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Fourth session

Geneva, 22 October 2021

Item 4 (a) of the provisional agenda

Reporting and compliance mechanisms: reporting mechanism

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

Prepared by the Compliance Committee with the support of the secretariat

Summary

The present report was prepared pursuant to decision III/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 third session (Budva, Montenegro, 15 September 2017), which requests the secretariat to prepare a synthesis of the national implementation reports submitted by Parties for each session of the Meeting of the Parties and to identify significant trends, challenges and solutions.^a

The Working Group of the Parties to the Protocol at its eighth meeting (Geneva, 16 and 18 December 2020) agreed to assign the Compliance Committee the task of preparing a synthesis report on the basis of national implementation reports.^b

Pursuant to these decisions, the Committee prepared the present synthesis report under the leadership of the Chair of the Compliance Committee and with the assistance of the secretariat. The Bureau also provided its comments on the draft report prior to its finalization.

^a ECE/MP.PRTR/2017/6/Add.1, decision III/1, para. 18.

^b ECE/MP.PRTR/WG.1/2020/2, para. 23.



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Introduction

1. In accordance with article 17 (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 (ECE/MP.PRTR/2010/2/Add.1), Parties must report on their implementation of the Protocol and agree to make their national implementation report publicly available.

2. The Working Group on Pollutant Release and Transfer Registers, at its fifth meeting (Geneva, 22–24 October 2007), had considered a proposal from the 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 Aarhus Convention Compliance Committee.¹

3. That proposal formed the basis of decision I/5, which requested each Party to submit to the secretariat, in advance of 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 and second synthesis reports on the implementation of the Protocol on PRTRs (respectively, ECE/MP.PRTR/2014/5 and ECE/MP.PRTR/2017/10) were prepared by the Compliance Committee for the 2014 and 2017 reporting cycles respectively.

5. The Working Group of the Parties to the Protocol on PRTRs, at its eighth meeting (Geneva, 16 and 18 December 2020), agreed to assign the Compliance Committee the task of preparing a synthesis report for the third reporting cycle on the basis of national implementation reports.²

6. The present synthesis report was prepared by the Protocol's Compliance Committee for the fourth session of the Meeting of the Parties (Geneva, 21 and 22 October 2021). It is based on the national implementation reports submitted by 34 of the 38 Parties before 31 May 2021.³

7. 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 national implementation reports. It does not check the accuracy and completeness of, or review compliance on the basis of, the contents of those reports. The present report should be read with these limitations in mind.

¹ ECE/MP.PP/AC.1/2007/4, para. 35.

² ECE/MP.PRTR/WG.1/2020/2, para. 23.

³ Italy, although a Party to the Protocol, was not due to submit a national implementation report, as it only ratified the Protocol on 23 November 2020. National implementation reports available at <https://prtr.unece.org/national-reports/reports-files>.

I. Procedural aspects of the reporting cycle

8. In accordance with paragraph 10 of decision III/1 (ECE/MP.PRTR/2017/6/Add.1), the deadline for submitting national implementation reports to the secretariat was 21 January 2021, i.e. nine months before the fourth session of the Meeting of the Parties.

9. As of 31 May 2021, the secretariat had received national implementation reports from 34 of the 38 Parties.

10. National implementation reports were submitted by Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the European Union, Finland, France, Germany, Hungary, Ireland, Israel, Kazakhstan, Latvia, Luxembourg, Malta, the Republic of Moldova, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Spain, Sweden, Switzerland, Ukraine and the United Kingdom of Great Britain and Northern Ireland.

11. As of 31 May 2021, no reports had been submitted by three Parties – Lithuania, Montenegro and Slovakia – which made it challenging for the Compliance Committee to prepare a full report.

12. No reports were submitted by any stakeholder.

13. Belgium, Estonia, France, Kazakhstan, the Republic of Moldova, Romania, Spain and Switzerland submitted their reports in two official languages of the United Nations Economic Commission for Europe (ECE).

14. 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 national implementation reports; 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 completed the draft report at its tenth meeting (Geneva (online), 31 May and 1 June 2021).

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

15. Most Parties respond to the subquestions of the reporting form, which, as a rule, leads to the omission of reporting on the implementation of article 4. Therefore, in some cases, it is difficult to identify whether a Party implemented national pollutant release and transfer register (PRTR) systems, as opposed to the detailed information available on implementation of legislative, regulatory and other measures under regional registers. Only two Parties⁴ provide specific information on the implementation of article 4. Finland, Malta, Portugal and Slovenia describe in their national implementation reports that they report to the European PRTR (E-PRTR)⁵ but do not have a national PRTR that would fully meet the obligations of the Protocol (see paras. 36 and 237-244 below). Estonia also relies on the E-PRTR as, in the national environmental decision information system “KOTKAS”, it is possible to search and identify emissions and transfers only by type, area and location of the permit. However, Estonia also reports that the development of a data disclosure module fitting the requirements under the Protocol is planned. Ukraine has not yet established a national PRTR system but

⁴ Bulgaria and Spain.

⁵ 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, *Official Journal of the European Union*, L 33 (2016), pp. 1–17.

reports that it is currently working to implement the Protocol and establish a national PRTR system as part of the development of a single environmental platform to collect, process, store and analyse data on the condition of the environment (the national environmental automated informational and analytical system to provide access to environmental data).

(a) *Measures to implement the Protocol, including enforcement measures (art. 3 (1))*

16. In terms of measures taken to implement the Protocol, in their answers, many Parties do little more than name the respective laws within their legislative framework.⁶ Several Parties, however, go into further detail, briefly explaining the history and operation of their national legislation in this regard.⁷ Many Parties also report on changes made to their legislative framework since the second national implementation report.⁸

17. Concerning enforcement, the responses were less complete, with only some Parties⁹ discussing possible remedial action, charges or sanctions. Measures other than legislative and regulatory measures – for example, the establishment of a working group – are only described by two Parties.¹⁰

(b) *Measures taken to implement more extensive or more publicly accessible PRTRs (art. 3 (2))*

18. With regard to public accessibility, many Parties¹¹ 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 that covers facilities not expressly required to make reports and also indicates that the portal includes a geographical information system browser, ensuring up-to-date online insight into the spatial component and the related information, along with the possibility of preparing spatial analyses and reports. Sweden included additional administrative information on the operations, for example, water district, organization number, property designation, supervisory authority, environmental management system and link to the operator's web page. Portugal collects information on all releases and transfers according to the E-PRTR Regulation but without thresholds; however, only the data above the threshold are made available to the public.

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

- (a) The possibility to download search results in file format;¹²
- (b) The possibility to search for data marked as “confidential” and the reasons for confidentiality;¹³
- (c) The inclusion of optional data (for example, production volume);¹⁴

⁶ Austria, Belgium, Bulgaria, Cyprus, European Union, Ireland, Latvia, Luxembourg, Malta, North Macedonia, Norway and Portugal.

⁷ Albania, Croatia, Czechia, Denmark, France, Germany (i.e. the federal system), Kazakhstan, Netherlands, Poland, Serbia, Spain, Sweden, Switzerland and United Kingdom.

⁸ Albania, Austria, Czechia, Estonia, France, Germany, Hungary, Poland, Republic of Moldova, Serbia, Spain and United Kingdom.

⁹ Czechia, Denmark, Israel, Netherlands, Poland, Romania, Serbia, Sweden, Switzerland and United Kingdom.

¹⁰ Netherlands and Switzerland.

¹¹ Albania, Austria, Belgium, Bulgaria, Czechia, Denmark, Estonia, France, Israel, Latvia, Malta, Netherlands, North Macedonia, Poland, Republic of Moldova and Sweden.

¹² Germany, Spain and Switzerland.

¹³ Germany.

¹⁴ Germany.

- (d) Supplementary information;¹⁵
- (e) The inclusion of background documents;¹⁶
- (f) The possibility to download the entire data set;¹⁷
- (g) The inclusion of time series;¹⁸
- (h) The inclusion of explanations;¹⁹
- (i) The visualization of PRTR data;²⁰
- (j) User-friendly maps and a search function;²¹
- (k) Online help boxes, downloadable user manuals and help documents.²²

20. Apart from some Parties that provided no answer with regard to measures taken to introduce a more extensive PRTR than required by the Protocol,²³ there were two further groups, namely Parties:

- (a) Encouraging operators and owners to provide for additional voluntary reporting;²⁴
- (b) Having legislative and regulatory measures that exceed the Protocol's minimum standard.

21. 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 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) Cyprus, Estonia, Germany, Luxembourg, Malta, Norway, Poland, Romania, North Macedonia, Slovenia and the United Kingdom (E-PRTR);
- (e) Czechia (more pollutants than in the E-PRTR and lower reporting threshold than required by the Protocol for some substances, no restriction to PRTR and E-PRTR activities (232 activities with lower capacity threshold values or additional activities), transfers of the quantity of waste and transfers of pollutants in waste (24 substances in transfers of waste));
- (f) Denmark (certain enterprises must report additional information on water, energy and substantial resource consumption in a 3-yearly environmental report);

¹⁵ Germany.

¹⁶ Germany.

¹⁷ Germany and Switzerland.

¹⁸ Switzerland.

¹⁹ Spain and Switzerland.

²⁰ Switzerland.

²¹ Germany and Ireland.

²² Spain.

²³ Albania, Austria and Serbia

²⁴ Switzerland.

- (g) France (more pollutants, more facilities);
- (h) Ireland (E-PRTR, more substances (91), including: black carbon, carbon dioxide (CO₂) (excluding biomass) and fine particulate matter (PM_{2.5}));
- (i) Israel (annual water and energy consumption, additional non-public information concerning quality control or development of environmental efficiency indicators is collected);
- (j) Latvia (information also from smaller facilities);
- (k) Netherlands (E-PRTR, more substances, lower thresholds, energy consumption, water consumption);
- (l) 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);
- (m) Portugal (E-PRTR, reporting without 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 Waste²⁵ and per each reported transport of pollutants, the corresponding final destination is provided using recovery and disposal codes);
- (o) Sweden (E-PRTR and lower thresholds for about half the pollutants, further CO₂ emissions are reported separately for biogenic and fossil fractions).

(c) *Measures taken to protect those who report violations (art. 3 (3))*

22. A few Parties²⁶ specify in their national implementation reports that their PRTR-related and general environmental legislation protects persons reporting violations. Other Parties²⁷ explain that there is protection in constitutional or other legislation for citizens exercising their rights.

23. In several cases,²⁸ there is confidentiality as part of an established complaint system.

24. A few Parties²⁹ do not comment precisely on how national legislation may protect those who report violations, and Bulgaria refers to penalties for deficiencies in reporting by facilities.

25. Ireland mentions its Protected Disclosures Bill, which it claims closely reflects international best practice (for example, from the Group of 20/Organisation for Economic Co-operation and Development (OECD), the United Nations and the Council of Europe) on whistle-blower protection. Whistle-blower acts have been adopted in Latvia and Malta.

²⁵ Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, *Official Journal of the European Communities*, L 226 (2000), pp. 1–46.

²⁶ Austria, Czechia, Germany and Spain.

²⁷ Belgium, Bulgaria, Croatia, Denmark, Estonia, European Union, Finland, Israel (protection of employees), Kazakhstan, Luxembourg, Netherlands, North Macedonia, Norway, Portugal, Romania, Sweden and Switzerland.

²⁸ Belgium, Czechia, Estonia, France, Ireland, Latvia, Netherlands, Sweden and Switzerland.

²⁹ Albania, Cyprus, France, Poland, Republic of Moldova and Serbia.

26. Most of the Parties do not mention practical cases and only a few Parties report that such cases are unknown.³⁰

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

27. Some Parties³¹ have established new electronic tools, while the majority of Parties integrate their PRTR system with one of the following:

(a) Data from existing waste management and emission recording systems;³²

(b) General environmental reporting or environmental information systems,³³ eliminating duplication in reporting at varying levels.

28. A few Parties have environmental information systems that allow for cross-institutional³⁴ and cross-sectoral³⁵ use of the same electronic tool.

29. Other Parties³⁶ are developing software in conformity with the Protocol. For example, North Macedonia also plans to establish an integrated information system, part of which will be a PRTR.

30. 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.

31. Turning to challenges, a few Parties³⁷ note that the complete removal of duplicative reporting is often linked to extensive changes to the relevant constituent legislation. In Israel, some instances of duplication of data reporting have been identified regarding detailed information on wastes transfers from waste transfer stations and from waste treatment facilities. The United Kingdom refers to limited duplication of waste transfer data in parts of the country, notably that the waste transfer data duplicates waste returns required by permits. Kazakhstan reports challenges related to the lack of integration of PRTR with other reporting systems and the increase of duplicative reporting due to the establishment of separate PRTR reporting. In addition, it is noted by Czechia 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).

32. Further problems are encountered when attempting to establish links to integrate databases into one consistent and unambiguous information product. This requires retrieval of various types of data in accordance with environmental protection regulations. The data, however, are often not harmonized.³⁸ There is also a lack of legislative harmonization to secure this outcome.

33. There are reported synergies, inter alia, with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Convention on Long-range Transboundary Air Pollution (CLRTAP), the United Nations Framework Convention on Climate Change (UNFCCC), the European Union Industrial Emissions

³⁰ Kazakhstan, Poland, Republic of Moldova, Romania and Switzerland.

³¹ Cyprus, European Union, France, Kazakhstan, North Macedonia, Republic of Moldova and Spain.

³² Austria, Belgium (Brussels-Capital Region), Bulgaria, Ireland, Switzerland and United Kingdom.

³³ Belgium (except Brussels-Capital Region), Croatia, Czechia, Denmark, Estonia, European Union, France, Germany, Ireland, Israel, Netherlands, Norway, Romania and Sweden.

³⁴ Belgium, Czechia, Denmark and Romania.

³⁵ Croatia.

³⁶ For example, Estonia and Finland.

³⁷ Croatia, Czechia and Portugal.

³⁸ Croatia.

Directive,³⁹ the European Emissions Trading System and the European Union Urban Wastewater Directive,⁴⁰ and other wastewater discharge authorization regulations.

(e) *How releases and transfers can be searched and identified (art. 5 (1))*

34. Many of the reporting countries provide for all of the search categories defined in article 5 (1) of the Protocol;⁴¹ some countries added the following options to their search engine:

- (a) Year;⁴²
- (b) Watershed/river basin district/catchment;⁴³
- (c) Hazardous/non-hazardous waste;⁴⁴
- (d) Synthesis by substance or activity;⁴⁵
- (e) Confidentiality;⁴⁶
- (f) Method of calculation/measurement/estimation;⁴⁷
- (g) Total or accidental pollutant releases;⁴⁸
- (h) Statistical Classification of Economic Activities in the European Community (Nomenclature of Economic Activities (NACE)⁴⁹ codes);⁵⁰
- (i) National licence number or equivalent;⁵¹
- (j) Download of the full database;⁵²
- (k) Time series by facilities, emissions and waste transfer;⁵³
- (l) Total emissions per county/municipality;⁵⁴
- (m) Generation of graphic data display;⁵⁵

³⁹ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), *Official Journal of the European Union*, L 334 (2010), pp. 17–119.

⁴⁰ Council Directive 91/271/EEC of 21 May 1991 concerning urban wastewater treatment, *Official Journal of the European Communities*, L 135 (1991), pp. 40–52.

⁴¹ Austria, Belgium, Croatia, Cyprus, Czechia, Denmark, European Union, Germany, Latvia, Netherlands, North Macedonia, Poland, Portugal, Republic of Moldova, Sweden and Switzerland.

⁴² Bulgaria, Croatia, Czechia, France, Germany, Ireland, North Macedonia, Spain and Switzerland.

⁴³ France, Germany, Ireland, North Macedonia, Spain and United Kingdom.

⁴⁴ France, Germany, Ireland and Spain.

⁴⁵ Czechia, Denmark, France and Spain.

⁴⁶ Germany.

⁴⁷ Czechia and Germany.

⁴⁸ Germany.

⁴⁹ NACE codes refer to the industry standard classification system used in the European Union. Regulation (EC) No. 1893/2006 of the European Parliament and of the Council of 20 December 2006 established the statistical classification of economic activities NACE Revision 2 and amended Council Regulation (EEC) No. 3037/90, as well as certain EC Regulations on specific statistical domains, *Official Journal of the European Union*, L 393 (2006), pp. 1–39.

⁵⁰ Czechia and Germany.

⁵¹ Ireland and Israel.

⁵² Germany, Israel and United Kingdom.

⁵³ Spain and United Kingdom.

⁵⁴ Sweden.

⁵⁵ Sweden and United Kingdom.

- (n) Global search for facilities with reporting obligations at all levels in the web structure;⁵⁶
- (o) Search for all facilities with permit, also smaller facilities with no reporting obligations;⁵⁷
- (p) Search by text of keywords;⁵⁸
- (q) Regulatory authority of the facility;⁵⁹
- (r) Diffuse sources;⁶⁰
- (s) Facility locations using Google Earth,⁶¹ a geographic information system map to display the PRTR data,⁶² spatial overview and a georeferenced cartographic overview of data with the exact location of the organizational unit within the State borders;⁶³
- (t) Destination of hazardous waste transferred out of country;⁶⁴
- (u) Search by “facility”, “installation” and “parts of installation” levels.⁶⁵

35. Some Parties do not specify available search functions or only partially cover the categories listed in the Protocol, for example: Israel does not yet include environmental media or the destination of waste transfers; Norway does not include searches by activity or destination of waste transfers; and Spain does not include searches by owner or operator, and, as appropriate, company, but by facility together with the information on the parent company.

36. A few countries have no national database with appropriate search functions as required by the Protocol.⁶⁶ In Finland, information is available for certain officials only and in the Finnish Environment Institute after obtaining a user identifier. Finland reports that information is planned to be available for public at the end of 2021, as a new minimum viable product for the PRTR will be in use. In Portugal, a national PRTR portal is under preparation, and, in Estonia, in the national environmental decision information system “KOTKAS”, it is possible to search and identify emissions and transfers by type, area and location of the permit only, and the development of the data disclosure module required by the Protocol on PRTRs is being planned.

(f) *Information on links to Parties’ registers*

37. Tables 1 and 2 in the annex to the present report contain, respectively, the Internet addresses of national PRTRs and a list of links to other databases and PRTRs.

⁵⁶ Norway.

⁵⁷ Norway.

⁵⁸ Bulgaria.

⁵⁹ United Kingdom.

⁶⁰ Switzerland.

⁶¹ Sweden and United Kingdom.

⁶² Ireland.

⁶³ Croatia.

⁶⁴ United Kingdom.

⁶⁵ Spain.

⁶⁶ Estonia, Finland, Malta, Portugal and Slovenia.

III. Legislative, regulatory and other measures that implement article 7

- (a) *Are reporting requirements required by the national system (art. 7 (1) (a) and (b))?*

38. Most Parties⁶⁷ report that they have chosen the capacity threshold to identify the reporting facilities under article 7 (1) (a). Some of those that are also European Union member States refer to the E-PRTR Regulation, which also implements this provision. Bulgaria reports that it implements both subparagraphs (a) and (b) of article 7. Kazakhstan reports that its national PRTR is not fully in line with the requirements of either of the above-mentioned subparagraphs. In Kazakhstan, the requirement to report applies only to the largest enterprises listed in national legislation. Norway and Serbia have excluded the capacity thresholds in their legislative, and regulatory measures. Croatia applies national legislation that is stricter on thresholds and also includes a greater number of pollutants.

- (b) *Is it the owner or the operator of each individual facility who is required to fulfil the reporting requirements (art. 7 (1), (2) and (5))?*

39. In most Parties,⁶⁸ 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. Kazakhstan plans to separate the functions of the owner and the operator with the imposition of reporting responsibilities on facility operators by 2021 within the new draft of its Environmental Code.

- (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 (art. 7 (1) and annex I)?*

40. A significant number of countries report that there are no 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. Some countries also report that their national list of activities is more extensive and that lower thresholds are applied.

41. Article 3 (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 (1) of and annex I to the Protocol strictly require.

42. Many Parties⁶⁹ do not report any additional activities or lower capacity thresholds. Four Parties⁷⁰ report that their national legislation applies to additional activities not included in the Protocol, (for example, oil and gas production and desalination facilities, asphalt production facilities) and lower capacity thresholds than listed in annex I to the Protocol. Finland and Latvia report that they apply lower capacity thresholds. Cyprus, Germany and the United Kingdom state that they have only small extensions of activity 3b (Opencast

⁶⁷ Austria, Belgium, Croatia, Czechia, Denmark, Estonia, European Union, Finland, France, Germany, Ireland, Israel, Latvia, Luxembourg, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland and United Kingdom.

⁶⁸ Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, European Union, Finland, France, Germany, Ireland, Latvia, Luxembourg, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Sweden and United Kingdom.

⁶⁹ Austria, Belgium (Brussels-Capital Region), Bulgaria, Denmark, Estonia, European Union, Ireland, Luxembourg, Netherlands, Portugal, Serbia, Sweden and Switzerland.

⁷⁰ Belgium (Flanders and Walloon Regions), Croatia, Israel and Spain.

Mining) where quarries above 25 hectares are covered pursuant to the E-PRTR Regulation and its activities. The rest of the Parties⁷¹ refer to the E-PRTR Regulation. In Kazakhstan, the Protocol's list of activities and thresholds is not applied. Instead, the Party introduced a rule on sanitary and epidemiological requirements for establishing a sanitary protection zone of production facilities that establishes sanitary classification of industrial and other enterprises into sanitary hazard classes I and II, in accordance with the Environmental Code. Kazakhstan, in its report, also provided the list of activities that applies to its national PRTR. Ukraine is currently developing a law to implement the Protocol on PRTRs.

- (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 (art. 7 (1) and annex II)?*

43. Parties may also have additional pollutants or lower emission thresholds in their national PRTRs. A large number of the Parties to the Protocol are European Union member States. Most of the countries report that the list of pollutants and thresholds found in the E-PRTR Regulation applies to them. This Regulation goes beyond the Protocol's provisions by imposing: reporting of five additional pollutants (octylphenols and octylphenol ethoxylates, fluoranthene, isodrin, hexabromobiphenyl and benzo(g,h,i)perylene; stricter release threshold for polychlorinated dibenzodioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) (dioxins + furans). Bulgaria applies thresholds that are more stringent for releases to water for the following pollutants: PCDDs and PCDFs, tetrachloroethylene (PER), tetrachloromethane (TCM), trichlorobenzenes (TCBs) (all isomers), trichloroethylene and trichloromethane. Finland has excluded thresholds. Croatia, France, Hungary, Israel, Poland and Spain report that they impose an obligation to report on more pollutants and using significantly lower, i.e. stricter, thresholds for release and/or transfer compared to those prescribed under the Protocol. A few Parties⁷² report that they have extended their national registers to cover the above-mentioned five additional pollutants. Four Parties⁷³ state 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. Five Parties⁷⁴ explicitly refer to the additional five pollutants and the six lower thresholds (PCDDs/PCDFs and water). Four Parties⁷⁵ refer to 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 countries⁷⁶ refer to the E-PRTR Regulation with its additional five pollutants and six lower thresholds; and two Parties⁷⁷ mention that they report on CO₂ from biomass, which is a standard requirement for reporting – though voluntary – under the E-PRTR Regulation.

44. Spain reports on 115 pollutants in its national register – 91 E-PRTR pollutants, 6 additional air pollutants and 18 additional water pollutants. For reporting to the Spanish national register, no emission thresholds are applicable, but Protocol on PRTRs annex II thresholds are relevant for publication in the register.

⁷¹ North Macedonia, Poland and Romania.

⁷² Austria, Bulgaria and Ireland.

⁷³ Luxembourg, Poland, Serbia and United Kingdom.

⁷⁴ Belgium, North Macedonia, Portugal, Romania and United Kingdom.

⁷⁵ Denmark, Estonia, France and Latvia.

⁷⁶ Czechia, Germany and Netherlands.

⁷⁷ Germany and Sweden.

45. Sweden also reports on the additional 5 E-PRTR pollutants. For 31 pollutants there are lower thresholds than in annex II to 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.

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

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

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

48. Article 7 (3) allows an exception from the chosen approach according to article 7 (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 CO₂, etc. A significant number of countries report that pollutants or pollutant thresholds listed in annex II to the Protocol apply to them. In any case, there are countries that report that they imposed an obligation to report additional pollutants and lower/stricter thresholds, rather than the ones prescribed by the Protocol. For example, in Spain, the Protocol’s reporting thresholds do not apply for reporting. They did, however, at one time apply for dissemination purposes, as they were used as “public information thresholds” until 2017. In the United Kingdom PRTR, the thresholds for the transfer of pollutants in wastewater are more stringent for many pollutants compared to the thresholds in the Protocol on PRTRs. This derives from the E-PRTR Regulation, which is directly binding in its entirety across the European Union and was directly applicable in the United Kingdom. Croatia prescribes stricter release thresholds than those prescribed under the Protocol. This is explained with a view to national strategic goals related to environmental protection and natural resources conservation, as well as for the purpose of ensuring a more comprehensive and detailed overview of environmental pressures. Stricter rules have thus been applied to 39 air pollutants, 25 water pollutants and one soil pollutant, whereby the amount of available data on pollutant release and/or transfer was increased. France reports that it has prescribed lower thresholds for some pollutants. This is particularly the case for pollutants that are also reported to other international inventories and that fall under reporting obligations other than PRTR reporting obligations.

49. None of the Parties has made a decision to use the thresholds provided for in article 7 (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 (art. 7 (4))?*

50. In several Parties,⁷⁸ the competent authority for the collection of information on emissions from diffuse sources is a national environment agency. In two Parties,⁷⁹ the environment ministry is the competent authority, and for the European Union it is the European Commission. Several Parties report different authorities.⁸⁰ France reports that only diffuse emissions from facilities but no emissions from diffuse sources are included in the national register. Kazakhstan has not designated a competent authority to collect information on emissions of pollutants from diffuse sources. In Croatia, emissions from diffuse sources

⁷⁸ Austria, Bulgaria, Czechia, Denmark, Estonia, Germany, Ireland, Romania, Serbia and Sweden.

⁷⁹ Czechia and Israel.

⁸⁰ Such as Inspectorates (Czechia), National Centres (Poland), Institutes (Finland), Federal Offices (Switzerland), Departments (Spain) and environmental administration in general (Luxembourg).

are not yet defined in detail. Some Parties appoint more than one competent authority to cover different areas of responsibility. In the United Kingdom, 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 (art. 7 (5) and (6))?*

51. Most Parties report that there are no differences between national and Protocol requirements, and that they follow the waste-specific approach. However, there are countries that stated that their national reporting scheme is more extensive and operates without threshold values. European Union member States request facility operators to reflect in their reporting the requirements set out by the E-PRTR Regulation, and operators or owners 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 explain this; a few Parties⁸¹ hint at this by referring to their reporting under the E-PRTR Regulation or by referring to the waste thresholds. In Israel, the national PRTR system is based both on pollutant-specific (para. 5 (d) (i)) and waste-specific (para. 5 (d) (ii)) reporting.

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

53. 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.

54. France reports that it did not report the waste destination and the recovery or disposal activities.

55. 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.⁸² In the Croatian register, waste thresholds are lower than in the Protocol: 50 kg 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 European Union waste codes). Then the electronic database system calculates the total amounts. When the waste amount thresholds are exceeded, the total amounts of hazardous and non-hazardous waste are published online on the national register, together with the specific waste codes and the corresponding amounts.

56. Furthermore, Israel includes information on water and energy consumption in its register. In Finland, facilities report all waste generated in the same way, and the national reporting scheme is more extensive and operates without threshold values. The United Kingdom reports that it implements the Nomenclature of Territorial Units for Statistics codes, the NACE codes and the river basin districts in their national register pursuant to the E-PRTR Regulation. Portugal includes information such as county codes, the NACE codes and hydrographic region in their PRTR. The E-PRTR contains voluntary information on

⁸¹ Croatia, Czechia, Netherlands and Romania.

⁸² Croatia, Netherlands and Spain.

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 (art. 7 (4) and (7))?*

57. Most of the countries report that they do not provide access to data on emissions from diffuse sources in the PRTR register. However, national totals of diffuse emissions to air are reported via other obligations such as the emission inventory for the National Emissions Ceiling Directive,⁸³ UNFCCC and reporting to CLRTAP. These emission reports are available on the Central Data Repository maintained by the European Environment Agency (EEA). Croatia does not prescribe reporting requirements for diffuse emissions. In Spain and Sweden, the information on releases from diffuse sources is based on the information available in national inventories and other information requirements to air pollutants and for certain pollutants in water. Some of the Parties have provided a link to the respective national diffuse emission data. Several Parties take measures to enter emissions from diffuse sources directly into their national registers. Some⁸⁴ are planning first steps (for example, by incorporating the obligations in laws or ordinances) or have already set the obligations in their laws,⁸⁵ or have created national calculating systems regarding emissions from diffuse sources into air;⁸⁶ others⁸⁷ currently have projects for introducing the data. Only France reports no plans to include emissions from diffuse sources in the short term. Several Parties refer to national reporting obligations according to international treaties.⁸⁸ As far as emissions from diffuse sources into water are concerned, most Parties focus on nitrogen and phosphorous emissions. The European Union and Sweden (since 2016) also include diffuse emissions of metals into water. Beside the common sectors of transport, households and agriculture, Norway also considers emissions from products in use and their typical pollutants. For emissions into air, the United Kingdom 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 (art. 7 (8))?*

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

59. Several Parties⁸⁹ have methodologies for reporting emissions to air related to their other reporting requirements under European Union regulations, CLRTAP or UNFCCC (for example, the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)/EEA⁹⁰ air pollutant emission inventory guidebook or the Intergovernmental Panel on Climate Change (IPCC) Guidelines for

⁸³ Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC, *Official Journal of the European Union*, L 344 (2016), pp. 1–31.

⁸⁴ For example, Croatia.

⁸⁵ Israel.

⁸⁶ Finland.

⁸⁷ For example, Germany and the European Union for water.

⁸⁸ For example, CLRTAP and UNFCCC.

⁸⁹ Austria, Belgium, Croatia, Estonia, Finland, Luxembourg, Norway, Portugal, Romania, Spain, Sweden and United Kingdom.

⁹⁰ European Environment Agency.

National Greenhouse Gas Inventories). Some Parties⁹¹ do not have applicable methodologies for reporting of emissions from diffuse sources. Israel reports that it has already started examination of possible methodologies or started with reporting on one sector.⁹² A few Parties⁹³ do not describe their methods but provide links to websites containing the descriptions.

60. Germany does not describe its methodology; it refers to a research project that identified the sources and pollutants and prepared them for inclusion in the national register. Diffuse emissions to air include the transport, agricultural and households sectors, while emissions to water cover the agricultural, atmospheric deposition, urban systems and other sectors. Currently available at the German PRTR web page⁹⁴ are data on emissions to air for the years 2008, 2012, 2016 and 2018, the grid dimension is 3 x 3 km. The data from 2016 and 2018 are based on the Gridding Emission Tool for ArcGIS, a tool of the German Environment Agency to determine the spatial distribution of emissions. These data are expected to be updated every two years. Two Parties⁹⁵ state that their methodologies depend on the respective sector and pollutant. Switzerland explains that reporting on emissions from diffuse sources is based on internal reporting on air and climate and is updated yearly. Kazakhstan reports that there is no available information on diffuse sources and approved methodologies.

61. Significantly less information is reported about water; a few Parties⁹⁶ report that, for water, in principle, an activity rate is multiplied by an emission factor. In Switzerland, initially the Rhine data from 2005–2007 were the basis of water emissions from diffuse sources and values will be updated with more recent data. In Austria, the methodology is based on the MOdelling Nutrient Emissions in River Systems approach. An example of good practice seems to be the description of the emissions from diffuse sources of the European Union on the E-PRTR website.⁹⁷

IV. Reporting cycles (art. 8)

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

62. Most Parties report from the first reporting year of the national PRTR and continue to do so for every reporting year thereafter. Several Parties⁹⁸ report that their first reporting year for their national PRTR was 2007. Most of them also have 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-Capital and Flanders Regions in 2010. The Croatian and Serbian PRTRs started in 2008; in Croatia, 2007 was a transitional reporting year. Czechia started in 2004. Latvia and Portugal report that their first reporting year was 2010. Cyprus reports that its first reporting year was 2013. Ukraine reports that it is currently developing a law to implement the Protocol's provisions and determine the reporting methodology.

⁹¹ Bulgaria, France, Ireland, Israel, Luxembourg, North Macedonia and Poland.

⁹² For example, Serbia.

⁹³ Czechia, Denmark and United Kingdom.

⁹⁴ See www.thru.de.

⁹⁵ European Union and Netherlands.

⁹⁶ Belgium (Brussels-Capital and Walloon Regions), European Union and Netherlands.

⁹⁷ See www.eea.europa.eu/data-and-maps/data/european-pollutant-release-and-transfer-register-e-prtr-regulation-art-8-diffuse-air-data.

⁹⁸ Austria, European Union, Germany, Netherlands, Poland, Romania, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

63. In Bulgaria, the Protocol entered into force in 2010 and the first reporting year was 2011. For North 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 have been published in the register since 2016. The data from aquaculture are in the register but have not yet been published for technical reasons. In Luxembourg, the first reporting year was 2001. Denmark reports that 2011 was the relevant reporting year for its implementation report, and, for France and Israel, their national implementation report information relates to 2012.

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

64. Many Parties⁹⁹ require the operators to report by the end of March of the year following the reporting year, including Czechia, which has made an exception for reporting the year 2019 by exceptionally extending the deadline to 30 June 2020, due to the coronavirus disease (COVID-19) pandemic. In France, those facilities that are also under the emissions trading system have to report by 28 February. Finland, Latvia and Norway set the first of March of the year following the reporting year, Kazakhstan set the first of April of the year following the reporting year, the Flanders Region (Belgium) 15 March and there are a number of different dates for the United Kingdom.¹⁰⁰ Estonia has earlier deadlines¹⁰¹ for operators. In four Parties,¹⁰² the deadline for operators is the end of May in the year following the reporting year. In Romania and the Republic of Moldova, it is the end of April, in the Brussels-Capital Region (Belgium) it is the end of June, in Luxembourg and in Switzerland it is before 1 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. Ukraine reports that, once the Protocol on PRTRs has been implemented, reporting cycle and deadlines will be determined in line with the Protocol's requirements.

65. Commission Implementing Decision (EU) 2019/1741¹⁰³ shortened the E-PRTR reporting deadline for European Union member States, starting with the 2019 reporting year. The deadline for 2019 (and subsequent years) is 30 September (i.e. 9 months) for administrative elements of the return (i.e. facility identifiers), and 30 November (i.e. 11 months) for thematic information (i.e. release and transfer data).

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

66. In order to provide the public with up-to-date information on PRTRs, 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

⁹⁹ Belgium (Walloon Region), Bulgaria, Croatia, Cyprus, Czechia, France, Ireland, Israel, Netherlands, North Macedonia, Poland, Serbia, Slovenia, Spain and Sweden.

¹⁰⁰ End of February for Scotland, end of January for Northern Ireland, end of March in Wales and end of May in England.

¹⁰¹ End of January for air and waste reporting and the beginning of February for water.

¹⁰² Austria, Denmark, Germany and Portugal.

¹⁰³ Commission Implementing Decision (EU) 2019/1741 of 23 September 2019 establishing the format and frequency of data to be made available by the Member States for the purposes of reporting under Regulation (EC) No 166/2006 of the European Parliament and of the Council concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC, *Official Journal of the European Union*, L 267 (2019), pp. 3–8.

months after the end of the reporting year.¹⁰⁴ Some Parties¹⁰⁵ make use of the whole 15-month period; a few Parties¹⁰⁶ need only 14 months. Two Parties¹⁰⁷ 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. Slovenia reports that data are available after 16 months or by 31 March for the year before the previous calendar year. The Netherlands makes the data available before June, which would also mean after the required 15-month period. The reporting of Finland is not clear in this respect. For the reporting period, Kazakhstan did not set a date by which public access to information should be provided but states that, in 2020, the process of initiating legislation had begun, which will result in making the data publicly available within 15 months after the end of the reporting year. The Republic of Moldova stated in its response that, currently, the question is not applicable.

67. North Macedonia reports in its latest national implementation report that, due to software-related technical issues, as well as the low number of reports by operators, the planned implementation of a PRTR system was delayed.

68. The European Union reports in its national implementation report that recital 11 of Regulation (EU) 2019/1010 specifies that: “Given the overriding importance of enabling Union citizens to quickly access environmental information, it is essential that member States and the Commission make data publicly available as fast as technically feasible with the aim of having the information available within three months of the year end, including by progressing towards that objective through an implementing act under Regulation (EC) No. 166/2006.”¹⁰⁸ The European Union also reports in its national implementation report that it is still working towards this aspirational 3-month reporting deadline but equally recognizes that it poses a number of technical implementation challenges.

- (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?*

69. Almost all Parties report that, in general, the reporting deadlines were met by the operators. Kazakhstan reports that there is no relevant information available on meeting deadlines and ensuring access. Only four Parties¹⁰⁹ 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.

70. Even Parties where the deadlines were met report some reasons for delays. Poland, for instance, reports human error and a lack of awareness of the reporting obligation as

¹⁰⁴ Bulgaria, 1 June; Croatia, 15 December; Czechia, 30 September; France, 31 December; Israel, 1 September; Norway, 1 June; Poland, immediately after reporting but within 15 months after the end of the reporting year by the latest; Serbia, immediately after verification; Spain, 15 November; Sweden, daily update; and Cyprus, automatically after verification.

¹⁰⁵ For example, Denmark, Germany, Ireland, Luxembourg, Romania and United Kingdom.

¹⁰⁶ Belgium, Latvia and Switzerland.

¹⁰⁷ Austria and Portugal.

¹⁰⁸ Regulation (EU) 2019/1010 of the European Parliament and of the Council of 5 June 2019 on the alignment of reporting obligations in the field of legislation related to the environment, and amending Regulations (EC) No 166/2006 and (EU) No 995/2010 of the European Parliament and of the Council, Directives 2002/49/EC, 2004/35/EC, 2007/2/EC, 2009/147/EC and 2010/63/EU of the European Parliament and of the Council, Council Regulations (EC) No 338/97 and (EC) No 2173/2005, and Council Directive 86/278/EEC, *Official Journal of the European Union*, L 170 (2019), pp. 115–127.

¹⁰⁹ Croatia, France, Poland and Sweden.

reasons for delays. Cyprus reports the extraordinary circumstances caused by the COVID-19 pandemic as a reason for delays. Ireland reports on delays in publishing the national register because of technical issues. Serbia does not report on this subject at all. The Republic of Moldova stated in its response that, currently, the question is not applicable.

- (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?*

71. Electronic reporting is used by most of the Parties;¹¹⁰ many Parties¹¹¹ additionally use online reporting. However, reporting on paper is still done by some Parties or sectors. Croatia reports that data could be submitted in an electronic format or on printed forms. If the facility submitted data on printed formats, the data was entered into the register by the competent authority in the county. Poland still requires signed hard copies, in addition to electronic reporting. In Portugal, after the reporting deadline has passed, the communications are non-electronic. However, since the implementation of a new PRTR reporting form in 2018, it is possible to make reporting openings on a case-by-case basis, and out-of-date communications are also accepted in digital format. Facilities that were not operating during the reference year can declare their non-operation, in paper or digital format, provided that it is formally signed. Slovenia reports that it uses tools developed by EEA for reporting purposes. The Republic of Moldova stated in its response that, currently, the question is not applicable.

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 (art. 9)

72. All reporting countries have the basic legislative, regulatory and other measures in place required by article 9 of the Protocol. Mostly, measures were developed earlier and have been incorporated into 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, make little or no reference to their legal regulations and measures for data collection and record-keeping.

73. The European Union, in parallel with the Protocol on PRTRs, also established its own European register (i.e. the E-PRTR) through the E-PRTR Regulation. A considerable number of the reporting Parties are European Union member States. The E-PRTR Regulation is directly applicable for the European Union member States. Twenty European Union countries report, therefore, that the E-PRTR Regulation applies in their national legal system and is part of the national PRTR regulatory system. Several countries, including non-European Union member States,¹¹² apply their own regulations for the national PRTR. The

¹¹⁰ Austria, Belgium (Flemish and Walloon regions), Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Kazakhstan, Latvia, Luxembourg, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland and United Kingdom.

¹¹¹ Bulgaria, Croatia, Denmark, Finland, France, Germany, Israel, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland and United Kingdom.

¹¹² Croatia, France, Ireland, Israel, North Macedonia, Norway, Serbia, Spain and Switzerland.

majority of Parties actively use the European Union considerations described in the *Guidance Document for the implementation of the European PRTR*¹¹³ (E-PRTR Guidance).

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

75. Article 9 provides for record keeping and storage 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, a number of Parties do not report on these questions, particularly those relating to record keeping, data storage and using the best available information. Several Parties report that legislation implementing the Protocol requires data to be stored for five years.¹¹⁴ Some countries further state that operators must use the best available information.¹¹⁵

76. 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 the E-PRTR Regulation or the Protocol on PRTRs.

77. 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.¹¹⁶

78. In the European Union, 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). In addition, the operator/owner should indicate which analysis, internationally approved standard, calculation or estimation method they have used to come up with these values.

79. Despite the fact that each country is required to report emissions from diffuse sources, some Parties¹¹⁷ indicated that diffuse sources have not yet been included in their national PRTR. Poland and Portugal also indicated that, although there are no data from diffuse sources in the national PRTR, these data can be accessed through the E-PRTR (for example, E-PRTR diffuse air emission data sets). North Macedonia reports that an effort will be made to include diffuse sources in the national PRTR. In Belgium (Flanders Region), the collection and modelling of diffuse emissions is done in the Water Emission Inventory Support System.

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

80. Pursuant to article 10 (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.

¹¹³ European Commission (31 May 2006). Available at

https://ec.europa.eu/environment/industry/stationary/e-prtr/pdf/en_prtr.pdf.

¹¹⁴ Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, Germany, Hungary, Ireland, Israel, Latvia, Norway, Romania, Serbia, Sweden and Switzerland.

¹¹⁵ Belgium, Bulgaria, Croatia, Estonia, Ireland and Switzerland.

¹¹⁶ Austria, Belgium, Bulgaria, Croatia, Estonia, Finland, Hungary, Netherland, Republic of Moldova and Serbia.

¹¹⁷ Albania, Cyprus, Kazakhstan, Latvia, Luxembourg, Republic of Moldova, Romania, Serbia, Slovenia and Ukraine.

81. In most countries,¹¹⁸ the quality of data with regard to completeness, consistency and credibility is assessed following the E-PRTR Guidance. Many Parties¹¹⁹ have developed their own methodologies to ensure the quality of PRTR data and some of them also use the *Guidance on Implementation of 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 Matters¹²⁰ or the E-PRTR Guidance. Germany revised the emission factors for the intensive livestock production sector and for CO₂ and heavy metals used for calculating annual loads of wastewater treatment plants. Belgium gives detailed information on its methodology for validation. In addition to regular controls and data comparison for quality control, Luxembourg points out that it has taken further practical measures to guarantee better data quality – namely 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 Netherlands PRTR guidelines.

82. In France, two organizations carry out checks on data quality. Checks include for example, the relevance of data reported under previous years, the consistency of emission factors, and cross-checking information with other databases. The quality control focuses on the: (a) identification of biggest polluters by sector (more than 10 per cent of national emissions); (b) verification of applicable thresholds; and (c) control of data compared to the previous year (significant increase or decrease for a particular substance or waste code). Some data are also corrected a posteriori after the analysis of the informal review carried out by EEA.

83. The Croatian Environment Agency has prepared 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.

84. In many Parties,¹²¹ data quality assurance and control is required by the conditions of the applicable permit. Validation tasks get simplified for authorities in countries where the Integrated Pollution Prevention and Control (IPPC) licensing procedure binds the operator to carry out monitoring programmes, quality assurance and control of data. This results in higher quality PRTR data. Additionally, some Parties¹²² use automatic tools for first-step data validation.

85. Albania and Kazakhstan have no quality assurance for PRTR data.

86. In Estonia, the Environmental Inspectorate monitors compliance with the requirements of the integrated permit in facilities, subject to an integrated permit, which also facilitates compliance with the PRTR.

87. In 2013, the Danish Environmental Protection Agency introduced automatic quality assurance of PRTR information reported through green accounts online.¹²³ 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, PRTR information reported through this website is forwarded automatically to the authority that is to assess its quality with regard to completeness, consistency and reliability.

¹¹⁸ Austria, Bulgaria, Belgium, Croatia, Cyprus, Czechia, Denmark, Estonia, European Union, Finland, France, Germany, Hungary, Ireland, Israel, Latvia, Netherlands, North Macedonia, Poland, Portugal, Romania, Slovenia, Spain and United Kingdom.

¹¹⁹ Belgium, Croatia, Hungary, Luxembourg, Netherlands, North Macedonia, Poland, Portugal, Serbia, Spain, Sweden, Switzerland and United Kingdom.

¹²⁰ United Nations publication, ECE/MP.PP/7.

¹²¹ Belgium, Bulgaria, Estonia, Germany, Hungary, Ireland, Latvia, Norway and Romania.

¹²² Denmark, Estonia, European Union, Germany, Hungary, Ireland, Norway, Sweden and Switzerland.

¹²³ See www.virk.dk.

In Denmark, an overall assessment of the quality of the forwarded PRTR information has not yet been carried out.

88. 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. Croatia has adopted a new regulation under which the coordination tasks related to quality assurance are performed by the Ministry of Environment and Energy and its subordinate institutions and has launched a project to improve quality assurance parameters of PRTR data.

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

90. Three Parties state that the quality of data reported was good; the others do not provide information on the quality of the information reported.

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

92. In Estonia, the Environmental Board checks annual reports and, when necessary, approaches companies for additional information. The specialists engaging in checking the reports have been trained regularly. Estonia has developed a validation methodology for emissions to air, livestock and poultry.

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

(a) Automatic validation, involving a 5-step approach to ensure that 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 Environmental Protection Agency server validation.

(b) All information submitted to the Irish Environmental Protection Agency is also subject to a process of manual validation and verification by the Agency. The manual validation process was reported to have improved the quality of data reported by operators by highlighting changes from previous years.

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

95. In Switzerland, the verification system has proven to be useful in detecting inconsistencies in the data and obvious data entry errors. As part of a project to completely renew the Swiss PRTR software, the data-collection platform will also be renewed. The aim is, among other things, to improve user guidance and automated quality assurance to further improve data quality.

96. In the United Kingdom, there is an online data entry system that allows for initial validation of submitted data. There is also a series of manual question-and-answer checks. Various guidance documents are available to operators that have been developed to ensure that 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. For other

United Kingdom competent authorities that do not use the online data entry system for collecting operators' data, there are a series of manual data quality assurance checks that are undertaken to ensure accuracy of data.

97. In Sweden, the operator must 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 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.

98. North Macedonia has a rulebook for quality assessment, article 7 of which states that the competent authorities shall assess the quality of the data provided by the operators of facilities, in particular as to their completeness, consistency and credibility.

99. In Finland, the quality of information is ensured by manually and partly automatically checking all information submitted.

100. Malta and Poland also use the respective provisions of the E-PRTR Regulation in terms of quality assessment/quality control.

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

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

102. Five Parties¹²⁴ are still developing and improving PRTR systems to provide electronic access to data. In 2016, Serbia further developed its national PRTR website.¹²⁵ North Macedonia reports that, while the redesigned and improved PRTR web portal was made available from the beginning of 2017, PRTR is implemented through a continuous process that requires time, knowledge and financial resources. Norway reports that, depending on available resources, the website will undergo further development in the future. The website is still not completely in line with the provisions of the Protocol. The most obvious shortcomings are a lack of display of geographical information and non-accessibility of emission data from aquaculture facilities. Ukraine reports that, with the development of the single window environmental information platform "Eko.Diia", a dedicated Internet portal will be set up to ensure public access to information. The data will be available free of charge. Furthermore, Ukraine reports that the Ministry of Environmental Protection and Natural Resources maintains an electronic service set up to engage with the public and that will also be included in the emission monitoring geographical information system and – in the longer term – will become part of the interactive PRTR system within the "Eko.Diia" single window environmental information platform. The Republic of Moldova reports that the request and provision of information regarding environmental data is to be carried out in accordance with the provisions of the national legislation in force, without providing further details. Kazakhstan states that the PRTR website does not contain any structured information regarding the types of facilities, types and amounts of waste and/or pollutants and associated

¹²⁴ North Macedonia, Norway, Republic of Moldova, Serbia and Ukraine.

¹²⁵ This website was developed with the financial support of the Regional Environmental Centre in the framework of the project "Support Establishment and Advancement of Pollutant Release and Transfer Registers (PRTR) in Western Balkan Countries and in Moldova", funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

thresholds. Romania reports that it provides public access to information held in the national PRTR and that this information is easily accessible and free.¹²⁶

103. Parties emphasize 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 search tools of Austrian, Belgian (Flanders Region), Irish, Luxembourg, Netherlands, Norwegian, Swedish and Swiss PRTR web pages are also available in English. The Spanish PRTR web page is available in five languages.¹²⁷ Access to the Irish PRTR data is also facilitated at Irish Environmental Protection Agency regional offices on request.¹²⁸

104. Two Parties¹²⁹ refer to administrative procedures that ensure provision of data upon request within the meaning of article 11 (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 help desk has been operating since 2008 and is responsible for providing data on request by the public or competent authorities. The Ministry of Environment of Czechia also provides, in cooperation with the Czech Environmental Information Agency, information through the Environmental Help Desk, or by telephone or email.

105. Countries emphasize free access to PRTR data from direct sources; however, there is no discussion of charges for reproducing and mailing information on request by a member of the public or other concerned entities.

106. 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) and on other government websites.

107. Frequently, web pages disseminating environmental information cross-refer to the PRTR page and vice versa. It is notable that few Parties¹³⁰ report collection of statistical data on visits to PRTR pages. Switzerland monitors the number of visitors and database queries per month as a criterion for awareness about the Swiss PRTR.

108. In Sweden, there is a link to the Swedish PRTR from the Swedish Environmental Protection Agency website and from a related electronic reporting system. General information about PRTR can also be found on the Agency's website. Useful information, such as monitoring data and data on environmental effects, is easily obtained since the PRTR website is a part of the Environmental Protection Agency website. In 2019, information regarding pollutants and their sources was updated and structured in a user-friendly way on the PRTR website. The number of visitors to the current web page has increased every year, from approximately 16,000 per year in 2011 to approximately 47,500 per year in 2019. The number of page views increased almost three-fold after the update of the substance pages. All Swedish libraries are equipped with public computers and, since the Swedish PRTR is web-based, it is easily accessible for the public.

¹²⁶ Available at <http://prtr.anpm.ro>.

¹²⁷ Basque, Catalan, English, Galician and Spanish.

¹²⁸ I.e. under "data reporting and data sets" (<http://www.epa.ie/data>), "enforcement" (<http://www.epa.ie/enforcement>) and "map my area" (<http://gis.epa.ie>).

¹²⁹ Czechia and Spain.

¹³⁰ For example, Sweden, Switzerland and United Kingdom.

109. Between 18 August 2009 and 18 August 2020, over 18,000 individual users accessed the United Kingdom PRTR website. Each year, the publication of PRTR data is announced on the Defra and other competent authorities' websites. Links to the national PRTR site are also available at various competent authority websites in order to promote and enhance speed of access for users. The database itself is searchable and various aspects of it can be downloaded without charge. The Open Government Licence allows users to copy, publish, distribute, transmit, adapt and exploit, both commercially and non-commercially, the information from the PRTR system, on the condition that Defra is acknowledged as the source of the information. A monitored email address is also provided for users wishing to contact Defra for more information and a Defra helpline is available for those preferring to use the telephone. During the 2021 reporting cycle, the United Kingdom made an annual submission of its data to EEA for E-PRTR data, which is available on the E-PRTR website publicly and free of charge. The United Kingdom continues to update the United Kingdom PRTR annually.

VIII. Confidentiality (art. 12)

(a) Legislation

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

111. Croatia reports on the new environmental pollution register ordinance (Official Gazette No. 87/15), article 12 and chapter V of which include data confidentiality provisions. So far, Croatia states that less than one per cent of facilities have submitted a data confidentiality request (0.15 per cent in 2015). The submissions mainly came from State-owned companies and institutions and a small number of private companies. Data marked as "confidential" are available only to employees responsible for Environmental Pollution Register-related activities in the Environmental Protection Inspectorate and the Croatian Environment Agency, according to the report of Croatia.

112. Germany reports on an amending law on PRTR, which transposes the new provisions of the E-PRTR on confidentiality. According to the new rules, confidential information is to be marked as such and will not be made public while still being reported by the operator and the competent authorities to both the German Environment Agency and the European Union. It is reported that the competent authority has to check *ex officio* whether one of the reasons for confidentiality applies and whether it is outweighed by the public interest in disclosing the information. If an operator claims confidentiality, it will be crucial to what extent the respective authority considers a detailed substantiation necessary and sufficient. An important element in assessing confidentiality is whether the data are already available to the public, for example, as part of a permit procedure. Germany reports that the legal assessment is more difficult where confidentiality is based on basic constitutional rights. A statistical overview of confidentiality claims until 2018 is provided as part of the report of Germany, which shows that most confidentiality claims are related to information on waste.

113. Israeli legislation is more restrictive compared, for example, to European Union 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, section 12 (b) and (c) of the Environmental Protection Law provides that a number of categories of information are not available to the public (see para. 126 below).

114. Kazakhstan reports that, in 2020, it initiated a process for the development and adaptation of regulations governing the procedure for recognizing information as confidential. As part of the new procedure, the indication of the reasons for the request for classifying information as confidential is required. Confidentiality issues will also be reflected in the new rules for maintaining the PRTR, which are expected to come into force in 2021.

115. Portugal reports that, during the PRTR 2007–2019 cycles, it did not receive any indication from PRTR operators regarding confidentiality issues.

116. Serbia reports that data on 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 confidentiality of 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 for submitted data.

117. Ukraine states that the single environmental platform “Eko.Diia” is developed while ensuring the protection of State interests, including the provisions of the laws of Ukraine on the protection of information stored in information and telecommunications systems and on protection of personal data, other relevant legal acts, as well as the European Union Data Protection Regulation.¹³¹ The single environmental platform “Eko.Diia” will include software and platforms to identify vulnerabilities in systems, applications and registries, and allow for external experts to be involved if needed.

(b) *Practical experience*

118. Several countries¹³² 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.

119. A few countries¹³³ report that a number of companies that are obliged to report data under the Protocol requested that information be treated as confidential. Bulgaria has accepted all such confidentiality claims.

120. In several countries¹³⁴ 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, during the reporting period, only one enterprise applied for and received permission to keep waste production data confidential in 2016.

121. Belgium reports that no confidentiality request cases occurred in the Walloon and Brussels-Capital Regions. For the Flanders Region, such requests were made and the report provides detailed figures of cases for the period 2010–2019.

¹³¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), *Official Journal of the European Union*, L 119 (2016), pp. 1–88.

¹³² Austria, Belgium (Brussels-Capital and Walloon Regions), Czechia, Estonia, Latvia and Poland.

¹³³ Belgium (Flanders Region), Bulgaria, Croatia and Denmark.

¹³⁴ Including Denmark, Ireland and Luxembourg.

122. Bulgaria reports on the annual statistics, i.e. number of cases of confidentiality claims and states that all claims for confidentiality were accepted but reports about difficulties when judging whether or not a confidentiality claim is justified.

123. Croatia reports that so far, less than 1 per cent of the facilities have submitted a data confidentiality request (0.15 per cent in 2015; in 2019 there were no such requests) and that requests mainly came from State-owned companies and institutions and only a small number of private companies. It is reported that data confidentiality requests by State-owned companies and institutions mainly referred to data concerning company organization, number of employees and geographical location, while private companies request confidentiality concerning production capacities and technologies used (trade secret). The Croatian PRTR system defines various user levels for browsing data pursuant to article 10 of the Ordinance (OG No. 87/15), so that the data marked as confidential are available only to competent authorities' employees responsible for PRTR-related activities, the Environmental Protection Inspectorate (the State Inspectorate) and Ministry of Environment and Energy employees responsible for PRTR-related activities.

124. Czechia reports that, by default, the contact information for persons is not published, however it is possible for reporters from reporting year 2020 onwards to actively add contact information for publication. A further recent change concerns information about the volume of production made available to the European Commission, EEA and the Ministry of the Environment for their exclusive needs only.

125. Germany reports that the competent authority has to check *ex officio* whether one of the reasons for confidentiality applies and whether it is outweighed by the public interest in disclosing the information. If an operator claims confidentiality, it will be crucial to what extent the respective authority considers a detailed substantiation necessary and sufficient. An important element in assessing confidentiality is whether the data are already available to the public, for example, as part of a permit procedure. The legal assessment is more difficult where confidentiality is based on basic constitutional rights. If the competent authority considers that the public interest in disclosing the information prevails, certain procedural safeguards apply in order to protect the person concerned. For instance, the information may be made public in the PRTR only after a hearing. Germany reports that individual operators have relied on these provisions in recent years. However, the amount of confidential information is constantly low. Germany provides tables with an overview of the reasons for confidentiality claimed in the period 2007–2018 (in most cases, these concern confidentiality of commercial or industrial information and are related to information about waste).

126. Israel reports that the Environmental Protection Law provides that processed data on the type of waste may be published in order to avoid damage to trade secrets. Therefore, 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 the total amounts of hazardous and of non-hazardous wastes transferred by each facility. Furthermore, in order to prevent damage to various interests, such as State security and public safety, or the protection of trade secrets, the Environmental Protection Law provides that the following information is not available to the public:

(a) Information regarding the particular destination to which waste was transferred for treatment, on the grounds that this might constitute a trade secret, except where that particular destination 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 might be a trade secret;

(c) Information the disclosure of which may harm State security, as confirmed by a senior defence official in a written and signed statement;

(d) Information the registrar has decided not to publicize on the grounds of a reasonable assumption that the information is not correct or is incomplete.

127. Ireland reports that, to date, the only example found of confidential information being excluded from the PRTR due to its commercially sensitive nature has been in relation to the destination name and addresses of waste facilities used by reporters. Information on releases to air and water that is relevant for the protection of the environment has not been encountered as an issue regarding confidentiality to date.

128. Luxembourg reports that, currently, there are four operators who have requested the confidentiality of information on shipments of hazardous waste exported abroad (based on article 12 (1) (b) and (c) of the national PRTR act).

129. The Republic of Moldova reports that confidentiality is granted in compliance with the provisions of their national legislation (art. 7 of Law No. 982/2000 on access to information). According to the provisions of point 36 of their national PRTR legislation (Government Decision No. 373/2018), operators who consider information confidential must make requests separately for each industrial plant/complex and the type of information regarding which confidentiality is requested. They state that no such requests have been registered to date.

130. The Netherlands reports 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 the Netherlands authorities, neither are they subject to 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. In Norway, only the name of waste recipients, as well as the production volume data concerning individual facilities, are confidential.

131. Romania reports that many companies request confidentiality for information that they provide to the authorities only on a voluntary basis. As an example of a confidentiality claim for data for which reporting was obligatory, Romania mentions data on the operator's parent company name and quantities of hazardous and non-hazardous waste. Romania reports that companies gave the following grounds for confidentiality: legitimate economic interests, intellectual property rights and data protection grounds.

132. Switzerland reports that, related to data for 2018, 9 facilities (out of 257) claimed confidentiality for parts of their data. For 6 facilities, confidentiality was granted, and 3 claims were rejected by formal decision. For other years, the situation regarding confidentiality claims is comparable. In order to make sure that all facilities are treated equally, the claims and the decision criteria are reviewed on a yearly basis by a Federal Office for the Environment team that includes PRTR and legal experts. The Swiss report states that:

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.

133. 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. The vast majority of operators have

not claimed confidentiality since 2015. However, between 2016 and 2019, 23 United Kingdom sites claimed confidentiality at the facility level.

134. The European Union reports that very few cases of confidentiality have been claimed: During the reporting period, eight member States have made use of the confidentiality provisions. Confidentiality was mostly claimed for information regarding 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 interests, including tax or statistical secrecy.

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

135. About half of the reporting countries¹³⁵ describe opportunities for the public to submit questions or comments to public authorities relating to the PRTR system or newly developed adopted laws. Slovenia reports that it does not yet have a national register of emissions and pollutants.

136. Many countries report the active development of various electronic tools to make information more easily available, for example through governmental websites¹³⁶ (see also the reporting on art. 11). Estonia reports that the Estonian PRTR is partially integrated into the "KOTKAS" environmental decision information system. In most of the countries, the website resources are used not only for publication of 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. Romania reports that, with the finalization of the Environment Integrated System, the national PRTR Register was included in the new online external geographical information system interface.¹³⁷

137. Some countries¹³⁸ report that they used meetings, seminars, or workshops to deliver public participation, distribute information and/or to obtain comments with regard to PRTRs. Latvia reports that it has introduced into its national register the possibility for the public to obtain clear and easily understandable online information regarding the possible impact of certain substances on human health. North Macedonia reports that its Ministry of Environment and Physical Planning, in cooperation with civil society, has formed a working group on PRTR that includes a representative of civil society to ensure direct engagement of NGOs in activities related to the implementation of PRTRs. Kazakhstan reports on various projects developed in the country through NGOs and with the support of the Government and international organizations to promote public involvement in the development of a national PRTR system, including, inter alia, the development of a National Strategy for Public Access to Environmental Information and PRTR.

138. Only the United Kingdom reports on the price of providing information to the public and states that information contained in the PRTR can be accessed free of charge and is downloadable.

¹³⁵ Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Germany, Ireland, Israel, Malta, Republic of Moldova, Romania, Spain, Sweden, Switzerland and United Kingdom.

¹³⁶ Belgium, Croatia, Cyprus, France, Germany, Ireland, Latvia, Malta, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Switzerland and United Kingdom.

¹³⁷ See <http://atlas.anpm.ro/>.

¹³⁸ Bulgaria, Cyprus, Germany, Hungary, Kazakhstan and Switzerland.

139. A few countries¹³⁹ indicate that they have already ensured public participation in decision-making with respect to the establishment of PRTRs.

140. The European Union reports that the E-PRTR Regulation was adopted following the ordinary legislative procedure of the European Union; 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 E-PRTR revision process commenced in September 2019, when the Commission published an Inception Impact Assessment – also known as a “road map” – laying out its understanding of the issues requiring investigation. As the next stage in revision of the E-PRTR Regulation, the Commission launched an Open Public Consultation in December 2020 that invites all members of the public and the wider community of stakeholders to express their views.

141. Two countries¹⁴⁰ also refer to their obligations vis-à-vis public participation under the E-PRTR Regulation, or their efforts to implement the requirements thereof. Portugal reports that its current data-collection system is designed to respond to Commission Implementing Decision (EU) 2019/1741.

142. Some Parties¹⁴¹ describe the opportunities for the public in their countries to participate in drafting new legislation/regulations. In most of these States, the drafts are published and open for public comments.

143. Some countries describe specific laws, regulations and strategy documents directly related to PRTRs, and also partly related to public participation; those instruments were drafted and adopted following the usual, transparent legislative processes. In particular, Germany describes its PRTR Law of 2007 and the 2006 public participation strategy for the development of the national PRTR. Ireland describes the PRTR Regulations 2011, which provide for ongoing opportunities for public participation in the further development of the register, and the Irish IPPC, Industrial Emissions, Waste, and Wastewater Discharge Application licensing codes. The PRTR reporting obligations on operators have been incorporated into these codes.

144. Bulgaria and Poland regret the lack of involvement of the public in the process of further development of the national PRTR systems. Finland reports that it does not have a national register meeting the requirements of the Protocol. Instead, the information in Finland is collected and reported to the EEA E-PRTR. Finland also has a release and transfer register that meets all other requirement of the Protocol except for the search feature.

X. Access to justice (art. 14)

145. The majority of the reporting countries refer to legislation setting the framework for environmental protection, freedom of information (including environmental information) and access to review procedures¹⁴² as the sources of rules on access to justice with regard to requests for data from PRTRs, together with procedural legislation. Moreover, Austria,¹⁴³

¹³⁹ Ireland, Israel and Switzerland.

¹⁴⁰ Austria and Belgium.

¹⁴¹ Austria, Croatia, Denmark, Estonia, Israel and Malta.

¹⁴² For example, 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 North Macedonia.

¹⁴³ Environmental Information Act.

Denmark,¹⁴⁴ Romania¹⁴⁵ and the Republic of Moldova¹⁴⁶ report that they have adopted specific rules covering access to environmental information, together with possible remedies in case of a breach of the relevant provisions.

146. Within the European Union, 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/EC¹⁴⁷ and, where the institutions of the European Union are involved, in accordance with articles 6, 7 and 8 of the Access to Documents Regulation.¹⁴⁸

147. Parties, in general, report availability to individuals of both administrative and judicial review procedures to appeal respective decisions.¹⁴⁹ A few countries specifically emphasize availability of certain administrative or judicial procedures¹⁵⁰ or judicial proceedings.¹⁵¹ Cyprus, Czechia, Germany, the Netherlands, Norway and Serbia provide no detailed information on the availability of review procedures in their national implementation reports. For example, Serbia and the Netherlands discuss under article 14 the pollution monitoring and availability of data via electronic means respectively. Notably, this information is not directly relevant under the access to justice provisions of article 14.

148. It is significant to note that, in several legal systems, specific administrative authorities¹⁵² are empowered to review decisions concerning provision of environmental information, which includes data derived from PRTRs.

149. Parties report no specific administrative or judicial cases concerning refusal of access to PRTR data. However, some Parties¹⁵³ indicate an absence of cases initiated with regard to requests for PRTR database information. Ireland underlines that the responsible public authority, the Environmental Protection Agency, has not refused any request for PRTR information to date. Accordingly, no review of a decision by the Agency has arisen specifically in relation to PRTR information.

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

¹⁴⁴ Act on Access to Environmental Information.

¹⁴⁵ Government Decision No. 878/2005 on public access to environmental information.

¹⁴⁶ Law No. 982/2000 on access to information.

¹⁴⁷ 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, *Official Journal of the European Union*, L 41 (2006), pp. 26–32.

¹⁴⁸ 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, *Official Journal of the European Communities*, L 145 (2001), pp. 43–48.

¹⁴⁹ Belgium, Croatia, Estonia, Finland, France, Ireland, Kazakhstan, Latvia, North Macedonia, Poland, Republic of Moldova, Romania, Spain and United Kingdom.

¹⁵⁰ I.e. Denmark – Environmental Board of Appeal, Malta – Information and Data Protection Commissioner, Portugal – Commission for Access of Administrative Documents, or Slovenia – Information Commissioner.

¹⁵¹ For example, Austria, Bulgaria, Israel, Malta (Environmental and Planning Review Tribunal), Sweden and Switzerland.

¹⁵² 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).

¹⁵³ Czechia, France, Ireland, Malta and Switzerland.

151. 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.

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

XI. Promotion of public awareness of pollutant release and transfer registers (art. 15)

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

153. Many countries provide national guidance documents on PRTRs that clarify the tasks of the different bodies involved and that should help authorities in fulfilling these tasks.¹⁵⁴ Switzerland reports on a checklist for data validation. Germany provides an expert wiki, which is regularly updated.

154. A number of countries have established working groups on PRTR or organize regular meetings or training.¹⁵⁵ For example, Switzerland reports on annual training courses offered to the cantons (within the Swiss PRTR working group). However, Switzerland reports that, in recent years, the need for regular discussion of open issues has decreased and that consultations about specific issues, such as opinions regarding system requirements of new software, have been successfully undertaken using online tools. Several countries report that assistance via telephone and email is offered to the civil servants in charge.

155. Croatia reports on a specific section on the web and a manual that provide related information. It is stated that all enquiries, comments and suggestions by public institutions, competent authorities and the public collected through the Croatian PRTR help desk or in any other way (by telephone, through the industry help desk, at workshops, etc.) are stored, published and answered through its help desk and website. Furthermore, employees regularly visit installations, where they are introduced to the applied technologies and establish direct contact with the industry in question.

156. Czechia reports that the fulfilment of obligations towards the national PRTR is highly centralized at the level of State administration, and therefore there is no need to carry out extensive information activities directed towards lower levels of State administration. It states that its PRTR system is currently undergoing an extensive update (to be completed in 2021) to ensure that the updated information on pollutants is available for the new national PRTR website.

157. Estonia states it has established regular training sessions for authorities, together with the introduction of a new information technology system entitled “KOTKAS”, which verifies the PRTR data provided by installations. Furthermore, sectoral information days are organized for operators where advice is provided on the preparation of reports.

158. Germany reports on several research projects the aim of which, inter alia, was the writing, preparing and updating of expert manuals and the answering and resolving questions and problems that occurred during the implementation process. These manuals and support materials are available to competent authorities and operators in an expert wiki and are regularly updated, amended and upgraded.¹⁵⁶ Through these research projects, various workshops and information events were organized for competent authorities, industrial facilities and academia on the implementation of the PRTR. Germany furthermore reports

¹⁵⁴ For example, Austria, Croatia, Czechia, Ireland, Israel and Spain.

¹⁵⁵ Belgium, Bulgaria, Ireland, Israel, Netherlands and Spain.

¹⁵⁶ See <https://wiki.prtr.bund.de> (German only).

that, in February 2021, a research project on the benefit and impact of the German PRTR would be finalized that would look deeper into the issue of PRTR as a tool to prevent or reduce industrial pollution. Questions or problems regarding the reporting software “BUBE” are shared and answered by the competent authorities and in the context of cooperation between the federal Government and the federal states.

159. The Netherlands reports on information and guidance for competent authorities provided online¹⁵⁷ and via a help desk.

160. Kazakhstan reports that, in 2019, round table events on “International experience and current Kazakhstan practice of implementing the register of pollutants release and transfer” were held for State bodies and enterprises to provide them with recommendations on the effective use of PRTRs and a seminar on “Implementation of a Pollutant Release and Transfer Register in Kazakhstan: Key Results and Next Steps” was held with the support of the United Nations Institute for Training and Research (UNITAR).¹⁵⁸ Key results of the pilot implementation of PRTRs in Kazakhstan were discussed during a round table discussion and training seminar on implementing the Aarhus Convention principles in Kazakhstan supported by the Organization for Security and Cooperation in Europe (OSCE) with the participation of representatives of business, Government and the public.¹⁵⁹ Information on measures taken is regularly published on the PRTR website.

161. Luxembourg reports on a new (geographic information system-based) website of the Environmental Administration of Luxembourg, which is currently under construction.¹⁶⁰

162. Between 2014 and 2021, North Macedonia implemented several projects with the help of foreign assistance. The projects focused on supporting the efforts of the authorities to implement the Protocol on PRTRs and the E-PRTR Regulation, as well as on raising awareness and improving the understanding of operators and NGOs about their role and activities regarding the PRTR systems.

163. The Republic of Moldova reports that the national PRTR is accessible on a website¹⁶¹ that includes a section for guidance material, including in video format, which helps to fulfil the obligations of operators, the public and authorities regarding the performance of duties in the field of PRTR.

164. Portugal reports that all competent authorities and bodies cooperate in carrying out their duties under the Protocol. More specifically, the national and regional authorities, as well as the General Inspectorate of Agriculture, Sea, Environment and Spatial Planning, have free access to the national PRTR electronic system in order to fulfil the obligations.

(b) *Assistance and guidance to the public*

165. Most countries provide online information tools, for example, special sections on a web page.¹⁶² Some countries provide “question and answer” sections on their web page.¹⁶³ The Danish Environmental Protection Agency regularly announces news online,¹⁶⁴ including news regarding the PRTR and about a map with diffuse sources displayed.¹⁶⁵ The European

¹⁵⁷ See www.e-mjv.nl (Dutch only).

¹⁵⁸ See <http://ecogofond.kz/2019/03/13/34134/> (Kazakh and Russian only).

¹⁵⁹ See www.osce.org/programme-office-in-nur-sultan/425366.

¹⁶⁰ See <http://prtr.aev.etat.lu/>.

¹⁶¹ See <http://www.retp.gov.md>.

¹⁶² For example, Belgium, Bulgaria, Croatia and Spain.

¹⁶³ For example, Denmark.

¹⁶⁴ See www.mst.dk.

¹⁶⁵ See <https://envs.au.dk/en/research-areas/air-pollution-emissions-and-effects/air-emissions/emissioner-fra-diffuse-kilder-under-prtr/kortlaegning/>.

Union reports that it intends to update its 2006 guidance document once the text of the E-PRTR Regulation has been amended as a result of an ongoing revision exercise.

166. Many countries report that members of the public can contact the authority in charge of PRTR maintenance via telephone or email.¹⁶⁶ Related to this, for example, Germany reports that questions from the public are answered within 10 days. An extensive help function and a question-and-answer section facilitate the search for and the understanding of the data. The website www.thru.de, as well as the “top issue” section, are meant to introduce specific analyses and questions and provide background information. In order to cover all possible questions, the website provides the complete data set as a database for download. Malta reports that it intends to recruit an officer whose duties will also include the responsibility of “helping out” in matters of the Protocol on PRTRs and the E-PRTR Regulation. In Finland, the Centres for Economic Development, Transport and the Environment have a joint centre for customer service in environmental matters via telephone and email and customer services points where citizens can receive face-to-face service and guidance.

167. Czechia reports that it expects significant developments in the information systems directly related to the national PRTR in 2021. There will be a new information system for reporting (Integrated System for the Fulfilment of Reporting Obligations 2), together with a Central Environmental Register. A completely new website for the national PRTR should also be launched, together with significant improvements in the handling of reported data, which is currently the main limiting factor (control, export, analysis, preparation of reporting, etc.). Czechia states that a new portal is also to be launched at the European level, which will enable the publication of all data reported to the European Union Registry on Industrial Sites (administrative and thematic data). This will, inter alia, ensure the availability of the vast majority of reported data for national facilities that do not fall under the E-PRTR Regulation (i.e. data collected/reported at the national level exceeding the relevant European regulations and obligations under the Protocol).

168. 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 email, a local telephone number or in person.¹⁶⁷ It is also reported that the Department of the Environment, Climate and Communications¹⁶⁸ has a dedicated Awareness Unit, whose function is, inter alia, to enhance awareness of protecting environmental resources through working with communities, environmental NGOs and private and public sector stakeholders.

169. Israel mentions that a video designed to explain how to use the register was posted on the website of the Ministry of Environmental Protection (and on YouTube). In addition, a question-and-answer page and explanations on PRTR are posted on the Ministry’s website. Furthermore, the annual PRTR report helps the public understand the abilities of the registry and to identify trends and hotspots.

170. Kazakhstan reports that, in June 2019, with the support of the OSCE Cooperation for Sustainable Development Centre,¹⁶⁹ a workshop for government, industry and NGO representatives was held to increase stakeholder understanding of the goals and practising skills in using the PRTR.¹⁷⁰

¹⁶⁶ For example, Estonia and France.

¹⁶⁷ See www.epa.ie/.

¹⁶⁸ See www.dccae.gov.ie.

¹⁶⁹ See <https://csd-center.kz/>.

¹⁷⁰ See www.osce.org/ru/programme-office-in-nur-sultan/423899.

171. Latvia reports that operators are informed through the State Environmental Service. Information about the PRTR is also included in their integrated permits. Latvia has introduced into its national register the possibility for members of the public to obtain clear and easily understandable online information regarding the possible impact of certain substances on human health. Such additional sources of information promote a better understanding of how exactly particular substance may have an influence on lives. It also provides information on the nature and possible impacts of chemical substances, thus supporting awareness-raising related to environmental issues.

172. When launching or upgrading national PRTRs, some countries sent out press releases.¹⁷¹ Norway reports that press releases are issued when new data are available. It has also undertaken awareness-raising campaigns for journalists on how to use the PRTR web page.

173. North Macedonia reports that, in the framework of the project “Strengthening capacities for the development of the National Pollutant Release and Transfer Register” several activities related to experience sharing, capacity-building and improving public awareness were undertaken.

174. The Republic of Moldova reports that, so far, the public has not expressed opinions regarding the development of the national PRTR, and no assistance has been requested in accessing it. The public can establish a dialogue by email and by telephone with the persons responsible at national level (Environment Agency) on the implementation of the PRTR Regulation.

175. Poland reports that public awareness regarding the scope of the national PRTR has been increased through information posted on the official website of the Chief Inspectorate for Environmental Protection.

176. Portugal reports that the national PRTR portal is undergoing remodelling and development. In the meantime, there are public and easily accessible documents about PRTR and related obligations, including support material for calculation related to pollutant releases, frequently asked questions and specific information about the current PRTR cycle online.¹⁷² It is reported that, in the Autonomous Region of the Azores, such information is made available on the Monitoring, Environmental Assessment and Licensing portal of the Regional Directorate for the Environment.¹⁷³

177. Romania comprehensively reports on its awareness-raising and training activities, both for the competent authorities and the concerned industries, as well as for NGOs and the public. In addition to information for operators on how to properly report the data, there is a frequently asked questions page that provides answers to the questions of all concerned stakeholders.

178. Serbia reports that, in previous years, the Serbian Environmental Protection Agency, in cooperation with NGOs and the media, has organized PRTR-related promotion and capacity-building through television and newspapers articles. In 2015 and 2016, around 10 workshops were organized with media and NGO participation. According to Serbia, these activities need further work, particularly in collaboration with Aarhus centres in Serbia, but also with the media. The Serbian report states that it is necessary to further promote the PRTR and prepare briefings that help users to interpret the published data on emissions to air, water, soil and waste management. Regarding recent activities, the report states that, during 2020 and the pandemic, the Serbian Environmental Protection Agency participated in more than

¹⁷¹ Austria, Germany and Poland.

¹⁷² See <https://apoiiosiliamb.apambiente.pt/>.

¹⁷³ See www.azores.gov.pt/Gra/srrn-ambiente/menu/secundario/PRTR/.

10 webinar videoconferences promoting reporting, methodologies for calculating emissions and the submission of data related to air emissions, water and waste management.

179. Spain reports that information on the national PRTR is disseminated via social media networks (for example, Twitter) and provides information about outreach activities, such as the annual Conference on Information and Public Participation (PRTR Conference), which, in 2020, had to be held remotely due to the pandemic (a specific annex to the national report is provided on this matter). Furthermore, awareness is raised at the biennial National Congress on Environment (the 2020 Congress was postponed to 2021).

180. In Sweden, the PRTR website has been demonstrated at universities, with a special focus on how it can be used and integrated into education. The PRTR website is also adapted for use by persons with disabilities.

181. Ukraine states that public awareness of the development and implementation of the national PRTR under the single environmental platform “Eko.Diia” is promoted with the help of information published on the Ministry of Environmental Protection and Natural Resources’s official website.

182. The United Kingdom reports that it has developed various tools and templates that enable competent authorities to carry out their PRTR functions more easily. These include guidance documents for each sector, an emissions factor database and sector expertise in each of the main agencies to assist and guide industry in providing credible data and the public in understanding it. The United Kingdom PRTR site has an email link through which any member of the public can get in touch by, for example, asking questions on emissions or seeking more general information or for research purposes, all of which are dealt with promptly by the Industrial Emissions Team. The United Kingdom reports on a frequently asked questions section, as well as on useful information on each of the 91 pollutants covered by the United Kingdom PRTR.

XII. International cooperation (art. 16)

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

183. Some Parties¹⁷⁴ have been involved in European Union twinning projects that supported the implementation of PRTRs, in particular through annual exchanges of information on data analysis and examples of good practice during meetings of the committee convened under article 19 of the E-PRTR Regulation (E-PRTR Committee).

184. A few Parties¹⁷⁵ report an exchange of information about PRTR reporting at the annual meetings of the E-PRTR Committee. Several Parties¹⁷⁶ stress their close cooperation with other Parties and European Union member States at meetings, either in the context of the E-PRTR Committee or of the Working Group of the Protocol on PRTRs and the OECD Working Group on Pollutant Release and Transfer Registers, workshops, or within subregional groups (for example, the Nordic PRTR group) and also through personal contacts; there have also been opportunities for cooperation during their participation in negotiations concerning the E-PRTR.

¹⁷⁴ Austria, Croatia, France, Germany, Israel, Romania and Spain.

¹⁷⁵ Bulgaria, France, Norway, Poland, Romania and United Kingdom.

¹⁷⁶ Belgium, Croatia, Czechia, Denmark, Estonia, Finland, Latvia, North Macedonia, Norway, Romania, Serbia, Spain, Sweden and United Kingdom.

185. A few Parties¹⁷⁷ report that they have no cooperation with other Parties.

186. Germany indicates that it supports international action, in particular regarding capacity-building on PRTR. For example, Germany distributed information on the German PRTR and on the use of its open source PRTR software “BUBE”, which Germany is currently working on reprogramming.¹⁷⁸

187. France refers to the existence of twinning activities to provide candidate countries for membership of the European Union with support to establish regulatory frameworks or online tools to collect data from the industry.

188. Switzerland indicates its support of the objectives of the Protocol by providing dedicated funding via the secretariat of the Protocol.

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

189. A few Parties¹⁷⁹ have, with the support of EEA or in partnership with other countries in their region, organized international or national workshops promoting modern environmental information systems, including PRTRs. Some Parties indicate that, in the framework of negotiations on the E-PRTR, experience has been exchanged with national PRTRs. During the reporting period, the United Kingdom provided the majority of its input through the European Union processes and networks; now that it has left the European Union, it will continue to comply with the Protocol within national processes.

190. Germany has been involved in partnerships that feature twinning and advisory assistance programmes, and engages with the systems and technologies of Israel, the Western Balkan countries and the Republic of Moldova. Norway has assisted Poland in a bilateral project on development of a PRTR website.

191. Other environmental partnerships have emerged in the context of a working group for economic cooperation between Israel and Japan. In particular, in this context, Japan shared its experience in developing diffuse emissions inventories.

192. 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 (for example, the Northern Ireland Environment Agency visit to the Irish Environmental Protection Agency in 2016). Similarly, Belgium shares available information on an ad hoc basis when asked about specific issues by other Parties to the Protocol.

193. A couple of Parties¹⁸⁰ have not approached others bilaterally because they lack the capacity to do so. Nevertheless, presentations at E-PRTR working group meetings have reportedly been helpful for some Parties. Czechia states that it has used the opportunity provided by these presentations to share with member States the planned functional updates of its national PRTR. Similarly, several countries share projects and capacity-building activities implemented with technical support from Spain.

¹⁷⁷ Albania, Cyprus, Kazakhstan, Luxembourg, Netherlands, Portugal and Ukraine.

¹⁷⁸ *Betriebliche Umweltdatenberichterstattung* (BUBE) is a data collection and management system, serving as the common basis for the PRTR, the eleventh, thirteenth and seventeenth Federal Emission Control Ordinances, as well as the European Union Registry. The annual PRTR report is generated by the operator itself by using the PRTR module of BUBE.

¹⁷⁹ Austria, Denmark and Germany.

¹⁸⁰ Serbia and Switzerland.

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

194. Some Parties¹⁸¹ indicate that their data on releases and transfers within border areas are publicly available for other Parties on their national PRTR websites. In some instances, information on the establishment of a national register has also been communicated to the PRTR secretary of EEA and other regional partners. Moreover, some Parties have established working groups on specific topics, such as the protection of transboundary waters pursuant to bilateral treaties. For other Parties,¹⁸² data reported to the national PRTR constitute an important support source for addressing transboundary environmental problems. Two Parties¹⁸³ report having taken measures in this context to make available the data on their PRTR website and have offered information on development plans and their experience in data provision. The United Kingdom explains that most competent authorities have inventories that are freely accessible to the public and agencies. A United Kingdom industrial reporting group regularly meets to consider all aspects of PRTR data and to ensure secure uniform action. Czechia indicates that, since the reporting year 2020, and with the aim of improving coherence between PRTR data and international reporting on relevant IPPC installations and also with the European Union Emissions Trading System, the respective identification information must be provided together with the PRTR data from facilities.

195. There is close cooperation among European Union member States through the E-PRTR. For example, Finland and Malta underline this cooperation and indicate that they supply PRTR information to the E-PRTR, which contains the information of all European Union member States concerning releases covered by the Protocol on PRTRs, and 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 on the development of diffuse emissions inventories, and also between Liechtenstein and Switzerland. Following the replacement of the current reporting software in Switzerland, Liechtenstein will report its data directly to EEA.

196. Poland indicates that it does not yet cooperate with neighbouring countries. Estonia reports 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)*

197. PRTR data concerning transfers among Parties are publicly available to other Parties on the Austrian and United Kingdom PRTR websites. Several Parties stress that they cooperate closely with other European Union member States through the European Union and the E-PRTR. For example, Czechia and Poland cooperate to address air pollution issues on a continuous basis. A few Parties¹⁸⁴ also raise 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 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the Stockholm Convention on Persistent Organic Pollutants.

198. A couple of Parties¹⁸⁵ mention that they did not receive any request for information related to knowledge transfers among Parties, but that they would be ready to answer

¹⁸¹ Austria, Bulgaria, Germany, Ireland, Norway, Romania, Serbia and Switzerland.

¹⁸² For example, Czechia.

¹⁸³ Germany and United Kingdom.

¹⁸⁴ Czechia, Germany and Finland.

¹⁸⁵ Belgium and Czechia.

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.

199. Some Parties do not cooperate with countries to which wastes are transferred. Serbia and Norway explain that data concerning transfers to other countries constitute part of the data set delivered to the E-PRTR. 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 country.

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

200. Several environmental agencies cooperate with other Parties; for example, the German Environment Agency has an advisory assistance programme in North Macedonia and Serbia, and twinning projects with Israel and Croatia concerning the establishment and improvement of national PRTRs. Sweden has also shared its experiences within the framework of environmental collaboration with Brazil. Croatia discussed in the national implementation report a cooperation and technical assistance with Bosnia and Herzegovina for creating a PRTR database and portal in 2013 and shared experience with Kosovo¹⁸⁶ in 2016 on environmental topics, especially on waste and PRTR.

201. Czechia underlines the importance for its Ministry of Environment 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 EEA in that matter.

202. Spain provided technical support to several countries within a United Nations Environment Programme (UNEP)/UNITAR/Global Environment Facility (GEF) initiative. During the 2017–2020 reporting period, Spain provided technical support in the context of capacity-building activities and projects in collaboration with Argentina, Colombia, North Macedonia and Turkey, and in the context of implementing the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

203. Norway assisted Poland through a bilateral project on the development of a website for the Polish PRTR. While Poland provided technical support to Georgia, the Republic of Moldova and Ukraine in 2018 and 2020 through the Eastern Partnership Academy for Public Administration.

204. North Macedonia received technical and financial support from Germany, Norway and Spain. The country cooperated and shared experiences in the context of a project dedicated to strengthening capacities for the development of national PRTRs and to supporting the implementation of the Strategic Approach to International Chemicals Management.

205. Several Parties¹⁸⁷ similarly support UNITAR projects and the activities of the OECD Working Group on PRTRs that benefit countries building up a PRTR system.

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

¹⁸⁶ References to Kosovo shall be understood to be in the context of Security Council resolution 1244 (1999).

¹⁸⁷ Including Spain, Sweden and Switzerland.

207. A few Parties¹⁸⁸ indicate being a part of the International PRTR Coordinating Group, the foremost goal of which to support developing countries and countries with economies in transition through intergovernmental coordination.

208. The Ministry of Environmental Protection of Israel has received financial assistance from the UNEP Mediterranean Action Plan for the integration of PRTR data of emissions to sea with the National Baseline Budget system.

XIII. Conclusions

209. In paragraph 5 of decision I/5, the Parties to the Protocol requested a synthesis report that not only summarized the national implementation reports, but also identified “significant trends, challenges and solutions”.

210. 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 (arts. 3, 4 and 5)

Trends

211. A consideration of those parts of the national implementation reports that relate 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 that 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 (for example, by covering more activities or pollutants or lower thresholds). This is often because of the combined implementation of the 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.

¹⁸⁸ Croatia, European Union, Spain, Sweden and Switzerland.

Challenges and solutions

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

- (a) Minimizing duplicative reporting by analysing existing legislation through, for example, 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 informants' identities secret is vital to encourage citizens to take the risk to alert the authorities where appropriate;
- (d) Fostering harmonization where minimum standards are exceeded: whether it is feasible for Parties to adjust, for example, thresholds, the number of pollutants, activities, water, energy, resource consumption, source-type of greenhouse gas emissions (fossil versus non-fossil);
- (e) There is a lack of information on the establishment of national PRTR systems, which could be remedied by more thorough reporting on that issue;
- (f) Few Parties report on practical measures to protect whistle-blowers, and there should be more detailed reporting on that issue in future;
- (g) Some Parties described in their national implementation report that they report to the E-PRTR but do not have a national PRTR, or do not have, at the national level, relevant search functions required by the Protocol. Taking into account specific issues at the national level, such an approach may constitute potential non-compliance with several provisions of the Protocol.

Legislative, regulatory and other measures (art. 7)*Trends*

213. A consideration of those parts of the national implementation reports 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 in such activities since the last reporting round. However, 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 taken 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;

(d) The information provided by Parties in the national implementation reports in some cases referred to external links or legislation without being specific to the question.

Challenges and solutions

214. 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 take the necessary steps to report on releases of relevant pollutants from diffuse sources in accordance with their national priorities and by considering the development of further guidance, including on methodologies for collecting data for releases from diffuse source;

(d) To facilitate information exchange and exchange on good practices and to improve the transparency of the implementation reports, Parties are encouraged to make use of the existing Guidance for reporting on implementation of the Protocol on Pollutant Release and Transfer Registers (ECE/MP.PRTR/2017/6/Add.3) and to provide more detailed information in the reports instead of listing national legislation.

Reporting cycles (art. 8)

Trends

215. A consideration of those parts of the national implementation reports 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 email.

Challenges and solutions

216. 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 (art. 9)

Trends

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

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

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

Challenges and solutions

220. Despite the fact that each country is required to report emissions from diffuse sources, Parties not always report on respective data collection and record-keeping issues. Since the second reporting cycle, more and more Parties mention data collection with respect to diffuse sources in their reports. A few report diffuse emissions into the water.

221. An increasing number of Parties are moving towards electronic data provision or data delivery and 2-step automatic tools validation.

Quality assessment (art. 10)

Trends

222. A consideration of those parts of the national implementation reports 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 (4) of the Protocol;

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

223. 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 of the data submitted is good. Validation is simplified where the IPPC licensing procedure requires monitoring, quality assurance and control of data.

Public access to information (art. 11)

Trends

224. A consideration of those parts of the national implementation reports 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 report administrative procedures that ensure provision of data upon individual request as provided for in article 11 (5);
- (c) Most Parties stress the user-friendliness of their PRTR web pages and provide advice on how to use those web 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 web page and vice-versa;
- (f) Parties collect data on web page visitors.

Challenges and solutions

225. 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 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, and those data might help to understand how the web page, and its accessibility, can be improved.

Confidentiality (art. 12)

Trends

226. A consideration of those parts of the national implementation reports 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

227. 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 (art. 13)

Trends

228. A consideration of those parts of the national implementation reports that related to public participation in the development of PRTRs 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

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

(a) Several countries, including some European Union member States, report that they face 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 civil society in the national PRTR systems. More effective measures (like development of relevant publications and the organization of training sessions, workshops, seminars, etc.) need to be taken in order to raise public awareness on the importance of national PRTR systems in general and public participation in the development of national PRTRs in particular.

Access to justice (art. 14)

Trends

230. A consideration of those parts of the national implementation reports that relate to access to justice led to the identification of the following trends:

(a) Almost all Parties describe 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

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

(a) Except for a few Parties, no information is provided about 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 (art. 15)

Trends

232. A consideration of those parts of the national implementation reports 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 the contact details of an official in charge, or at least an email 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

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

(a) Given the fact that the majority of countries had 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 existing data users and further potential users, with a view to raising awareness of the potential added value that 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 (art. 16)

Trends

234. A consideration of those parts of the national implementation reports that related to international cooperation led to the identification of the following trends:

(a) Most Parties 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 the European Union, ECE, OECD and subregional groups;

(c) Several Parties indicate 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 through collaboration with non-Parties outside the ECE region, although, strictly speaking, that falls outside the ambit of the present report.

Challenges and solutions

235. It seems that Parties with economies in transition face challenges in implementing their PRTRs because of financial constraints and 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.

236. 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 so requested by countries seeking support in building their PRTR. To facilitate collaboration activities, the organization of dedicated events can be considered as a good way to facilitate implementation of obligations under article 16 by bringing together Parties, non-Parties and relevant organizations. As an example, the Global Round Table on PRTRs events were perceived by Parties as very useful events for sharing information on PRTRs and getting in touch with experts from other Parties. It can be considered that the organization of such events in the future would continue to have a strong impact on efforts by Parties to implement article 16.

National pollutant release and transfer registers in the European Union member States

Background

237. The issue of national PRTRs in the European Union member States has been already touched upon through the document on the Systemic issues concerning the implementation of the Protocol on Pollutant Release and Transfer Registers and recommendations on how to address them. The document stated that national implementation reports from a number of Parties suggested that there may be issues to address concerning the fulfilment of the obligation to establish national PRTRs, as opposed to only reporting on regional obligations, such as those arising under the E-PRTR. It was recommended in this regard that Parties should consider the extent to which the E-PRTR implements their obligations arising under the Protocol and to report accordingly.¹⁸⁹

238. In addition, in the 2017 synthesis report on the implementation of the Protocol on PRTRs references to the E-PRTR are made throughout the text in the different sections, including with relevance to the issue of establishing a national PRTR.¹⁹⁰

239. The issue was, however, not considered in a systemic way in the previous synthesis reports. Given the overarching implications of the issue for the implementation of a variety of Protocol provisions, the Committee agreed to address in the present synthesis report relevant observations identified through 2021 national implementation reports.

Considerations

240. The European Union, in parallel with the obligations under the Protocol on PRTRs, also established its own European register (i.e. the E-PRTR) through the E-PRTR Regulation. European Union member States report, therefore, that the E-PRTR Regulation applies in their national legal system and is part of the national PRTR regulatory system. In addition, there are Parties to the Protocol that are not member countries to the European Union, but they also

¹⁸⁹ ECE/MP/PRTR/2017/6/Add.2, paras. 13 and 14.

¹⁹⁰ ECE/MP.PRTR/2017/10, paras. 17, 76, 177, 193 and 194.

participate in and make their PRTR data available through the E-PRTR system. This fact has implications for the implementation of the Protocol in the Parties concerned.

241. The Protocol's article 26 (3) states that any regional economic integration organization that becomes a Party without any of its member States being a Party shall be bound by all the obligations under the Protocol. If one or more member States of such an organization is a Party, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Protocol. In line with article 26 (4), regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by the Protocol. Article 26 (4) of the Protocol thus establishes the extent of the obligations of the European Union under the Protocol, not the extent of the obligations of the European Union member States. These are Parties in their own right, their obligations flow directly from that status. The Committee recalls, in that regard, that it remains each Party's responsibility to ensure compliance with all of the Protocol's provisions. For example, the reporting deadlines of the E-PRTR in no way affect the clear and unequivocal deadlines established under article 8 of the Protocol. Article 26 provides an opportunity to share competencies, but that does not mean, for example, that the expressly stipulated reporting cycle deadlines can be changed.

242. Furthermore, some of the issues, such as the possible impact of lack of availability of PRTRs in the national language(s) on user-friendliness and accessibility of information, or Parties striving to achieve convergence among different national PRTRs, are relevant across several provisions.

243. In that context, the national implementation reports showed that, in general, issues related to, for example, data collection and record keeping, seem to pose no special challenges due to the (co-)existence of a national and a regional part of a PRTR system, whereas the implementation of other provisions, such as those linked to the dissemination of data, may require careful consideration by the Parties concerned, taking into account the co-existence and complementarity of the E-PRTR and their national PRTR systems. Provisions that require careful consideration may include the following:

- (a) Whistle-blower protection (art. 3 (3));
- (b) Duplicative reporting and harmonization (art. 3 (5) and (6), while not affecting the right of a Party to maintain or introduce a more extensive or more publicly accessible pollutant release and transfer register (art. 3 (2));
- (c) Timely data (arts. 4 (g) and 8);
- (d) User-friendly, publicly accessible and designed for maximum ease of public access (arts. 4 (h) and 5 (4) and (5));
- (e) Diffuse sources (art. 7 (4), (7) and (8));
- (f) Public access to information (art. 11);
- (g) Public participation in its development and modification (arts. 4 (i) and 13 (1)).

244. The following major conclusions regarding the establishment of national PRTRs shall be acknowledged in this regard:

- (a) All Parties, including the European Union member States, are obliged under the Protocol to set up their national PRTRs; the requirement for a national register can be met or partially met through a regional register if all requirements of the Protocol are met;
- (b) The European Union framework can support Parties in fulfilling their obligations under the Protocol; Parties must ensure that, taken as a whole, for any national PRTR that they have established, which may include elements of the E-PRTR, all requirements of the Protocol are met;

(c) The following systemic issues shall be considered when establishing national PRTRs, for example:

- (i) Public access to online registers with the search function in national languages,¹⁹¹ also considering technological advancements that facilitate translation, searchability and other means that improve the user-friendliness of the register;
- (ii) Availability of data in a timely manner, within 15 months from the end of each reporting year;
- (iii) Opportunities for effective public participation in development or modification of the register;
- (iv) Whistle-blower protection;
- (v) Provision of links in the register to the relevant existing, publicly accessible national databases on subject matters related to environmental protection;
- (vi) Duplicative reporting and harmonization, while not affecting the right of a Party to maintain or introduce a more extensive or more publicly accessible PRTR.

¹⁹¹ See also recommendations from the guidance on the implementation of the Protocol (2008) (ECE/MP.PP/7, https://unece.org/DAM/env/pp/prtr/guidance/PRTR_May_2008_for_CD.pdf).

Annex

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

Table 1

Internet addresses of national pollutant release and transfers

<i>Party</i>	<i>Internet addresses as specified in the report</i>
Albania	http://prtr.akm.gov.al/main/welcome.jsf
Austria	www.prtr.at (German only)
Belgium	www.bruxellesenvironnement.be/eprtr (French only) www.leefmilieubrussel.be/e-prtr (Dutch only) 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/ (Croatian only) http://roo.azo.hr/login.aspx http://pproo.azo.hr/ Environmental performance review is also available on ENVI portal (http://envi-portal.azo.hr/) and Atlas of the Environment web page (http://envi.azo.hr/?topic=9) (both Croatian only)
Czechia	http://irz.cz/ (or www.prtr.cz) (both Czech only) Search in the national PRTR - http://portal.cenia.cz/irz/ (Czech only)
Denmark	www.miljoeoplysninger.dk (Danish only)
Estonia	https://kotkas.envir.ee (Estonian only)
European Union	http://prtr.ec.europa.eu
France	www.georisques.gouv.fr/risques/registre-des-emissions-polluantes (French only)
Germany	www.thru.de
Hungary	http://web.okir.hu/hu/eprtr http://prtr.ec.europa.eu/ http://web.okir.hu/hu/tart/index/50/Adatok_lekerdezese
Ireland	https://gis.epa.ie/EPAMaps/PRTR
Israel	www.gov.il/he/departments/topics/prtr

<i>Party</i>	<i>Internet addresses as specified in the report</i>
Kazakhstan	http://prtr.ecogofond.kz/otchety-rvpz/ (scanned paper documents) (Russian only)
Latvia	https://prtr.lv/gmc.lv/ (Latvian only)
Luxembourg	http://prtr.aev.etat.lu
Netherlands	www.prtr.nl
Norway	www.norskeutslipp.no
North Macedonia	http://ripz.moep.gov.mk/
Poland	www.gios.gov.pl/prtr/portal (Polish only) http://mapy.gios.gov.pl/prtr/
Portugal	Data not accessible at present. National PRTR Portal currently under construction
Rep. of Moldova	www.retp.gov.md/ (Moldovan only)
Romania	http://prtr.anpm.ro/
Serbia	http://prtr.sepa.gov.rs/
Spain	www.prtr-es.es
Sweden	www.naturvardsverket.se http://utslappisiffror.naturvardsverket.se/en/ www.swedishepa.se/State-of-the-environment/Open-data/The-Swedish-PRTR
Switzerland	www.prtr.admin.ch , http://map.bafu.admin.ch
United Kingdom	http://prtr.defra.gov.uk/

Table 2
Links to other databases and pollutant release and transfer registers

<i>Party</i>	<i>Databases and PRTRs</i>
Austria	www.umweltbundesamt.at/umweltthemen/industrie/daten-industrie/prtr
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, links to websites and national PRTR of United Nations member States that have signed the Protocol
Czechia	<p>The Register of Air Pollution Emissions Sources (REZZO) – Czech Hydrometeorological Institute – http://portal.chmi.cz/files/portal/docs/uoco/oez/embil/14embil/index_CZ.html (in Czech only)</p> <p>Maps of air pollution – Czech Hydrometeorological Institute – http://pr-asu.chmi.cz:8080/IskoPollutionMapView/faces/viewMapImages.xhtml (in Czech and English)</p> <p>The sources of pollution – Czech Hydrometeorological Institute – http://portal.chmi.cz/files/portal/docs/uoco/web_generator/plants/index_CZ.html (in Czech only)</p> <p>Waste management information system –the Czech Environmental Information Agency (CENIA) – http://isoh.cenia.cz/groupisoh/ (in Czech only)</p> <p>Integrated System of Waste Management (ISOH) - http://isoh.cenia.cz/groupisoh/ (in Reporting Obligations in the field, in Czech only)</p> <p>Information System of Fulfilling Duties of Reporting in the Field of the Environment (ISPOP) – CENIA – www.ispop.cz/ (in Czech only)</p> <p>Information system of the IPPC – Ministry of the Environment – www.mzp.cz/ippc (Czech only)</p> <p>Polluters under the magnifying glass – a non-profit organization Arnika www.znecistovatele.cz/ (the source of information is the national PRTR; in Czech only)</p> <p>A national inventory of contaminated sites – CENIA – http://kontaminace.cenia.cz/ (Czech only)</p> <p>Information system WATER – Ministry of Agriculture of the Czech Republic – http://voda.gov.cz/portal/ (in Czech and English)</p> <p>EIA information system – CENIA – http://portal.cenia.cz/eiasea/view/eia100_cr (in Czech only)</p> <p>SEA information system – CENIA – http://portal.cenia.cz/eiasea/view/SEA100_koncepce (in Czech only)</p>
Denmark	E-PRTR

<i>Party</i>	<i>Databases and PRTRs</i>
	<p>www3.mst.dk/Miljoeoplysninger/PrtrPublicering/Links</p> <p>www.mst.dk</p>
Estonia	Under development
France	<p>Ministry for the ecological Transition;</p> <p>Thematic files on other natural and technological risks (underground cavities, clay shrinkage and swelling, earthquake, ground movements, floods, base of classified installations, polluted sites and soils, networks and pipelines).</p>
Germany	<p>Links to:</p> <p>(1) PRTRs of other countries and of the European Union</p> <p>(2) Thematically related websites of the federal and <i>Länder</i> governments</p> <p>(3) Further links relating to the issue of environmental information and PRTRs - https://www.thru.de/links/</p> <p>On the support of Germany to other countries - https://www.thru.de/3/thrude/about-thrude/international-projects/</p>
Hungary	<p>E-PRTR, PRTR.</p> <p>Links to the Internet-based PRTR registers of a list of countries and to other databases:</p> <p>http://web.okir.hu/hu/cikk/463/EU_tagallamok_PRTR_honlapjai</p> <p>http://web.okir.hu/hu/cikk/464/Nemzeti_PRTR_rendszerek_honlapjai_a_vilagon</p> <p>http://web.okir.hu/hu/cikk/465/Nemzetkozi_szervezetek</p>
Ireland	<p>The Irish PRTR website provides links to existing databases such as those maintained by the Environmental Protection Agency and other public bodies in Ireland and to other international databases (E-PRTR, ECE, OECD, PRTR.net, Special Areas of Conservation, Special Protection Areas) - www.epa.ie/enforcement/prtr/links/</p>
Israel	<p>Links to registries in other countries and to other databases via: prtr.unece.org/prtr-global-map</p>
Latvia	E-PRTR
Luxembourg	<p>E-PRTR</p> <p>http://prtr.aev.etat.lu</p>
Malta	E-PRTR
Netherlands	<p>Links to more information on emissions (including E-PRTR, EEA, ECE), and organizations participating in the Netherlands register</p>
Norway	E-PRTR, ECE, OECD, PRTR.net
North Macedonia	<p>Links of the national existing publicly accessible databases on subject matters related to environmental protection,</p> <p>1. Air quality - http://airquality.moepp.gov.mk/ (Macedonian only)</p>

<i>Party</i>	<i>Databases and PRTRs</i>
	<ol style="list-style-type: none"> 2. Climate change - www.unfccc.org.mk/ 3. Persistent organic compounds - www.pops.org.mk/ 4. Ministry of Environment and Physical Planning - www.moep.gov.mk/ 5. List of IPPC facilities - www.moep.gov.mk/default-MK.asp?ItemID=CF25D70E4A5C7A41B60778682589BFE5 6. Links to the international PRTR's <ol style="list-style-type: none"> (a) Scottish PRTR (b) German PRTR (c) Spanish PRTR (d) Australian PRTR (e) E-PRTR 7. Links to the international organizations <ol style="list-style-type: none"> (a) UNECE Aarhus Convention (b) UNECE Convention on Long-range Transboundary Air Pollution (c) UNECE Protocol on PRTRs (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
Poland	E-PRTR
Portugal	E-PRTR, links to other PRTRs
Romania	E-PRTR
Serbia	Under development
Spain	<ol style="list-style-type: none"> 1. Information on “other sources”: www.prtr-es.es/informacion-publica (Spanish) and www.en.prtr-es.es/informacion-publica (English): <ol style="list-style-type: none"> (a) Emissions from other sources to air: www.prtr-es.es/Emisiones-difusas-atmosfera-1073102012.html (Spanish); www.prtr-es.es/Releases-atmosphere-111112012.html (English) (b) Emissions from other sources to water: www.prtr-es.es/Emisiones-difusas-agua-1074102012.html (Spanish); www.prtr-es.es/Releases-water-1112112012.html (English) 2. International and National links in: <p>www.prtr-es.es/conozca/Enlaces-interes-1027062012.html (Spanish);</p> <p>www.en.prtr-es.es/conozca/Enlaces-interes-1027062012.html (English).</p>
Sweden	Aarhus Convention, environmental reports, E-PRTR, other pollution inventories

<i>Party</i>	<i>Databases and PRTRs</i>
Switzerland	E-PRTR, ECE, OECD, PRTR.net
United Kingdom	National Atmospheric Emissions Inventory (NAEI) with information on diffuse sources and emissions factors, http://naei.defra.gov.uk/ United Kingdom Air Information Resource website, http://uk-air.defra.gov.uk/ E-PRTR
