR guidance.

77. 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.

78. 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

[112] Austria, Belgium (two regions), Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Latvia, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

[113] Bulgaria, Croatia, Denmark, Finland, France, Germany, Israel, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland and United Kingdom.

[114] Croatia, France, Ireland, Israel, Norway, Serbia, Spain, Switzerland and the former Yugoslav Republic of Macedonia.

be stored for five years.[115] Some countries further mention that operators must use the best available information.[116]

79. In several Parties the competent authority is responsible for data collection and checking according to the validation rules. Furthermore, in many countries the competent authority is the environment agency managing, processing and developing the national PRTR and aggregates the data required by E-PRTR regulation or the Protocol on PRTRs. Most of the Parties use electronic reporting systems that support the submission of data.

80. In many countries the operators have to report to the environmental (competent) authorities at least once a year in accordance with domestic legislation. Furthermore, the operators report PRTR data via electronic means, internet portal or other ways.[117]

81. In the EU member States on the base of domestic and E-PRTR legislation stipulate that the operator / owner must state whether the submitted PRTR data have been measured (M), calculated (C) or estimated (E). If the data have been measured, calculated or estimated, the operator / owner should indicate which analysis, internationally approved standard, calculation or estimation method they have used to come up with these values.

82. Despite the fact that each country is required to report emissions from diffuse sources, only Austria, Estonia, Germany and the Republic of Moldavia mention its emissions from diffuse sources (primarily in the pig and poultry production) in its reporting related to Article 9.

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

83. 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.

84. In several countries[118] the quality of the data with regard to completeness, consistency and credibility is assessed following the E-PRTR guidance. Many Parties[119] have developed their own methodology to ensure the quality of PRTR data. Germany revised the emission factors for the intensive livestock production sector, and for carbon dioxide and heavy metals used for calculating of annual loads of wastewater treatment plants. 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 and control. In

[115] Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, Germany, Hungary, Ireland, Israel, Latvia, Norway, Romania, Serbia, Slovakia, Sweden and Switzerland.

[116] Belgium, Bulgaria, Croatia, Estonia, Ireland and Switzerland.

[117] Austria,Belgium, Bulgaria, Estonia, Croatia, Netherland, Republic of Moldavia, Serbia and Slovakia.

[118] Austria, Bulgaria, EU, Germany, Ireland, Netherlands, Romania Spain and the former Yugoslav Republic of Macedonia.

[119] Belgium, Croatia, Luxembourg, Netherlands, Poland, Serbia, Slovakia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

nine States[120] the data quality assurance and control is required by the conditions of the applicable permit. Validation tasks get simplified for authorities in countries where the IPPC licensing procedure binds the operator to carry out monitoring programs, quality assurance and control of data. This results in higher quality PRTR data. Additionally, a few Parties[121] use automatic tools for data validation.

85. In 2013 the Danish Environmental Protection Agency introduced automatic quality assurance of PRTR information reported through green accounts at www.virk.dk. If the information entered is very different from previous years' information, the person reporting data will automatically be notified and asked to verify the correctness of the information reported. Moreover, the PRTR information which has been reported through www.virk.dk is forwarded automatically to the authority which is to assess the quality of the information with regard to completeness, consistency and reliability. In Denmark, an overall assessment of the quality of the forwarded PRTR information has not yet been carried out.

86. In Croatia the environmental agency carries out and coordinates activities on data quality assurance and control, including meetings, workshops, seminars and informative materials. For this purpose, the agency prepared the "Manual for Keeping the Environmental Pollution Register" which contains instructions for work with the Environmental Pollution Register and procedures for data quality assurance which is available online.

87. In Israel there are two types of quality assessment: limited and extended quality assessment.

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

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

90. 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.

91. In Estonia the Environmental Board checks annual reports and, where necessary, requests companies for additional information. The specialists engaging in checking the reports have been trained regularly.

92. In Ireland, validation of the PRTR data consists of two separate stages:

(a) Automatic validation contains a 5-step approach to ensure uploaded information is correct:

(i) User authentication;

(ii) Cell input validation / workbook rules to ensure good quality and consistent data is received from the licensees;

(iii) XML validation;

(iv) Uploading to website validation;

(v) Uploading to Irish EPA server validation.

(b) All information submitted to the Irish EPA is also subject to a process of manual validation and verification by the Irish EPA. The manual validation process was

[120] Belgium, Bulgaria, Estonia, Germany, Ireland, Latvia, Lithuania, Norway and Romania.

[121] Denmark, EU, Germany, Ireland, Norway and Sweden.

reported to have improved the quality of data reported by operators by highlighting changes from previous years.

93. In Spain a working group, coordinated by the Ministry, was established at national level. The group deals with every PRTR issue and analyses the reporting exercise per each cycle.

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

95. In the United Kingdom there is an online data entry system which allows for initial validation of submitted data. There are also a series of manual QA checks. Various guidance documents are also available to operators which have been developed to ensure the best possible methods are used to derive data before submission. The quality of data has seen year-on-year improvements since additional checks were introduced.

96. In Sweden the operator shall ensure the quality of reported data. In addition to a manual review of data the Swedish Portal for Environmental Reporting is used for submitting environmental reports. The overall aim of the electronic reporting system is to facilitate and to accelerate the reporting process and to ensure the quality of the reported data. The system performs a number of validations when the operator enters information into the different parts of the environmental report.

97. The former Yugoslav Republic of Macedonia has a rulebook for quality assessment. According to article 7 of the rulebook, the competent authorities shall assess the quality of the data provided by the operators of the facilities, in particular as to their completeness, consistency and credibility.

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

98. 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).

99. Four Parties[122] are still developing and improving PRTR systems to provide electronic access to data. Estonia currently developed the module of publiching data required by the Protocol on PRTRs, but it is still incoplete. In 2016, Serbia further developed its national PRTR register website. This website was developed with the financial support of the Regional Environmental Center, in the framework of the project “Support Establishment and Advancement of Pollutant Release and Transfer Registers (PRTRs) in western Balkan Countries and in Moldova”, funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The launch of the advanced and redesigned web portal of PRTR of the former Yugoslav Republic of Macedonia is scheduled for the beginning of 2017. The website on PRTR in Moldova is under development, will be made public and will be the tool for public access to PRTR data starting with 2018.

100. Romania reports that the access to data covered by the Protocol is being provided via a national PRTR register.[123]

101. 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

[122] Estonia, Republic of Moldova, Serbia and the former Yugoslav Republic of Macedonia.
[123] Accessible at the following address: 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).

102. Only a few Parties[124] referred to administrative procedures that ensure provision of data upon request within the meaning of article 11, paragraph 5. Spain reports that 100 per cent of data enquiries are made through the electronic database, at the same time it is always possible to use any of the common administrative procedures established by law. 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 Czechia 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.

103. 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.

104. 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.

105. Frequently, web pages disseminating environmental information cross-refer to the PRTR page and vice versa. It is notable that five Parties[125] 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.

106. The Swedish PRTR was synchronised with the Swedish EPA's website (www.naturevardsverket.se) in 2014 in order to make it easier to use and further 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 and is increasing further with 34,000 per year in 2015. In Croatia, in the period from 1 January 2016 until 21. July 2016, the total number of visits was amounted to 39,228 by users who viewed 354,526 pages. On average, 9.04 pages per visit were viewed, while the average duration was almost 18 minutes.

VIII. Confidentiality (article 12)

(a) Legislation

107. 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

[124] Croatia, Czechia, Estonia, Lithuania and Spain.

[125] Austria, Croatia, Spain, Sweden and Switzerland.

in the PRTR-España Register are considered to be "environmental information" which cannot be subject to confidentiality claims.

108. 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.[126]

109. Portugal reports that a new national law transposing the E-PRTR Regulation of the EU (Law no. 26/2016 of 22 August 2016) and states that until today confidentiality has never been requested by national PRTR operators.

110. 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.

111. Croatia reports about the new environmental pollution register ordinance (OG No. 87/15) which includes data confidentiality provisions in Article 12 and Chapter V. So far, reports Croatia, less than one per cent of the facilities have submitted a data confidentiality request (in 2015 amounting to 0.15 per cent). The submissions mainly came from state-owned companies and institutions and a small number of private companies. 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.

(b) Practical experience

112. Many countries[127] 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.

113. Some countries[128] 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.

114. 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.

[126] 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.

[127] Austria, Belgium (Brussels and Walloon Regions), Czechia, Estonia, Latvia, Lithuania, Poland and Slovakia.

[128] Belgium (Flanders Region), Bulgaria, Croatia and Denmark.

115. In several countries[129] 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.

116. 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 request for confidentiality was made, related to ammonia emissions from an installation for the intensive rearing of poultry.

117. 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 2007–2014 (in most cases these concern confidentiality of commercial or industrial information and infringement of intellectual property rights) and states that there is a decline in confidentiality cases.

118. Luxemburg reports about four operators who requested confidentiality regarding hazardous waste shipment to destinations outside of Luxemburg.

119. The Republic of Moldova reports that Art. 12 has not yet been implemented in national legislation.

120. The Netherlands report that only for the specific additional reporting obligations, when comparing with E-PRTR reporting obligations, several confidentiality claims are submitted every year. These concern the reporting of fuel and energy consumption and the reporting of emissions at installation level. These data are not actively made public by Dutch authorities, neither are they subject to the E-PRTR reporting. Where confidentiality is claimed in these cases, the claimant does not want the data to be made public at the request of third parties.

121. Similarly, Switzerland reports that in 2014 six facilities out of 261 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. Recent years have shown however that only very few new facilities claim confidentiality for their data. This may partly be ascribed to the established awareness that confidentiality claims can only be granted under very restrictive conditions.”

[129] Including Denmark, Ireland and Luxembourg.

122. 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. Furthermore, the United Kingdom reports about a call for views which had been organized: Approximately 54 per cent of respondents agreed that the UK applies the requirement to keep specific information confidential in an appropriate manner, 38 per cent were unsure and eight per cent didn't answer. Feedback indicates that the UK applies the requirement for handling confidential information appropriately.

123. The EU reports that very few cases of confidentiality have been claimed: As per 2014 eight member States have made use of the confidentiality provisions. 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)

124. The majority of the reporting countries[130] described opportunities for the public to submit questions or comments to public authorities relating to the PRTR system or newly developed adopted laws.

125. Many countries reported the active development of various electronic tools to make information more easily available, for example through governmental websites131 (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.

126. Some countries[132] 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 they have introduced in their national register a possibility for the public to obtain clear and easily understandable online information regarding the possible impact of certain substances on human health. The former Yugoslav Republic of Macedonia reported that their Ministry of Environment and Physical Planning in cooperation with the civil society has formed a working group on PRTR that includes a representative from the civil society to ensure direct engagement of NGOs in the activities related to the implementation of PRTRs. The Republic of Moldova reported about organizing one-day trainings for NGOs in 2016 and spring 2017 on the involvement of NGOs and the general public to strengthen their role in the development of the PRTR and accessing/using PRTR data.

[130] Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Germany, Ireland, Israel, Romania, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

[131] Belgium, Croatia, France, Germany, Ireland, Norway, Romania, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

[132] Bulgaria, Germany and Switzerland.

127. Only the United Kingdom addressed in the report the issue related to the price of the information provided to the public; they mentioned that access to information contained on the PRTR is free of charge and downloadable.

128. A number of countries[133] 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.

129. 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.

130. Some countries[134] also referred to their obligations vis-à-vis public participation under the E-PRTR Regulation or their efforts to implement requirements of E-PRTR.

131. Some Parties[135] 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.

132. 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.

133. Lithuania 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. Bulgaria and Poland regretted the lack of involvement of public in the process of further development of the national PRTR system.

X. Access to justice (article 14)

134. 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.

135. The majority of the reporting countries refer to legislation setting the framework for environmental protection, freedom of information (including environmental information) and

[133] Ireland, Israel, Lithuania, Netherlands and Switzerland.
[134] Austria and Belgium.
[135] Austria, Croatia, Denmark, Estonia, Israel and Slovakia.

access to review procedures[136] as the sources of rules on access to justice with regard to requests for data from PRTRs together with procedural legislation. Moreover, Austria,[137] Denmark[138] and Romania[139] adopted specific rules covering access to environmental information together with possible remedies in case of a breach of the relevant provisions.

136. 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[140] 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.

137. Parties, in general, report availability to individuals of both administrative and judicial review procedures to appeal respective decisions.[141] A few countries emphasize availability of either administrative procedures[142] or judicial proceedings.[143] Only the reports of Czechia, Germany, Norway and Serbia provide no detailed information on availability of review procedures. It is significant that in several legal systems specific administrative authorities[144] are empowered to review decisions concerning provision of environmental information, which includes data derived from PRTRs.

138. Parties reported no specific administrative or judicial cases concerning refusal to access to PRTR data. Some Parties,[145] though, indicate 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.

139. 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.

140. 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.

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

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136 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.

137 Environmental Information Act.

138 Act on “Access to Environmental Information”.

139 Government Decision No. 878/2005 on “Public access to environmental information”.

140 Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC.

141 Belgium, Croatia, Estonia, Finland, France, Ireland, Latvia, Lithuania, Romania, Spain, the former Yugoslav Republic of Macedonia and United Kingdom.

142 I.e. Denmark-Environmental Board of Appeal, Poland proceedings under the Code of Administrative Procedures, Portugal-Commission for Access of Administrative Documents.

143 Austria, Bulgaria, Israel, Sweden and Switzerland.

144 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).

145 Czechia, 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

142. 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.[146] Switzerland reports on a checklist for data validation. Germany provides an expert wiki, which is regularly updated.

143. A number of countries have established working groups on PRTR or organize regular meetings or training.[147] Switzerland furthermore reports on annual training courses offered to the cantons.

144. 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.

145. Several countries report that assistance via telephone and e-mail is offered to the civil servants in charge.[148]

146. 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.

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

148. The Netherlands report about information and guidance for competent authorities provided on the website www.e-mjv.nl and via a helpdesk.

149. Luxemburg reports about a new (geographic information system-based) website of the Environmental Administration of Luxemburg which is currently under construction (http://prtr.aev.etat.lu/).

150. In the former Yugoslav Republic of Macedonia, donor-funded support projects provided capacity-building for PRTR, both for the public authorities and the general public; more specifically, a study and a strategy on PRTR implementation in the former Yugoslav Republic of Macedonia (2016-2020), a short local language manual for companies on reporting via PRTR-online software, a short local language guide for citizens and civil associations and a redesigned and advanced PRTR web portal are now available.

151. The Republic of Moldova reports about the implementation of two international capacity building projects, one within a United Nations Environment Programme/United Nations Institute for Training and Research /Global Environment Facility initiative (in Belarus, Cambodia, Dominican Republic, Ecuador, El Salvador, Kazakhstan, Republic of Moldova, Panama and Peru) regarding POPs reporting, monitoring and information dissemination using PRTRs and one regional project with the title "Support for implementation and promotion of PRTR in Balkan Countries and the Republic of Moldova" which is implemented by the Regional Environmental Center for Central and Eastern Europe,

[146] E.g., Austria, Croatia, Czechia, EU, Ireland, Israel and Spain.
[147] Belgium, Bulgaria, Ireland, Israel, Netherlands and Spain.
[148] E.g., Denmark and Latvia.

in partnership with the MoEnv and EcoContact NGO and funded by the Federal Ministry of Environment, Nature Conservation, Building and Nuclear Safety of Germany. In the frame of these projects a number of activities have been carried out, such as a working meeting with the representatives of the State Ecological Inspections related to activities included in the Annex 1 of the Protocol and the pollutants to be reported. In this workshop the issue of thresholds for economic operators to be included in the national PRTR system has been discussed with the representatives of the local inspections. A further workshop was held dedicated to the presentation and discussion of measuring and calculation methods for air and water pollutant emissions. Workshops on exchange of experience and progress made were held as part of the aforementioned regional project.

(b) Assistance and guidance to the public

152. Most countries provide online information tools, e.g., special sections on a web page.[149] Some countries provide "question and answer" sections on their webpage.[150]

153. Many countries report that members of the public can contact the authority in charge for PRTR maintenance via telephone or e-mail.[151] 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. Furthermore, in 2014, an English version of the PRTR website has become available.

154. 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/).

155. 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.

156. Latvia reports that operators are informed through the State Environmental Service. Information about the PRTR register is also included in their integrated permits. As concerns the public Latvia has introduced in its national register a possibility for the society to obtain clear and easily understandable online information regarding the possible impact of certain substances on human health. Such added sources of information promote a better understanding on how exactly particular substance may have an influence on lifes. It also provides information on nature and possible impacts of chemical substances and by way of this supports awareness raising related to environmental issues.157. 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. Furthermore, the institution in charge of providing environmental information has changed; it is now the Environmental Protection Agency and no longer the Regional Environmental Protection Departments.

158. When launching or upgrading national PRTRs, some countries sent out press releases.[152] 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.

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

[149] E.g., Belgium, Bulgaria, Croatia and Spain.
[150] E.g., Denmark.
[151] E.g. Estonia and France.
[152] Austria, Germany and Poland.

160. 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. They envisage continuation of cooperation with the Serbian Aarhus Centre in promoting the PRTR and plan to prepare briefings to help to interpret the published data on emissions to air, water, soil and on waste management. Serbia reports on about ten workshops which were organised in 2015 and 2016 with participation of the media and from NGOs.

161. Czechia 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.

162. Portugal reports that the duty of assistance to the public for access to environmental information is establish by articles 10 and 11 of the Law No. 26/2016 from August 22, 2016.

163. Spain reports that information on the national PRTR is disseminated via social networks (Twitter, Facebook) and provides information about new outreach activities, such as the second and the third PRTR-Conferences held in 2014 and 2016 (a specific Annex to the national report is provided on this matter).

164. Romania reports about a planned new access point to PRTR data via a new GIS-portal.[153]

165. In Sweden, the PRTR website has been demonstrated at universities with a special focus on how it can be used and integrated into education. A new PRTR brochure is available as of 2016.

166. 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. The results from the call for views identified that approximately 60 per cent of respondents did not agree or were unsure that the United Kingdom sufficiently promotes public awareness of the PRTR. Feedback centred on low awareness amongst the general public and non-specialists, with suggestions that the Defra website could make it easier to find the PRTR. Others were unable to provide an opinion as they only interact with it from the point of view of specialists. As with the other feedback from the call for views Defra would work with competent authorities to review how this can be improved.

XII. International cooperation (article 16)

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

167. Some Parties[154] 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.

168. A few Parties[155] 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[156] stress their close cooperation with other Parties and EU member States at meetings, either in the context of the E-PRTR Committee or of the Working Group of the

[153] See https://atlas.anpm.ro.

[154] Austria, Croatia, France, Germany, Israel, Romania and Spain.

[155] Bulgaria, France, Poland, and United Kingdom.

[156] Belgium, Croatia, Czechia, Denmark, Finland, Latvia, Norway, Serbia, Slovakia, Spain, Sweden and the former Yugoslav Republic of Macedonia.

Protocol on PRTRs and the OECD Working Group on pollutant release and transfer registers, workshops, or within subregional groups (e.g. the Nordic PRTR group) and also through personals 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.

169. Some Parties[157] reported that they have no cooperation with other Parties. Among them the former Yugoslav Republic of Macedonia explained in their report that it was not able to cooperate and assist other countries because its PRTR is at an early stage of practical implementation.

170. Germany indicates that it supports international action in particular regarding capacity building on PRTR. For example, at the first session of the Meeting of the Parties Germany distributed information on the German PRTR and on the use of the open source software components.

171. France mentions the existence of twinning activities to provide candidate countries for membership of the EU with support to establish regulatory frameworks or online tools to collect data from the industry.

(b) Mutual agreements between the Parties concerned in implementing national systems in pursuance of the Protocol in accordance with paragraph 1 (b)

172. A few Parties[158] have, with the support of the 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.

173. Germany has been involved in important partnerships that feature twinning and advisory assistance programmes and engage with the systems and technologies of Israel, the western Balkan countries and the Republic of Moldova.

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

175. Ireland indicates that wherever possible information on the Irish PRTR system is shared with other countries and visiting parties are guided through systems and technologies where relevant (e.g. Northern Ireland Environment Agency visit to the EPA in 2016). Similarly Belgium shares the available information on an ad hoc basis when asked about specific issues raised by other Parties to the Protocol.

176. A couple of Parties[159] 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. Czechia also took the opportunity of these presentations to share with member States the significant changes to come in the functioning of its national PRTR. Similarly, several countries have shared projects and capacity-building activities with technical support from Spain.

[157] Albania, Luxembourg, Netherlands and Portugal.
[158] Austria, Denmark and Germany.
[159] Serbia and Switzerland.

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

177. Some Parties[160] have indicated that their PRTR data on releases and transfers within border areas were publicly available for other Parties on its national PRTR website. In some instances information on the establishment of a national register have also been communicated to the PRTR Secretary of the EEA and other regional partners. Moreover, some Parties[161] have established working groups on specific topics such as the protection of transboundary waters pursuant to bilateral treaties. For other Parties[162] data reported to the national PRTR constitute an important support source for addressing transboundary environmental problems. A couple of Parties[163] 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.

178. There is close cooperation among EU member States through the E-PRTR. For example Finland underlines this cooperation and indicates to supply its PRTR information to the EU's joint EEA data register which contains the information of all EU member States concerning releases covered by the PRTR register, as well as links to any possible national registers. 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.

179. Poland indicated that it does not cooperate with neighbouring countries, yet. Estonia indicates that it has no considerable experience in international cooperation related to PRTRs.

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

180. PRTR data concerning transfers among Parties are publicly available to other Parties on the Austrian and British PRTR websites. Several Parties stress that they cooperate closely with other EU member States through the EU and the E-PRTR. For example, Czechia and Poland cooperate to address air pollution issues on a continuous basis. Some Parties[164] also raised the fact that data reported on national PRTR are usually part of larger information material relevant for different reports under international conventions such as the Stockholm convention and the Basel convention.

181. A few Parties[165] mentioned that they did not receive any request for information related to knowledge transfers among Parties, but that they would be ready to answer questions on an ad hoc basis. Switzerland indicates that all information on its national website is made available in four languages, including English which is not a national language.

182. Some Parties do not cooperate with countries to which wastes are transferred. Serbia and Norway explain 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.

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[160] Austria, Bulgaria, Germany, Ireland, Norway, Romania, Serbia, Switzerland and United Kingdom.
[161] E.g., Slovakia.
[162] E.g., Czechia.
[163] Germany and United Kingdom.
[164] Czechia, Germany and Finland.
[165] Belgium, Czechia and Slovakia.

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

183. 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 twinning projects with Israel and Croatia concerning the establishment and improvement of national PRTRs. Sweden has also shared its experiences within the framework of the environmental collaboration with Brazil.

184. The Czech Environmental Ministry is involved in discussions and seminars focused on technical assistance to developing countries or countries with economies in transition, e.g. Kazakhstan, in particular by describing experience in purely electronic reporting to the national PRTR. Czechia also underlines the importance for the Czech Ministry to gain experience with the state of the art presentation and processing of data and the important role of the new National Reference Centre for industrial pollution established by the European Environment Agency in that matter.

185. Slovakia provided relevant technical support to other Parties[166] with economies in transition, especially through the Basel Convention Regional Centre and its cross-cutting projects referring to several topics within environmental protection, that refer also to the agenda of the PRTR Protocol. Slovakia also searches for new opportunities for technical cooperation in other countries in south and south-eastern Europe, in relation to the possible future EU membership of these countries mainly. Slovakia also cooperated with Mongolia on a project with emphasis on the environment contamination.

186. Spain provided technical support within a United Nations Environment Programme/United Nations Institute for Training and Research /Global Environment Facility initiative (in Belarus, Cambodia, Dominican Republic, Ecuador, El Salvador, Kazakhstan, Republic of Moldova, Panama and Peru) regarding POPs reporting, monitoring and information dissemination using PRTRs. Spain also contributed to initiatives and international projects aiming at awareness raising and the promotion of the Protocol organised in different countries (including Belarus, Mexico, Morocco, Turkey) and organised the "International PRTR Week" in November 2015 consisting of the following meetings: the second Global Round Table on PRTRs, the eighteenth OECD Task Force on PRTRs and the fourth meeting of the Working Group of the Parties to the Protocol on PRTRs in November 2015.

187. Norway assisted Poland through a bilateral project on the development of a website for the Polish PRTR.

188. Several Parties[167] similarly support UNITAR projects and the activities of the OECD Working Group on PRTRs that benefit countries building up a PRTR system.

189. More generally, some Parties, such as the United Kingdom, have developed resources on emission factors and sector guidance notes from a variety of competent authorities.

190. Some Parties[168] indicate being a part of the International PRTR Coordinating Group, which foremost goal is to support developing countries and countries with economies in transition through intergovernmental coordination.

191. The Ministry of Environmental Protection of Israel has received financial assistance from the UNEP Mediterranean Action Plan for promoting the integration of PRTR data of

[166] In particular, Belarus, Republic of Moldova and the former Yugoslav Republic of Macedonia.
[167] Including Spain, Sweden and Switzerland.
[168] Croatia, EU, Spain, Sweden and Switzerland.

emissions to sea with the National Baseline Budget system (NBB) promoted by marine pollution assessment and control component of the Mediterranean Action Plan.

XIII. Conclusions

192. 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).

193. 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

194. 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) PRTRs are a work in progress in some countries, with several Parties reporting further development of their legislation and the introduction of new measures to improve user friendliness;

(e) Search functions are crucial to user-friendliness, but in a number of countries search functions are still being developed or need improvement. Parties continue to refine their search engines by adding further categories;

(f) 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;

(g) 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;

(h) 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

195. 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)?

(f) There is a lack of information on the establishment of national PRTR systems, which could be remedied by more thorough reporting on that issue.

(g) Few Parties report on practical measures to protect whistle-blowers, and there should be more detailed reporting on that issue in future.

Legislative, regulatory and other measures (article 7)

Trends

196. 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, although there has been a slight increase on such activities since the last reporting round. 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, although there has been some progress in this regard.

Challenges and solutions

197. 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

198. A consideration of those parts of the NIRs that related to reporting cycles led to the identification of the following trends:

(a) For many of the Parties 2007 was the first reporting year of their national PRTR;

(b) 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;

(c) 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;

(d) 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

199. 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.

Data collection and record-keeping (article 9)

Trends

200. Most Parties have developed measures on record keeping and data collection in environmental laws that were introduced before their PRTRs.

201. All reporting Parties have their own regulatory measures for establishing methodologies used in gathering information on releases and reports.

202. In many countries reporting to competent authorities on an annual basis is required.

Challenges and solutions

203. Despite the fact that each country is required to report emissions from diffuse sources, very few Parties mention data collection with respect to diffuse sources in their reports.

Quality assessment (article 10)

Trends

204. 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.

205. A significant number of countries appear to have met the challenge posed by checking the credibility of information. A significant number of countries report that they have introduced systems to assure the quality of data and/or report that the quality submitted is good. Validation is simplified where the IPPC licencing procedure requires monitoring, quality assurance and control of data.

Public access to information (article 11)

Trends

206. 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;

(f) Parties collect data on webpage visitors.

Challenges and solutions

207. 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. A small, although growing, number of 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

208. 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

209. 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

210. 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

211. 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

212. 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

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

(a) Except for a few Parties, no information is 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

214. 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

215. 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

216. 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) There is a growing evidence that Parties collaborate within a number of forums including not only the EU and the ECE, but also the OECD and subregional groups;

(c) 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;

(d) It is encouraging to note that an increasing number of 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

217. 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.

218. It seems that a number of Parties do not engage proactively in collaboration activities. They nevertheless participate in related meetings organized under the Protocol. These Parties also often declare their willingness to provide assistance if asked for by countries that are looking for support in building their PRTR. To facilitate collaboration activities, the organisation of dedicated events can be considered as a good way to facilitate implementation of obligations under article 16 by bringing together Parties, non-Party states and relevant organisations. As an example, the second Global Round Table on PRTRs (Madrid, 24–25 November 2015) was perceived by Parties as a very useful event to share information on PRTRs and get in touch with experts from other Parties. It can be considered that the organisation of similar events in the future would continue to have a strong impact on efforts by Parties to implement i.e. article 16

Annex I

Overview of the progress in implementing the strategic plan for 2015−2020

Introduction

1. The Working Group of the Parties to the Protocol on Pollutant Release and Transfer Registers at its fifth meeting (Geneva, 23–24 November 2016) took note of the decision by the Bureau to entrust the Protocol's Compliance Committee with the task of preparing an overview of the progress in implementing the strategic plan for 2015–2020 for the Protocol (ECE/MP.PRTR/WG.1/2016/2, para. 33). Pursuant to this decision, the Committee prepared the present document with the assistance of the secretariat.

2. Based on the information provided by Parties through the national implementation reports for the 2017 reporting cycle, the Compliance Committee put together the following information on the current status of the indicators of progress/targets for the objectives, per the three focal areas, as outlined in the strategic plan for 2015–2020 (ECE/MP.PRTR/2014/4/Add.1). Numbers and names of Parties that are given in this document include only those Parties that reported the related information in their national implementation report (NIR). The information on NIRs provided in this document is as of 1 June 2017. The secretariat had received NIRs from 30 of the 35 Parties to the Protocol. In general, more Parties may fulfil specific indicators/targets, but may not have reported about this in their NIR.

3. Also, the Committee found that it had not enough information to prepare a full overview on the progress in implementation of the strategic plan. While for focal area I, most of the targets/indicators described in the strategic plan correspond to information that Parties had to report on for their report on national implementation of the Protocol, focal areas II and III were found to require more specific information that to a great extend was not available from the NIRs.

4. In the following chapter, an overview on the current status per focal area and objective as set out in the strategic plan is provided, followed by general conclusions.

A. Current status of progress in implementing the strategic plan by focal area

1 Focal area I, implementation of the Protocol by each Party

5. 26 Parties[a] have integrated and shared electronic reporting tools and data available on electronic databases (objective I.1), are accessible through the internet (objective I.3) and most of them seem to use geographic information systems (GIS), which is however difficult to discern from the NIRs due to a lack of explicit reporting about the use of GIS tools[b] (objective I.5). Seven Parties[c] report that they make information on releases from diffuse

[a] Austria, Belgium (two regions), Bulgaria, Croatia, Czechia, Denmark, European Union, Estonia, Finland, France, Germany, Ireland, Israel, Latvia, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia and United Kingdom.

[b] With the exception of e.g. Luxembourg and Romania that report about planned new access points to PRTR-data via a new GIS-portal.

[c] Belgium (Flanders Region), Denmark, EU, Netherlands, Norway, Sweden and Switzerland.

sources available through their respective pollutant release and transfer registers (PRTRs), see paragraph 60 of the synthesis report on the implementation of the Protocol on Pollutant Release and Transfer Registers ECE/MP.PRTR/2017/10 for more details on this topic (objective I.6).

6. The NIRs provide no clear answer to the question on the number of Parties that make use of calculation methodologies for the preparation of data for PRTR reporting, which could be easily adapted and used in all countries (objective I.2).

7. Ten Parties[d] reported about their practices on the subject of ensuring that grounds for confidentiality are applied strictly in accordance with article 12 of the Protocol (objective I.4). Many countries report that they have no requests for confidentiality. The overall impression of the Committee is that Parties make strict use of the provisions under the Protocol in that regard.

8. Regarding a sub-objective of objective I.1, to facilitate the use of PRTR data for multiple purposes and the sharing of information according to shared environmental information system (SEIS) principles to be developed throughout the ECE region, some more specific observations by the Committee include that there was only limited reporting regarding the application of the SEIS principle.

9. Table I below provides information about progress in implementing the focal area I of the strategic plan 2015–2020, including whether it was possible to evaluate accomplishment of the objectives based on information given in the NIRs and the proportions of Parties that met specific indicators/targets as provided through the strategic plan. The below table reflects only information that the Committee could clearly link to specific indicator/targets.

Table 1

Progress in implementing focal area I.

Focal area I, Objectives 1–6	*Objective could be evaluated based on information given in the NIRs*	*Proportion of Parties that met specific indicators/targets in relation to Objectives*
I.1	yes	74% (26 out of 35)
I.2	no	The NIRs provide no clear answer to the question on the number of Parties that make use of calculation methodologies for the preparation of data for PRTR reporting, which could be easily adapted and used in all countries.
I.3	yes	74% (26 out of 35)
I.4	yes	28% (10 out of 35)
I.5	partly	Parties in their NIRs not always provided clear information on whether they use GIS.
I.6	yes	20 % (7 out of 35)

[d] Belgium, Bulgaria, Denmark, EU, Germany, Ireland, Netherlands, Romania, Spain and Switzerland.

Examples of actions that supported progress in implementation of focal area I of the strategic plan

10. This section provides information on selected examples of actions that supported progress in implementation of focal area I of the strategic plan.

11. Increased harmonization with other databases and improved overall usefulness of PRTR systems were achieved by Parties through PRTR systems being:

(a) Integrated in an Environmental information system;

(b) Established as single window access point;

(c) Provided with a specific section or tool to establish, facilitate and maintain stakeholder dialog and develop or update the national or European registers;

(d) Overseen by a body consisting of representatives of the competent authority, the statistical office, industry and non-governmental organizations for information exchange between stakeholders as well as to review documentation or discuss draft decisions on important organizational matters.

12. Furthermore, Parties reported on capacity building and international/bi-lateral cooperation related activities that aimed at improving existing and establishment of new PRTR systems, namely with a focus on:

(a) Sharing experience with reporting, including on reporting software;

(b) Data processing and quality-assurance of national emission inventories and E-PRTR;

(c) Guidance manuals and documents on release estimation techniques, including documentation developed by the Organisation for Economic Co-operation and Development;

(d) Raising awareness, and promotion activities, including in relation to the use and up-to-date presentation and dissemination of PRTR data;

(e) Promoting modern environmental information systems and the integration of PRTR with other reporting obligations.

13. Parties added to their PRTR search engines the following new functionalities to make them more useful:

(a) Data is provided in aggregated form:

(i) Synthesis by substance or activity;

(ii) Time series by facilities,

(iii) Total emissions per county/municipality;

(iv) Generation of graphic data display, including projects to further facilitate the visualisation of emissions data and its integration with other environmental monitoring data;

(b) Search categories are cross-cutting:

(i) Watershed/river basin district/catchment;

(ii) National licence number or equivalent;

(iii) Global search for facilities with reporting obligations at all levels in the web structure, search for all facilities with permit, also smaller facilities with no reporting obligations,

(c) Type or source of releases can searched by:

(i) Hazardous/non-hazardous waste;

(ii) Total or accidental pollutant releases;

(iii) Emissions and waste transfer, including to other countries;

(iv) Diffuse sources.

(d) Other functionalities include that the registers to provide:

(i) Information on confidentiality claims;

(ii) Information on the used method of calculation/measurement/estimation;

(iii) Information on statistical Classification of Economic Activities in the European Community (NACE code);

(iv) Option for the download of the full database;

(v) Option for the search by text of keywords.

14. Parties' PRTR websites provide also supplementary information such as links to other websites and databases on subject matters relating to environmental protection and references to enterprise's environmental situation in general.

15. Efforts were also reported that aim to support operators and owners of facilities with their reporting obligations, including the development of related applications, e.g. industry help desk for reporting or annual meetings in conjunction with the PRTR reporting where issues and suggestions for improvements are discussed among stakeholders.

16. To increase outreach and use of PRTRs, information that is provided through the national PRTRs is also disseminated in non-national languages and via social networks (e.g. Twitter, Facebook).

2 Focal area II, lifting barriers to ratification and expansion beyond the ECE region

17. Since 2014 two countries ratified the Protocol (Ukraine and Malta) (objective II.1) and there were no ratifications beyond the ECE region (objective II.2). Signatories of the Protocol that remain to have not ratified the Protocol were the following: Armenia, Bosnia and Herzegovina, Georgia, Greece, Italy, Montenegro and Tajikistan.

18. In the NIRs some Parties describe activities related to lifting barriers to ratification and expansion beyond the ECE region. This includes e.g. the support of the Global Round Table events that also successfully made use of synergies with international organizations (objective II.3). What is more is that capacity building activities reported not only involve Parties to the Protocol but also non Parties from the ECE region and beyond the ECE regions. This could play a role in implementing focal area II of the strategic plan.

19. For the Committee it was not possible to, based on the information provided through the NIRs, identify a total number of projects that were implemented jointly between international organizations. The Committee noted, however, that the effective promotion and identification of potential synergies with ECE and global multilateral environmental agreements (MEAs) was done e.g. through meetings of the International PRTR Coordinating Group, joint meetings of Chairs and Vice-chairs of the ECE MEAs, inter-agency coordination meetings on sound management of chemicals and meetings under the United Nations environmental management group that resulted in publishing a report entitled United Nations and Sound Chemicals Management, Coordinating delivery for Member States and sustainable development, A Synthesis Report by the United Nations Environment Management Group or projects implemented and cooperation with ECE MEAs (available from https://sustainabledevelopment.un.org/content/documents/2334chemical_report.pdf) (objective II.4).

20. Table 2 below provides information about progress in implementing the focal area II of the strategic plan 2015–2020, including whether it was possible to evaluate accomplishment of the objectives based on information given in the NIRs and information regarding Parties, which ratified or acceded to the Protocol. The below table reflects only information that the Committee could clearly link to specific indicator/targets.

Table 2

Information regarding Parties, which ratified or acceded to the Protocol.

Focal area II, Objectives 1–4	*Objective could be evaluated based on information given in the NIRs*	*Relevant information*
II.1	no	Malta and Ukraine acceded to the Protocol
II.2	no	No country from outside UNECE region joint the Protocol
II.3	no	No clear numbers to be learned from the NIRs
II.4	no	No clear numbers to be learned from the NIRs

Examples for actions that supported progress in implementation of focal area II of the strategic plan

21. This section provides information on selected examples of actions that supported progress in implementation of focal area II of the strategic plan.

22. Some Parties reported collaborations with non-Parties to the Protocol within the ECE region, including through advisory assistance programmes, seminars or regional workshops.

23. Some Parties report activities that could help promote the Protocol outside of the ECE region, including through participation the International PRTR Coordinating Group, which foremost goal is to support developing countries and countries with economies in transition through intergovernmental coordination and a United Nations Environment Programme/United Nations Institute for Training and Research/Global Environment Facility initiative ("POPs reporting, monitoring and information dissemination using PRTRs") that benefits among others: Peru, Ecuador, Panama, Dominican Republic, El Salvador and Cambodia.

24. The parts of the 2017 synthesis report dealing with the implementation of e.g. Article 16 of the Protocol provide further details on the matter.

3 Focal area III, development of the Protocol

25. The listed indicators of progress/targets related to the development of the Protocol were decisions by the Meeting of the Parties and input to Committee on Environmental Policy/ "Environment for Europe" process – information that was not part of the reporting by Parties during the 2017 reporting cycle. Decisions related to focal area III of the strategic plan have not been taken by the Meeting of the Parties. The Committee was not able to assess the progress in implementing the focal area III and its four objects on the basis of the NIRs.

26. The parts of the 2017 synthesis report dealing with the implementation of e.g. Article 7 of the Protocol provide possible further details on related steps taken by Parties at national level:

(a) For activities and pollutants (annexes I and II), see in particular paragraphs 44 to 49 of the synthesis report and the relevant footnotes;

(b) For the inclusion of specific requirements for releases of pollutants from diffuse sources it was noted that e.g. Norway and Sweden (linked to projects under the Nordic-PRTR group) reported that they included or do work to prepare to report on diffuse emissions from products in use and Israel mentioned having learned from the Japanese experience in developing diffuse (non-fugitive) emissions inventory within the context of the working group for economic cooperation between the two countries;

(c) For the inxclusion of information on energy and water consumption, on-site transfers of waste or storage e.g. Israel reported that information on energy and water consumption by facilities are part of its PRTR.

27. Table 3 below provides information about progress in implementing the focal area III of the strategic plan 2015–2020, focusing on the proportion of Parties that implement the Protocol beyond the requirements of its provisions. The proportion was estimated on the basis of information provided by Parties in the 2017 reporting exercise. Areas for possible future development of Parties' PRTRs included in the table were addressed through the strategic plan 2015–2020 under focal area III.

Table 3

Proportion of Parties that implement the Protocol beyond the requirements of its provisions.

Areas for possible future development of Parties' PRTRs	*Proportion of Parties that implement the Protocol beyond the requirements of its provisions*
Activities (annex I)	over one-half
Pollutants (annex II)	over four-fifth
Specific requirements for releases of pollutants from diffuse sources, Energy consumption, Water consumption, on-site transfers of waste or storage, PRTRs as a tool for assessing the development of a green economy in the context of sustainable development	less than one-tenth

B. Conclusions

28. In order for the Committee to provide a more comprehensive overview on the progress in implementing the Protocol's strategic plan 2015–2020 the underlying sources of information need to be caught in a more specific way, as the existing reporting format under the Protocol is not designed for an evaluation of the strategic plan's targets/indicators. In addition, the Committee observed that the targets/indicators of the strategic plan seemed not always well met to provide a good view on the progress in implementing the plan's objectives.

29. Based on the available information for the Committee to provide an overview, the Committee's general impression was that Parties had more work done regarding implementation of focal area I, when comparing with activities related to implementation of focal areas II and III.

30. Also, the Committee found that Parties set priorities in different ways, as some countries invest in making their PRTR systems progressive and increase their usefulness for stakeholders and its support functions for decision making processes, while others pay less attention to the implementation and the making use of the potential that lies in their PRTRs.

Annex II

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

Party	*Internet addresses as specified in the report*
Albania	http://prtr.akm.gov.al/main/welcome.jsf
Austria	www.prtr.at
Belgium	www.bruxellesenvironnement.be/eprtr
	www.leefmilieubrussel.be/e-prtr
	http://bilan.environnement.wallonie.be/sitePrtrWallon.jsp?menu=PRTRWALLON
	www.milieuinfo.be/prtr
	http://prtr.ec.europa.eu/
Bulgaria	http://pdbase.government.bg/forms/public_eprtr.jsp
Croatia	http://roo-preglednik.azo.hr/,
	http://roo.azo.hr/login.aspx,
	http://hnproo.azo.hr/
Czechia	http://irz.cz/ (or http://www.prtr.cz) (in Czech language only).
	Search in the national PRTR - http://portal.cenia.cz/irz/
Denmark	www.miljoeoplysninger.dk
Estonia	National PRTR - *under development*
	Data on air are contained in OSIS - https://osis.keskkonnainfo.ee
	Data on waste in JATS- https://jats.keskkonnainfo.ee
	Data on water in VEKA - http://loodus.keskkonnainfo.ee/WebEelis/veka.aspxWeb page of the Environmental Register - https://register.keskkonnainfo.ee
European Union	http://prtr.ec.europa.eu
France	http://www.georisques.gouv.fr/dossiers/irep-resgistre-des-emissions-polluantes
Germany	www.thrude.de (name was changed in response to FAQs)
	www.prtr.bund.de
	http://de.wikipedia.org/wiki/Schadstoffemissionsregister
Ireland	http://prtr.epa.ie/
Israel	http://www.sviva.gov.il/prtrisrael/pages/default.aspx

Party	*Internet addresses as specified in the report*
Latvia	http://arcims.lvgma.gov.lv:8082/prtr/viz.jsp?lang=en
Lithuania	http://tersalai.gamta.lt/prtr/ (2007-2010 years data)
	https://aplinka.lt/duomenys/ (2011-2014 years data).
Netherlands	www.prtr.nl
Norway	www.norskeutslipp.no
Poland	www.prtr-portal.gios.gov.pl, http://mapy.gios.gov.pl/prtr/
Portugal	http://www.apambiente.pt/index.php?ref=17&subref=156&sub2ref=369
Romania	http://prtr.anpm.ro/
Serbia	http://prtr.sepa.gov.rs/
Slovakia	http://ipkz.shmu.sk
	http://www.sazp.sk/public/index/go.php?id=1000
	http://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/ipkz-integrovana-prevencia-a-kontrola-znecistovania/informacny-system-ipkz-1/uda
	http://www.minzp.sk/sekcie/temy-oblasti/integrovana-prevencia-kontrola-znecistovania/informacny-system-ipkz/informacny-system-ipkz-2.html
Spain	www.prtr-es.es
Sweden	www.naturvardsverket.se
	http://utslappisiffror.naturvardsverket.se/en/
	http://www.swedishepa.se/State-of-the-environment/Open-data/The-Swedish-PRTR
Switzerland	www.prtr.admin.ch, http://map.bafu.admin.ch
The former Yugoslav Republic of Macedonia	*The web portal is under construction and is available on the following url: http://ripz.moepp.gov.mk/*
United Kingdom	http://prtr.defra.gov.uk/

Table 2
Links to other databases and PRTRs

Party	*Databases and PRTRs*
Austria	www.umweltbundesamt.at/umweltsituation/industrie/daten_industrie/prtr/prtr_links
Belgium	E-PRTR, ECE, OECD
Bulgaria	E-PRTR
Croatia	E-PRTR, European Environment Information and Observation Network (EIONET) Central Data Repository (CDR), global PRTR Network,

Party	*Databases and PRTRs*
	links to websites and national PRTR registers of United Nations member states that have signed the Protocol
Czechia	The register of emissions and sources of air pollution (REZZO) – Czech Hydrometeorological Institute – http://portal.chmi.cz/files/portal/docs/uoco/oez/embil/14embil/index_CZ.html (in Czech language only).
	Maps of air pollution – Czech Hydrometeorological Institute – http://pr-asu.chmi.cz:8080/IskoPollutionMapView/faces/viewMapImages.xhtml (in Czech and English).
	The sources of pollution – Czech Hydrometeorological Institute – http://portal.chmi.cz/files/portal/docs/uoco/web_generator/plants/index_CZ.html (in Czech language only).
	Waste management information system (WMIS) – CENIA, the Czech environmental information agency – http://isoh.cenia.cz/groupisoh/ (in Czech language only).
	Integrated System of Waste Management (ISOH) - http://isoh.cenia.cz/groupisoh/ (in Reporting Obligations in the field of the Czech language only).
	Information System of Fulfilling Duties of Reporting in the Field of the Environment environment (ISPOP) – CENIA, the Czech environmental information agency – https://www.ispop.cz/ (in the Czech language only).
	Information system of the integrated pollution prevention and control - IS IPPC – Ministry of the Environment – http://www.mzp.cz/ippc.
	Polluters under the magnifying glass – a non-profit organisation Arnika http://www.znecistovatele.cz/ (the source of information is the national PRTR; in Czech language only).
	A national inventory of contaminated sites – CENIA, the Czech environmental information agency – http://kontaminace.cenia.cz/ (in Czech and English).
	Information system WATER – Ministry of Agriculture of the Czech Republic – http://voda.gov.cz/portal/ (in Czech and English).
	EIA information system – CENIA, the Czech environmental information agency – http://portal.cenia.cz/eiasea/view/eia100_cr (in Czech language only).
	SEA information system – CENIA, the Czech environmental information agency – http://portal.cenia.cz/eiasea/view/SEA100_koncepce (in Czech language only).
Denmark	E-PRTR
	http://www3.mst.dk/Miljoeoplysninger/PrtrPublicering/Links
	www.mst.dk
Estonia	Under development
European Union	http://prtr.ec.europa.eu

Party	*Databases and PRTRs*
France	Ministry of Environment, Energy and Sea;
	The database BASIAS (historical inventory of industrial sites and activities in service);
	Thematic files on other natural and technological risks (underground cavities, clay shrinkage and swelling, earthquake, ground movements, floods, networks and pipelines).
Germany	Links to:
	(1) PRTRs of other countries and of the EU
	(2) Thematically related websites of the federal and *Länder* governments
	(3) Further links relating to the issue of environmental information and PRTRs - https://www.thru.de/links/
	On the support of Germany to other countries - https://www.thru.de/3/thrude/about-thrude/international-projects/
Ireland	E-PRTR, ECE, OECD, PRTR.net, Special Areas of Conservation, Special Protection Areas
Israel	Links to registries in other countries and to other databases via: prtr.net/en/links
Latvia	E-PRTR
Lithuania	E-PRTR
	http://gamta.lt
Luxembourg	E-PRTR
	http://prtr.aev.etat.lu/ (under development)
Netherlands	Links to more information on emissions (including E-PRTR, EEA, ECE), and organizations participating in the Dutch register
Norway	E-PRTR, ECE, OECD, PRTR.net
Poland	No links to other websites
Portugal	E-PRTR, links to other PRTRs
Serbia	Under development
Slovakia	www.enviroportal.sk
	E-PRTR

Party	*Databases and PRTRs*
Spain	1. Information on "other sources": http://www.prtr-es.es/informacion-publica (ESP) and http://www.en.prtr-es.es/informacion-publica (ENG): (a) Emissions from other sources to air http://www.prtr-es.es/Emisiones-difusas-atmosfera-1073102012.html (ESP). http://www.prtr-es.es/Releases-atmosphere-1111112012.html (ENG) (b) Emissions from other sources to water: http://www.prtr-es.es/Emisiones-difusas-agua-1074102012.html (ESP); http://www.prtr-es.es/Releases-water-1112112012.html (ENG) 2. International and National links in: http://www.prtr-es.es/conozca/Enlaces-interes-1027062012.html (ESP); http://www.en.prtr-es.es/conozca/Enlaces-interes-1027062012.html (ENG).
Sweden	Aarhus Convention, environmental reports, E-PRTR, other pollution inventories
Switzerland	E-PRTR, ECE, OECD, PRTR.net
The former Yugoslav Republic of Macedonia	Under construction Will provide links of the national existing publicly accessible databases on subject matters related to environmental protection, 1. Air quality - http://airquality.moepp.gov.mk/ 2. Climate change - http://www.unfccc.org.mk/ 3. Persistent organic compounds - http://www.pops.org.mk/ 4. Ministry of Environment and Physical Planning - http://www.moepp.gov.mk/ 5. List of IPPC facilities - http://www.moepp.gov.mk/default-MK.asp?ItemID=CF25D70E4A5C7A41B60778682589BFE5 6. Links to the international PRTR's (a) Scottish PRTR (b) German PRTR (c) Spanish PRTR (d) Australian PRTR (e) E-PRTR 7. Links to the international organizations (a) UNECE – Aarhus Convention (b) UNECE Convention on Long-range Transboundary Air Pollution (c) UNECE PRTR Protocol (d) European Environment Agency – E-PRTR (e) UNEP - Pollutant Release and Transfer Registers (f) UNITAR – Pollutant Release and Transfer Register (g) OECD Centre for PRTR Data

Party	*Databases and PRTRs*
United Kingdom	National Atmospheric Emissions Inventory (NAEI) with information on diffuse sources and emissions factors, http://naei.defra.gov.uk/ United Kingdom Air resource website