

Format for the Protocol on Pollutant Release and Transfer Registers Implementation Report in accordance with Decision I/5 (ECE/MP.PRTR/2010/2/Add.1)

CERTIFICATION SHEET

The following report is submitted on behalf of the Republic of Croatia in accordance with decision I/5

Name of officer responsible for submitting the national report:	Branka Pivčević Novak, Ministry of Environmental and Nature Protection, Republic of Croatia
Signature:	
Date:	19 December 2013

IMPLEMENTATION REPORT

Please provide the following details on the origin of this report.

<i>Party/Signatory</i>	REPUBLIC OF CROATIA
<i>NATIONAL FOCAL POINT</i>	
Full name of the institution:	Ministry of Environmental and Nature Protection
Name and title of officer:	Branka Pivčević Novak, Head of Department for Environmental Policy General
Postal address:	Ulica Republike Austrije 14, 10000 Zagreb, Croatia
Telephone:	+385 1 3717 283
Fax:	+385 1 3717 135
E-mail:	branka.pivcevic-novak@mzoip.hr

<i>Designated competent authority responsible for managing the national or regional register (if different):</i>	
Full name of the institution:	Croatian Environment Agency
Name and title of officer:	Dejana Ribar Pope, Head of Department
Postal address:	Trg Maršala Tita 8, 10000 Zagreb, Croatia
Telephone:	+385 1 4886852
Fax:	+385 1 4886850
E-mail:	dejana.ribar-pope@azo.hr

Provide a brief description of the process by which this report has been prepared, including information on which types of public authorities were consulted or contributed to its preparation, how the public was consulted and how the outcome of the public consultation was taken into account and on the material which was used as a basis for preparing the report.

Answer:

The drafting and coordination of this Protocol on Pollutant Release and Transfer Registers Implementation Report was the responsibility of the Croatian Environment Agency (hereinafter referred to as: CEA). To this end, the Agency worked in cooperation with the Ministry of Environmental and Nature Protection (hereinafter referred to as: MENP) and public authorities responsible for the protection of environmental components. The first draft of the Report was published on MENP's website. It was available for public viewing during a period of 30 days (September – October 2013) for the purpose of obtaining public opinion as well as opinions of civil society organisations.

Articles 3, 4 and 5

List legislative, regulatory and other measures that implement the general provisions in articles 3 (general provisions), 4 (core elements of a pollutant release and transfer register system (PRTR)) and 5 (design and structure).

In particular, describe:

(a) With respect to **article 3, paragraph 1**, measures taken to ensure the implementation of the provisions of the Protocol, including enforcement measures;

Answer:

A number of Croatian laws and subordinate regulations provide a legal framework for the implementation of the Protocol:

The Act on Ratification of the Protocol on Pollutant Release and Transfer Registers and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (hereinafter referred to as: Protocol) ([Official Gazette \(OG\) – International Agreements \(IA\) No. 4/2008](#));

The Act on Ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (hereinafter referred to as: Aarhus Convention) ([OG – IA No. 1/2007](#));

Environmental Protection Act (OG No. 80/13) (hereinafter referred to as: EPA);

Ordinance on the Environmental Pollution Register (OG No. 35/08) (hereinafter referred to as: Ordinance).

As a member of the European Union (EU), the Republic of Croatia (hereinafter referred to as: Croatia) is required to implement Regulation (EC) No. 166/2006 of the European Parliament and of the Council concerning the establishment of a European Pollutant Release and Transfer Register amending Council Directives 91/689/EEC and 96/61/EC (E-PRTR Regulation).

The Ordinance prescribes mandatory content and manner of keeping the Environmental Pollution Register (hereinafter referred to as: EPR), parties obliged to submit data to the Register (hereinafter referred to as: facilities), manner, methods and deadlines for collecting and submitting data on pollutant release, transfer and depositing into the environment and on waste, data on polluter, company, installation, organisational unit of the polluter, deadline and manner of informing the public, manner of verifying and ensuring data quality, time period of keeping data and performing professional activities of register keeping.

The amount and diversity of data arise from the fact that the mentioned data are collected from a wide range of industrial and non-industrial activities, which makes the EPR system an important and comprehensive source of information concerning the types and quantities of pollutants, as well as the types and quantities of produced, collected and treated waste.

Furthermore, the EPR system is an important tool for continuous monitoring of the trends and progress in reducing environmental pollution, as well as for monitoring compliance with specific international agreements, identifying priorities and assessing the progress achieved through the implementation of the Croatian environmental protection policy and programs.

The system is indispensable to the public, various state and county bodies, the industry, scientists, non-governmental organisations and other decision-makers as a unique system that ensures insight into the state of the environment and environmental trends, as well as provides background for environmental decision-making.

The EPR system does not only provide for the national needs. Through the establishment and

implementation of the EPR system, Croatia's international obligations concerning pollutant release and transfer control are also fulfilled.

Pursuant to the EPA and the Regulation on the Environmental Information System (OG No. 68/08; hereinafter referred to as: Regulation on the EIS), the CEA coordinates and maintains the Croatian Environmental Information System (hereinafter referred to as: CEIS) which is continuously expanded to include new databases created in cooperation with state administration bodies and institutes. The databases are available to public via CEA's website: www.azo.hr; <http://iszo.azo.hr/>

The following projects were organised by the CEA with the aim of improving the EPR system:

1. Bilateral cooperation with the Kingdom of the Netherlands - Government to Government (G2G). The purpose of this project was to provide support to the CEA in the implementation of EU Regulation 166/06 as well as to transfer the experience and knowledge in the field of PRTRs (April 2007 – April 2008).
2. TAIEX Expert Mission (INFRA IND/EXP: 43167) – the transfer of knowledge of German experts in the field of PRTRs, particularly concerning the use of the open source and GIS software (2010, Zagreb).
3. In the framework of the IPA I 2007 TAF project entitled [Improving Environmental Reporting in Croatia](#), a training conducted by Austrian and German experts was conducted in cooperation with the Austrian Federal Environmental Agency as part of the E-PRTR Twinning Mission activities (2011, Zagreb).

(b) With respect to **article 3, paragraph 2**, measures taken to introduce a more extensive or more publicly accessible PRTR than required by the Protocol;

Answer:

The data on the release and/or transfer of pollutants and produced, collected and treated waste, resulting from a series of activities, are collected in the EPR system from point sources of pollution in accordance with the Ordinance. The Croatian system includes significantly more pollutants with, in most cases, lower prescribed release and/or transfer thresholds. To be more precise, the Croatian system covers 128 pollutants, while the Protocol requires from the Parties to report on 86 pollutants. Furthermore, Annex 1 to the Ordinance includes significantly more industrial and non-industrial activities with lower capacity thresholds compared to Annex I to the Protocol.

The public, the industry, scientists, local authorities, non-governmental organisations, decision-makers and all interested parties have at their disposal a good source of information which can be used for various analyses and as the basis for making decisions concerning environmental issues and people's health protection.

Free indirect access to the above-mentioned data is available to both, the professional and other interested public, through:

1. [Information Access Request](#) in accordance with the Act on the Right of Access to Information (OG No. 25/2013).
2. [Annual CEA EPR Data Reports](#).

Free direct access to the above-mentioned data is available via the Internet using the following browsers:

3. The Browser of the Environmental Pollution Register (hereinafter referred to as: [EPR Browser](#)) activated by the CEA in March 2012.

The EPR Browser contains information about all facilities, thus covering a significantly larger amount of data than required under the Protocol. The EPR Browser is intended for searching the aggregate data by organisational units of all facilities, respecting the provisions of the Data Secrecy Act (OG No. 79/07, 86/12).

4. [Croatian National Portal of the Environmental Pollution Register](#) (hereinafter referred to as: [CNPEPR](#)), created and made publicly available by the CEA in 2012 in accordance with the provisions of the Protocol.

In addition to the mentioned transparency of data on pollutant release and transfer, waste transfers off-site, as well as facilities and their locations, the Portal also includes a GIS 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.

Besides the CEA, competent authorities (hereinafter referred to as: CAs), i.e. administrative bodies in the counties or the City of Zagreb, also participate in activities concerning the public access to the data contained in the EPR system. They cooperate closely with the CEA and perform (in cooperation with the competent inspectorates) the assessment of the completeness, consistency and

credibility of the reported data and subsequent verification of the same in accordance with the Ordinance, thus playing an important role in informing the public within their respective counties.

(c) With respect to **article 3, paragraph 3**, measures taken to require that employees of a facility and members of the public who report a violation by a facility of national laws implementing this Protocol to public authorities are not penalized, persecuted or harassed for their actions in reporting the violation;

Answer:

The assurance that persons exercising their rights shall not be penalized, persecuted or harassed is provided for on the basis of the constitutional principle of legality in Art. 16 of the Constitution of the Republic of Croatia (OG No. 85/10 – cleared text) and the right to appeal described in Art. 18 of the Croatian Constitution.

Protection of persons who, in good faith, report acts of corruption in the Republic of Croatia is prescribed in: Art. 131 of the Criminal Code (OG No. 125/11, 144/12); Labour Law (OG No. 149/09, 61/2011, 82/12); Art. 14 a. of the Civil Servants Act (OG No. 92/05, 142/06, 77/07, 107/07, 27/08, 34/11, 49/11, 150/11, 34/12, 49/12, 37/13, 38/13); Art. 32 of the Act on Civil Servants and Employees in Local and Regional Self-government (OG No. 86/08, 61/11); Art. 25 of the Data Secrecy Act (OG No. 108/96, 79/07); Art. 36 of the Public Internal Financial Control Act (OG No. 141/06); and Art. 57 of the Trade Law (OG No. 87/08, 96/08, 116/08, 76/09, 114/11).

(d) With respect to **article 3, paragraph 5**, whether the PRTR system has been integrated into other reporting mechanisms and, if such integration has been undertaken, into which systems. Did such integration lead to elimination of duplicative reporting? Were any special challenges encountered or overcome in undertaking the integration, and how?

Answer:

We are continuously improving the CEIS in order to simplify data submission to the facilities. During the first phase of establishing the CEIS, we worked on improving the individual databases and database integration, where this was possible.

We are also continuously working on improving the CEIS for the purpose of preventing multiple sending of the same data and reports in response to enquiries from both Croatian and international bodies (European Commission, European Environmental Agency, etc.). The second phase will include the implementation of the AAA (Autorization Autentification Access) system called Rights and Obligations Management and Uniform CEIS Access, thus establishing a central/uniform CEIS access system as well as a central system for managing the rights and obligations of CEIS users.

The system will also be upgraded to include a central location for storing and using various Croatian official registers, starting with the register of legal entities and natural persons, register of craftsmen to the central register of administrative geographic units, thus ensuring the integrity and completeness of all official registers constituting integral parts of the CEIS databases.

As far as internal and external integration of the CEIS is concerned, an independent audit of all existing systems and databases within the MENP, the Croatian Hydrological and Meteorological Service (hereinafter referred to as: CHMS), the State Institute for Nature Protection (hereinafter referred to as: SINP), the Environmental Protection and Energy Efficiency Fund (hereinafter referred to as: EPEEF) and the CEA is currently being performed as one of the components of the first phase of the implementation and establishment of a web portal for environmental information (hereinafter referred to as: ENVI Portal). The purpose of this portal is to adjust the spatial data to meet the EU standards, the INSPIRE Directive and the Act on the National Spatial Data Infrastructure (OG No. 65/2013).

One of the components of the ENVI Portal implementation will also include georeferencing of all data from the EPR system in order to allow spatial presentation and analysis in the online GIS browser.

The data from the EPR system are directly used by the EPEEF for the purpose of calculating and charging fees to facilities responsible for emissions of CO₂, SO₂ and NO₂, whereas automation and better integration of the same will be ensured in the second phase of upgrading the EPR system through system reporting improvement. Due to the comprehensive nature of the data collected in the EPR system, the same are used to create a series of other reports required under international agreements and EU directives as the basic set or a set of data which is, if required, supplemented with data from other sources, thus eliminating duplicative reporting at least to a certain degree.

The new system will allow better integration and use of the reported data. It will also facilitate data submission, collection and quality assessment, as well as reporting.

During the following phases of development and upgrading of the CEIS, a central reporting system will be established. It will include a data warehouse (DWH) where all data from transaction systems (CEIS application) will be uploaded periodically, including the data from the EPR system.

The data will be uploaded into the data warehouse in such a manner as to allow pre-prepared views as well as drilldown analyses and comparisons with data from other sources/databases, thus

ensuring a link between the CEIS databases and an integrated report defined in accordance with the environmental protection regulations.

We are encountering special challenges in finding a solution to simplify reporting to the facilities considering the number and complexity of applicable regulations. Finding links to integrate the databases in accordance with the environmental protection regulations also presents a challenge, as it requires retrieval of various data and the databases are often not adjusted on IT level.

In conclusion, through the mentioned CEIS upgrades and improvements, it is, to a certain extent, possible to facilitate the process of submitting data for the CEIS users and the reporting process for the relevant institutions, but a more significant reduction in reporting requirements can only be achieved through a reduction and integration of legislation.

(e) With respect to **article 5, paragraph 1**, how releases and transfers can be searched and identified according to the parameters listed in subparagraphs (a) to (f);

Answer:

The [CNPEPR](#) allows browsing by the following criteria: year, county, city/community, operator, facility, sectors, industrial activity and sub-activity, geographic overview, release and/or transfer of pollutants, pollutant groups (chlorinated organic substances, greenhouse gases, heavy metals, inorganic substances, other gases, other organic substances and pesticides), environment components (air, water and/or sea, soil) and waste transfers. It also allows a georeferential cartographic overview of data with the exact location of the facility within the borders of Croatia.

(f) With respect to **article 5, paragraph 4**, provide the Universal Resource Locator (url) or Internet address where the register can be continuously and immediately accessed, or other electronic means with equivalent effect;

Answer:

The EPR system was made publicly available via CEA's website <http://roo.azo.hr/login.aspx>. The data submission and verification cycles are performed using the online EPR application.

The availability and direct access to information from the register via URL address <http://roo.azo.hr/login.aspx> have been ensured through CEA's infrastructure, the register being stored on the publication server with permanent Internet connection.

<p>(g) With respect to article 5, paragraphs 5 and 6, provide information on links from the Party's register to relevant existing, publicly accessible databases on subject matters related to environmental protection, if any, and a link to PRTRs of other Parties.</p>
<p><u>Answer:</u> The EPR system, created within the CEIS, contains a serious of mutually linked databases, sources of environmental information, such as information regarding the state and loads of particular environment components, geographic features and other data and information important for monitoring the state of the environment on a national level. Through the CEIS, the databases are linked on the national level.</p> <p>The EPR system includes the mechanisms and filters for searching the facilities subject to other international requirements in addition to those prescribed under the Protocol and the E-PRTR Regulation. Using those mechanisms and filters, the users can find out whether a particular facility is, for example, subject to the Seveso requirements (defined in accordance with the Regulation on Prevention of Major Accident Hazards Involving Dangerous Substances, OG No. 114/08 and the Ordinance on the Register of Facilities in which the Presence of Dangerous Substances has been Ascertained and the Major Accident Hazard Register, OG No. 113/08) or the IPPC requirements, i.e. a facility holding an environmental permit (in accordance with the Regulation on the Procedure for Determining Integrated Environmental Protection Requirements, OG No. 114/08 and the Ordinance on the Register of Use Permits Establishing Integrated Environmental Protection Requirements and Decisions on Integrated Environmental Protection Requirements for Existing Installations, OG No. 113/08). One of the filters used in the EPR system is also the ETS filter which allows browsing and a more detailed overview of the entities participating in the greenhouse gas emissions trading system.</p> <p>The CEA prepares reports in accordance with the requirements of the European Environment Information and Observation Network (hereinafter referred to as: EIONET) via online services such as ReportNet, an information infrastructure ensuring support and improvement of data and information flows based on a series of mutually linked tools and processes created on the basis of active Internet use.</p> <p>ReportNet also includes a central data repository (CDR). CDRs are Internet services for the submission of data and reports designed in accordance with relevant reporting obligations or agreements, such as for example Directive 2006/7/EC on Bathing Water Quality Management, CLRTP, Nationally Designated Areas (CDDA-1), Corine Land Cover, River Quality - EWN-1, Lake Quality - EWN-2 Quality of Underground Waters - EWN-3, EPR System Report for the E-PRTR and other reports prepared for different thematic areas.</p> <p>ReportNet also includes a reporting obligations database (ROD) which prescribes reporting obligations by the Parties vis-à-vis international organisations and institutions. The CEA delivers the required data to the EIONET via the CDR Internet Service in accordance with the data submission deadlines prescribed under particular directives and conventions.</p> <p>Furthermore, the CNPEPR is a member of the global PRTR Network. CEA's website provides links to useful websites and national PRTR registers of UN member states that have signed the Protocol.</p>

Article 7

<p>List legislative, regulatory and other measures that implement article 7 (reporting requirements).</p>
<p>Describe or identify as appropriate:</p>
<p>(a) With respect to paragraph 1, whether the reporting requirements of paragraph 1 (a) are required by the national system, or whether those of paragraph 1 (b) are required by the national system;</p>
<p><u>Answer:</u> Delivery of data into the EPR system is defined in Chapter III: Delivery of Data, Articles 7–20 of the Ordinance. Chapter III prescribes the conditions for submitting data, the manner in which the data are collected and delivered. It also prescribes the data reporting forms and includes descriptions of forms classified as either general forms or forms for specific thematic areas, which are provided in the Annexes to the Ordinance.</p>
<p>(b) With respect to paragraphs 1, 2 and 5, whether it is the owner of each individual facility that is required to fulfil the reporting requirements or whether it is the operator;</p>
<p><u>Answer:</u> Art. 2 of the Ordinance defines the party obliged to submit data as “the company’s operator and</p>

responsible person of the organisational unit within the company that performs the activity referred to in Annex 1 of the Ordinance and/or any other waste-generating or waste management activity”.
(c) With respect to paragraph 1 and annex I , 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;
<p><u>Answer:</u></p> <p>The national EPR data collection system includes significantly more activities than listed under the Protocol, as provided in Annex 1: List of Activities to the Ordinance. However, it also allows selection of activities from Annex I: Activities to the Protocol. We can therefore say that the data collection process has been adjusted to the requirements prescribed under the Protocol at the level of regulations and implementation of the same.</p> <p>If we compare the lists of activities provided in Annex 1 to the Ordinance and Annex I to the Protocol, it is evident that the former contains several hundred activities and is more extensive, provides more details and prescribes lower capacity thresholds, while it does not include the number of employees as a threshold variable. It therefore provides more complete information about the facilities and the activities causing emissions in the environment, as well as a greater amount of collected data. Croatia records a large share of lower production capacity. Consequently, collecting greater amounts of data is of national interest. This also allows a better overview of data concerning the environmental load in Croatia and preparation of a large number of reports based on the data from the EPR system, as well as reports on the state of the Croatian environment. When submitting data, the facilities select activities according to both criteria.</p>
(d) With respect to paragraph 1 and annex II , 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;
<p><u>Answer:</u></p> <p>Pursuant to the general provisions of Art. 3, Paragraph 2 of the Protocol, the Parties may establish more comprehensive national registers than prescribed under the Protocol. Pursuant to the national legislation, the EPR system includes a larger number of pollutants and for most of them lists significantly lower, i.e. stricter, release and/or transfer thresholds compared to those prescribed under the Protocol.</p> <p>Pursuant to Annex 2 to the Ordinance: List of Pollutants, the EPR contains information concerning the release and/or transfer for 128 pollutants, while the Protocol, pursuant to Annex II, requires from the Parties to provide information concerning the release and/or transfer for 86 pollutants. Croatia thus provides more detailed and complete information concerning the environmental load, while also fulfilling the requirements prescribed under the Protocol.</p> <p>The data on the release and/or transfer of pollutants in waste water are submitted to the EPR system under the same conditions, i.e. the thresholds are the same for both release and transfer. The release and/or transfer thresholds prescribed for 25 waste water pollutants for which reporting in the EPR system is required are lower than the thresholds prescribed under the Protocol.</p> <p>Croatia also prescribes significantly lower release thresholds for 39 air pollutants, which makes the data reporting requirements prescribed under the Ordinance stricter compared to the Protocol. Croatia prescribes a lower release threshold, compared to the threshold prescribed under the Protocol, for one soil pollutant for which reporting to the EPR system is required as well.</p> <p>Table 1 of this Report is a comparative table of pollutant release thresholds prescribed differently under the national system and the Protocol (Ordinance, Annex 2: List of Pollutants and Protocol, Annex II: Pollutants).</p>
(e) With respect to paragraph 3 and annex II , whether for any particular pollutant or pollutants listed in annex II of the Protocol, the Party applies a type of threshold other than the one referred to in the responses to paragraph (a) above and, if so, why;
<p><u>Answer:</u></p> <p>During the procedure of adopting the Ordinance, it was decided that stricter release thresholds than those prescribed under the Protocol should be prescribed for certain pollutants due to the national strategic goals related to the environment 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 1 soil pollutant, thus increasing the amount of available data on pollutant release and/or transfer.</p>
(f) With respect to paragraph 4 , the competent authority designated to collect the information on releases of pollutants from diffuse sources specified in paragraphs 7 and 8;

Answer:

The authorities responsible for the collection of data on the release of pollutants from diffuse sources mentioned in Paragraphs 7 and 8 have not been defined for all emissions, as explained in more detail under Answer (h).

(g) With respect to **paragraphs 5 and 6**, 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 whether the national system is based on pollutant-specific (paragraph 5 (d) (i)) or waste-specific (paragraph 5 (d) (ii)) reporting of transfers;

Answer:

With respect to Paragraph 5(e) „*the amount of each pollutant in wastewater required to be reported pursuant to Paragraph 2 transferred off-site in the reporting year*”, the relevant data are collected in the EPR system indirectly, i.e. through a selected receiving area into which wastewater is released reported by the facilities, indicating the direct release or transfer of pollutants. The EPR does not provide separate data for release and transfer, as such.

The data on waste are reported at the level of particular sites, including the waste codes prescribed under the Regulation on Categories, Types and Classification with Waste Catalogue and Hazardous Waste List (OG No. 50/05, 39/09), while the prescribed thresholds, the basis for determining the reporting requirements, are significantly lower than those prescribed under the Protocol. Thus, the EPR system provides better and more detailed information than the Protocol. To be more precise, pursuant to the Protocol, facilities are organisational units responsible for off-site transfer of hazardous waste in the amount exceeding 2 tons per year or other types of waste in the amount exceeding 2,000 tons, while the Ordinance prescribes a 50 kg threshold for hazardous waste and a 2 ton threshold for non-hazardous waste.

The EPR system does not require reporting of data concerning waste recovery (R) and disposal (D) operations for trans-boundary movement of waste, which is, on the other hand, required under the Protocol. This discrepancy has been identified and a proposal for an adequate amendment to the Ordinance has been submitted.

(h) With respect to **paragraphs 4 and 7**, where diffuse sources have been included in the register, which diffuse sources have been included and how these can be searched and identified by users, in an adequate spatial disaggregation; or where they have not been included, provide information on measures to initiate reporting on diffuse sources;

Answer:

The Ordinance does not prescribe reporting requirements for diffuse emissions, so that the EPR system does not contain that type of data. It has, however, been proposed that the Ordinance be amended to allow the establishment of a system for monitoring emissions from diffuse sources in accordance with the national possibilities and priorities.

Within the framework of the Transition Facility program, the CEA has submitted a project entitled Improvement of the Croatian Environmental Pollution Register (EPR) and its integration into the Croatian Environmental Information System (CEIS). The mentioned project envisages a number of activities the purpose of which is the planning and adoption of guidelines for establishing a national system for monitoring emissions from diffuse sources and integration with other CEA databases containing information concerning such emissions. The project is currently in the process of being approved by the European Commission, and the CEA is currently in the process of integrating with other Croatian institutions that possess information concerning diffuse water emissions, more precisely the information concerning the release of pollutants from diffuse sources in water according to spatial disaggregation and information concerning the methodology used to obtain such data.

Some of the diffuse air emissions are, however, included in two national reports prepared by the CEA:

1. A National Greenhouse Gas Inventory Report is prepared pursuant to the provisions of the Regulation on Greenhouse Gas Monitoring, Policy and Reduction Measures in the Republic of Croatia (OG No. 87/12). It contains information concerning six greenhouse gases (CO₂, CH₄, N₂O, HFCs, PFCs and SF₆) and indirect greenhouse gases (CO, NO_x, NMVOC and SO₂) from six various sectors (energy, industrial processes, solvents and other products, agriculture, land use, changes in land use and forestry, waste management).
2. The Agency also prepares a pollutant emission forecast and the Inventory of Air Pollutant Emissions in the Republic of Croatia pursuant to the Regulation on Emission Quotas for Certain Pollutants in the Republic of Croatia (OG No. 108/13) with the aim of fulfilling the requirements prescribed under the LRTAP Convention.

Furthermore, on the basis of the report prepared by the Croatian Bureau of Statistics concerning transportation sector fuel consumption, it is possible to calculate the emissions caused by transport as

one of the sectors causing diffuse emissions in the environment. More information is available at the following link:

http://www.dzs.hr/Hrv_Eng/publication/2011/SI-1438.pdf

Additional information concerning energy consumption (coal and coke, wood and biomass, liquid fuels, gas fuels, water power, electric power, renewable sources) by sectors (industry, transport, agriculture, households) is available in the publication entitled Energy in Croatia in 2011, Annual Energy Overview of the Ministry of Economy of the Republic of Croatia. More information is available at the following link:

http://www.eihp.hr/hrvatski/projekti/EUH_od_45/EUH11web.pdf

Links to reports published on CEA's website:

<http://www.azo.hr/Default.aspx?sec=652>

<http://www.azo.hr/Izvjesca26>

<http://www.azo.hr/EmisijaOneciscujucihTvari>

(i) With respect to **paragraph 8**, the types of methodology used to derive the information on diffuse sources.

Answer:

Pollutant emissions included in the Inventory of Air Pollutant Emissions in the Republic of Croatia are calculated using the standard methods and procedures prescribed under the EMEP/EEA Air Pollutant Emission Inventory Guidebook: Technical Guidance to Prepare National Emission Inventories (2009) and the EMEP/CORINAIR Good Practice Guidance, Good Practice for CLRTAP Emission Inventories.

The methodology used to calculate the emissions for the purpose of preparing the National Greenhouse Gas Inventory Report are based on the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC Guidelines) and the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (IPCC Good Practice Guidance) prepared by the Intergovernmental Panel on Climate Change (IPCC).

The methodology used to calculate transport fuel consumption by different energy sources and consumption sectors is defined under the Energy Balance Methodology prescribed under the Energy Balance Regulations (OG No. 33/03).

More information concerning the mentioned inventories and relevant legislation is provided under Answer (h), Art. 7.

Article 8

For each reporting cycle since the last national implementation report (or date of entry into force of the Protocol), please indicate:

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

Answer:

Reports on the data from the EPR are prepared in accordance with the Ordinance on the basis of the data collected using the relevant EPR system application. The EPR system collects data relating to the previous calendar year. The EPR Data Reports, based on the data relating to the previous calendar year, are published each year by December 15.

So far, the CEA has published five EPR Data Reports, as follows:

[Environmental Pollution Register Data Report for 2011](#)

[Environmental Pollution Register Data Report for 2010](#)

[Environmental Pollution Register Data Report for 2009](#)

[Environmental Pollution Register Data Report for 2008](#)

[Reports for 2007* \(air, wastewater, municipal and industrial waste\)](#)

*the mentioned reports were prepared using the data on particular environmental components and waste. The Ordinance came into force in 2008 and the mentioned year was transitional in terms of the manner of submitting, collecting, processing and reporting data, which was prescribed and organised solely for that relevant year. In accordance with the Ordinance (Art. 25), the data for 2007 were collected pursuant to the Ordinance on the Cadastre of Emissions into the Environment (OG No. 36/39) on forms prescribed by the Ordinance.

(b) The deadline(s) by which the owners or operators of facilities were required to report to

the competent authority;

Answer:

The facilities are required to submit data relating to the previous calendar year to the relevant CA each year by March 1. The relevant CA verifies, in cooperation with the competent inspectorate, the data and sends them electronically to the CEA by June 15.

(c) The date by which the information was required to be publicly accessible on the register, having regard to the requirements of **article 8** (reporting cycle);

Answer:

The manner and deadline for informing the public are prescribed under Articles 22 and 23 of the Ordinance. The CEA provides public access to the data on pollutants contained in the EPR via its website. Each year by December 15, the CEA also prepares a national report on the data from the EPR relating to the previous calendar year and publishes it on its website.

Furthermore, with the enactment of the Act on Ratification of the Protocol on 8 October 2009, Croatia became bound by the Protocol. Pursuant to the Protocol, Croatia is required to prepare data reports and publish the same via the [CNPEPR](#). The first such report was prepared within the prescribed deadline.

The first reporting year covered by the CNPEPR is 2011. The related data report was published in December 2012.

(d) Whether the various deadlines for reporting by facilities and for having the information publicly accessible on the register were met in practice; and if they were delayed, the reasons for this;

Answer:

In practice, the facilities do not always respect the deadlines prescribed in Art. 20 of the Ordinance, which results in late submissions. Chapter IV: Data Quality Assurance and Control, Art. 21, Paragraph (1) prescribes the responsibility of the relevant CA, in cooperation with the competent inspectorate, to assess the completeness, consistency and credibility of the reported data. Thus, late submissions also cause delays in the activities performed by the CAs. The Environmental Protection Inspectorate performs inspection controls in order to check whether the facility is acting in compliance with the same.

Consequently, the deadlines prescribed under national regulations are also not met. However, this does not affect compliance with the Protocol requirements.

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

Answer:

As explained in Answers to Questions 3, 4 and 5 of this Report, the EPR system has been created in such a way as to allow electronic (online) data submission, thus simplifying the data delivery process for the facilities, operators and organisational units. The CAs perform electronic (online) verification of data directly in the system via their respective user accounts.

It is an important fact that all competent inspectorates, which perform data-related assessments directly in the system, before and during inspection controls in accordance with their inspection plans, are also assigned user accounts. In that way, performance of obligations by all stakeholders is made quicker and more transparent, and all process participants (including other institutions and competent inspectorates) use at all times up-to-date data from the EPR in accordance with the assigned authorizations.

The Ordinance prescribes that data may be submitted in electronic format or on printed forms (Art. 19 (1)). If the facility submits data on printed forms, the data are entered in the EPR system by the relevant CA (Art. 19 (2)).

On the basis of the information received from the CAs, it can be concluded that the manner in which data are delivered, as defined in Art. 19, Par. (2), differs from one county to the other. Other factors such as the population of the county, its demographic structure and the number and type of facilities within the relevant county also influence the manner in which data are submitted. Developed companies with a large number of organisational units provide a number of possibilities for electronic data submission. Small operators, on the other hand, and craftsmen in particular, do not provide many possibilities for electronic data submission and more often submit the required data in paper, i.e. printed form.

For example, in accordance with the 2013 survey, the share of electronic reporting in most counties amounted to more than 95% in May, with certain exceptions where the percentage was around 65%. To be more precise, according to the information delivered by the CAs, less than 5% (0-

5%) of facilities submitted the required data in printed form, with the exception of four CAs in the case of which the percentage ranged up to 35% (5.83%; 9.75%; 16.98%; 35%).

Furthermore, as far as software applications are concerned, three EPR system upgrade phases have been performed since 2008. Each upgrade phase included adding of new software solutions with the aim of facilitating data submission for facilities and use of data for all EPR system participants in accordance with the scope of their activity. The fourth upgrade phase and optimisation of the EPR system is planned as well.

Article 9

Describe the 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, in accordance with article 9 (data collection and record-keeping).

Answer:

Pursuant to Art. 12 of the Ordinance, the facilities collect the data as frequently as specified under special regulations in order to determine the release and off-site transfer of pollutants and waste. The facilities must use the best available information in the process of collecting data, which may include, for example, pollutant release and off-site transfer monitoring, emission factors, substance balances, estimates and other methods in line with internationally acknowledged methods, if such are available. The facilities must keep the data used to determine the pollutant release and off-site transfer levels for no less than five years, as well as provide a description of the methods applied during data collection.

Article 10

Describe the rules, procedures and mechanisms ensuring the quality of the data contained in the national PRTR and what these revealed about the quality of data reported, having regard to the requirements of article 10 (quality assessment).

Answer:

The provisions of Art. 21 of the Ordinance refer to data assurance and control:

- (1) The competent authority in cooperation with the competent inspection shall ensure verification of completeness, consistence and authenticity of the submitted data.
- (2) The Croatian Environment Agency shall coordinate activities on data quality assurance and control.
- (3) The Croatian Environment Agency shall prepare the Manual for Keeping the Environmental Pollution Register containing instructions for work with the Environmental Pollution Register and procedures for data quality assurance.
- (4) The Manual for Keeping the Environmental Pollution Register is available on the Croatian Environment Agency's web page.

A continuous improvement in terms of the quality of the submitted data has been recorded since the establishment of the EPR system in 2008, as a result of joint efforts of the CAs, the Inspectorate and the CEA and cooperation with the facilities.

The CEA regularly informs about such improvements in its [annual reports](#) published in accordance with Art. 23 of the Ordinance.

Article 11

Describe the way(s) in which public access to the information contained in the register is facilitated, having regard to the requirements of article 11 (public access to information).

Answer:

The information contained in the EPR is available to the public free of charge via CEA's website, www.azo.hr. The website regularly provides up-to-date information concerning the EPR system, legislation, frequently asked questions (FAQ), useful information, links, up-to-date CA address book, and similar. Pursuant to the Ordinance, each year by December 15 the CEA also prepares the EPR Data Report based on the data relating to the previous calendar year and publishes it on its website.

The last report (2011 data) was prepared in 2012 and is available at: <http://www.azo.hr/IzvjescaROO01>

In June 2012, the Environmental Pollution Register Browser was activated and made available

at: <http://roo-preglednik.azo.hr/>

An increasing interest of the public in the above-mentioned topic has been recorded on the basis of the visiting frequency monitoring of the EPR system.

In the period from March 1, 2010 until September 18, 2013, the total number of visits was 227,087, i.e. on average 56,771 visits per year, while the number of individual visits was 42,743, i.e. on average 10,686 per year. In the same period 2,257,496 pages were browsed (on average 564,374 per year), while the average visit duration was 15:46 minutes. 10 pages per visit were browsed on average. The number of new visits (first time visitors) in relation to the total number of visitors was on average 16.77% per year.

As far as the visiting frequency concerning the new CNPEPR (12 December 2012 – 18 September 2013) is concerned, the following statistics were collected:

The total number of visits was 1,630, while the number of individual visits was 1,205. A total of 7,852 pages were browsed, i.e. almost 5 pages per visit. The duration of the visit was on average 03:45 minutes per page. There were 73.87% new visitors.

The EPR help desk has been operating since 2008. It allows answering to the enquiries submitted by the public, the competent authorities, the industry, other institutions, and similar, on the basis of Information Request Forms submitted via e-mail, or via the phone. The EPR help desk experts are experienced in matters relating to the EPR. During the first half of 2013, five EPR help desk employees answered around 1,000 phone calls and about 950 enquiries via e-mail and Information Request Forms.

The EPR help desk provides professional and technical assistance to the EPR system users, primarily the CAs and the facilities, but also employees of the cooperating ministries and institutions who have been assigned user accounts for browsing the EPR data at their own request. Since the establishment, the EPR help desk employees have been providing answers via e-mail or phone to on average 3,000 enquiries per year. They are also available for additional questions and information concerning the EPR to all professional and interested public.

Apart from that, the CEA has appointed an Information Officer who accepts enquiries from citizens on the basis of Information Request Forms sent via e-mail (info@azo.hr) or regular mail to CEA's registered address.

The CEA Information Centre, located in the heart of Zagreb, was established in 2010. It provides environmental protection information to the citizens. A promotional video about the Information Centre can be viewed at:

<http://www.azo.hr/InfoCentarAZO01>

An Information Catalogue (<http://www.azo.hr/KatalogInformacija>) has also been implemented. It provides an overview of all information in possession of the CEA, including a more detailed overview of data, content description, purpose, manner of ensuring the right of access to information and the period in which this right can be claimed, availability and delivery rates (in case of actual material costs). The CEA sends the data concerning the number and type of received Information Request Forms and other enquiries submitted by the interested public to the National Agency for Personal Data Protection for the purpose of creating a national report.

The above-mentioned manners in which public access to the EPR data has been ensured are based on the Act on the Right of Access to Information (OG No. 25/2013) which regulates the right to access the information possessed, managed or controlled by all public authorities and prescribes the principles on the right of access to information, exemptions to the mentioned right, and the procedures for claiming and protecting the mentioned right. The EPA, which contains provisions concerning the right of access to environmental information, environmental information reporting obligations, deadlines for providing information and request refusal, which provisions comply with the provisions of the Aarhus Convention, is also important in this respect.

Article 12

Where any information on the register is kept confidential, give an indication of the types of information that may be withheld and the frequency with which it is withheld, having regard to the requirements of article 12 (confidentiality). Please provide comments on practical experience and challenges encountered with respect to dealing with confidentiality claims, in particular with respect to the requirements set out in paragraph 2.

Answer:

The availability of environmental information is regulated on the basis of the EPA. Article 158,

Paragraph (4) of the EPA reads: „A public authority that holds environmental information may not refuse a request for information mentioned in Paragraph 3, Sub-paragraphs 1, 4, 5, 6 and 7 of this Article, if such request concerns the release or other emissions in the environment.“

The confidentiality of data is also defined under the Data Secrecy Act (OG No. 79/07; NN 86/12) and the related subordinate regulations.

The Ordinance includes data confidentiality provisions in Article 10, while the deadline and manner of informing the public are prescribed in the provisions of Articles 22 and 23.

The facilities indicate confidential EPR data in Item 7 of Form PI-2 which allows selection of data entered in the forms that the relevant entity considers confidential. In Item 7.2., the confidentiality of the selected data must be corroborated on the basis of appropriate documentation. In accordance with the applicable regulations and after inspecting the provided documents, the relevant CA approves the Data Confidentiality Request. So far, less than 1% of the facilities have submitted a Data Confidentiality Request, mainly state-owned companies and institutions and a small number of private firms. Data Confidentiality Requests submitted by state-owned companies and institutions mainly refer to the data concerning company organization, number of employees and geographical location, while private firms request confidentiality concerning production capacities and used technologies.

The EPR system defines various user levels for browsing the data pursuant to Article 10 of the Ordinance, so that the data marked as confidential are available only to CA employees responsible for EPR-related activities, the Environmental Protection Inspectorate and CEA employees responsible for EPR-related activities.

Article 13

Describe the opportunities for public participation in the development of the national PRTR system, in accordance with article 13 (public participation in the development of national pollutant release and transfer registers), and any relevant experience with public participation in the development of the system.

Answer:

The general legal framework for public participation is defined under the Code of Practice on Consultation with the Interested Public in Procedures of Adopting New Laws, other Regulations and Acts (OG No. 140/2009) which includes the Code Implementation Guidelines. Furthermore, the EPA includes provisions concerning the participation of the general as well as interested public in making decisions concerning the operations and activities related to environmental protection which are in accordance with the Aarhus Convention.

Pursuant to the above-mentioned regulations, a draft version of the Ordinance (OG No. 35/08) was made publicly available on the website of the ministry responsible for environmental protection. For an entire month, the public had an opportunity to post comments and complaints, as well as participate in a public discussion.

Article 14

Describe the review procedure established by law to which all individuals have access if they consider that their request for information has been ignored, wrongfully refused or otherwise not dealt with in accordance with the provisions of article 14 (access to justice), and any use made of it.

Answer:

Pursuant to Articles 25 and 26 of the Act on the Right of Access to Information (NN 25/13):

Article 25

(1) An appeal against the public authority decision may be filed with the Commissioner within 15 days from the date of delivery of the relevant decision.

(2) An appeal may also be filed if the public authority fails to reach a decision concerning the party's request within the prescribed deadline.

(3) The Commissioner shall reach a decision concerning the appeal and deliver it to the party, through a first-instance authority, no later than within the deadline of 30 days following the proper submission of the appeal.

(4) Public authorities shall allow the Commissioner to inspect the information constituting the subject-matter of the appeal in the procedure for handling appeals against a decision on withholding information defined in Article 15, Paragraphs 2 and 3 of this Act. With respect to information from Article 15, Paragraph 2, Item 1 of this Act, the Commissioner shall request an opinion of the Office of the National Security Council in accordance with the relevant data confidentiality legislation.

(5) Where the Commissioner is required, according to the procedure for handling appeals, to assess the accuracy of the proportionality and public interest tests or perform the same, he/she shall reach a decision concerning the appeal and deliver it to the party, through a first-instance authority, no

later than within the period of 60 days following the proper submission of the appeal.

(6) If the Commissioner requests an opinion of the Office of the National Security Council regarding information from Article 15, Paragraph 2, Item 1 of this Act, he/she shall reach a decision concerning the appeal and deliver it, through a first-instance authority, no later than within 90 days following the proper submission of the appeal.

(7) Should he/she establish the appeal founded, the Commissioner shall allow the user to access the relevant information.

Article 26 – Administrative Dispute

(1) No appeals may be filed against the decision of the Commissioner. However, it is possible to initiate an administrative dispute before the High Administrative Court of the Republic of Croatia. The High Administrative Court of the Republic of Croatia shall reach a decision concerning the complaint within the deadline of 90 days. If access to information was allowed under the challenged decision, such a complaint shall postpone the enforcement of the decision.

(2) An administrative dispute against the decision mentioned in Paragraph 1 of this Article may be initiated by the public authority that reached the relevant first-instance decision as well.

(3) In the complaint handling procedure, public authorities shall allow insight into information from Article 15, Paragraphs 2 and 3 of this Act, constituting the subject matter of the dispute, to the High Administrative Court of the Republic of Croatia.

Article 15

Describe how the Party has promoted public awareness of its PRTR and provide detail, in accordance with article 15 (capacity-building), on:

(a) Efforts to provide adequate capacity-building for and guidance to public authorities and bodies to assist them in carrying out their duties under the Protocol;

Answer:

Immediately after publishing the Ordinance in 2008, the [EPR Section](#), providing all necessary information and content related to the national register to the professional and interested public, was created on CEA's website.

In accordance with Art. 21 of the Ordinance, the CEA has also prepared the Manual for Keeping the Environmental Pollution Register ([EPR Manual](#)) published as part of the mentioned section.

The EPR Manual is currently being amended and all enquiries, comments and suggestions by public institutions, competent authorities and the public collected through the EPR help desk, are being processed and stored. Through its help desk and website, the CEA provides continuous support and coordination related to data submission and quality improvement.

Furthermore, the first coordination meeting/workshop on the topic of the EPR for the CAs was held on 16 December 2009. The purpose of the workshops was to introduce the CAs to the EPR, collecting information concerning the challenges and needs of the same, as well as an active discussion of all participants, especially concerning the matters in respect of which international cooperation is expected. On 27 September 2012, the EPR employees actively participated in the workshop called Cooperation among Competent Authorities in the Field of Waste Management organized by the CEA which included the presentation of the EPR system upgrade and an active discussion aimed at improving cooperation in data collection and quality control.

Within the scope of the possibilities provided by the CEA and additionally through visits organised in the framework of specific projects, the employees of the Croatian Environment Agency regularly visit the facilities where they are introduced to the applied technologies as well as establish contacts with the industry.

(b) Assistance and guidance to the public in accessing the national register and in understanding the use of the information contained in it.

Answer:

All information related to the EPR is available to the public in the [EPR Section](#) of [CEA's website](#). The website contains regularly updated information concerning the EPR system, legislation, frequently asked questions (FAQ), useful information, links, up-to-date CA address book, and similar. Pursuant to the Ordinance, each year by December 15, the CEA publishes the [EPR Data Report](#) which contains data relating to the previous calendar year.

After the public launch of the CNPEPR, which was covered by the media, the CEA also regularly updates the available information about the portal on its website.

More information concerning the public access to the EPR system, the EPR Browser and the

Article 16

Describe how the Party has cooperated and assisted other Parties and encouraged cooperation among relevant international organizations, as appropriate, in particular:

- (a) In international actions in support of the objectives of this Protocol, in accordance with **paragraph 1 (a)**;
- (b) On the basis of mutual agreements between the Parties concerned, in implementing national systems in pursuance of this Protocol, in accordance with **paragraph 1 (b)**;
- (c) In sharing information under this Protocol on releases and transfers within border areas, in accordance with **paragraph 1 (c)**;
- (d) In sharing information under this Protocol concerning transfers among Parties, in accordance with **paragraph 1 (d)**;
- (e) Through the provision of technical assistance to Parties that are developing countries and Parties with economies in transition in matters relating to this Protocol, in accordance with **paragraph 2 (c)**.

Answers (a), (b), (c), (d):

Croatia regularly cooperates with other Parties to the Protocol and EU Member States on the meetings, workshops and through personal contacts. The establishment of the CNPEPR was communicated to the PRTR Secretary, European Environmental Agency and other regional partners. International projects are described on page 3 of this Report.

Participation at workshops, conferences and working meetings:

- meeting: 1st Meeting of Parties of the PRTR Protocol, Developing PRTR Systems in South and Eastern Europe: Successes and Challenges and Upcoming Initiatives; presentation: National Environmental Pollution Register in Croatia (Geneva, Switzerland, 22 April 2010);
- Meetings of the Working Group of the Parties to the PRTR (2011, 2012, 2013);
- workshop: Improving Capacity for Monitoring Industrial Emissions, (Athens, Greece; 11–14 June 2012);
- meeting of the European PRTR Regulation Article 19 Committee (Brussels, Belgium, 6-7 June 2012);
- V meeting of the Industrial Emissions Directive (IED) Article 75 Committee/meeting of the Industrial Emissions Expert Group (IEEG) (Brussels, Belgium, 20 November 2012);
- Regional workshop Improving capacity to prepare PRTR for the monitoring of industrial emissions on the Mediterranean, Horizon 2020 (Italy, Trieste, 22-24 April 2013);
- sub-regional workshop on the Protocol on Pollutant Release and Transfer Registers in Southeastern Europe called Realize Your Right to a Healthy Community; lecture on Croatian experiences; presentation of the EPR system and the CNPEPR (Sarajevo, Bosnia and Herzegovina, 28-29 May 2013);
- 2nd International PRTR Conference (Madrid, Spain, July 3-4, 2013);
- Global Round Table on PRTRs (Geneva, Switzerland, 19 November 2013);
- International Coordinating Group on PRTRs (Geneva, Switzerland, 22 November 2013).

Answer (e):

The CEA hosted a delegation from Bosnia and Herzegovina for the purpose of exchanging information about the CEIS and discussing future cooperation and provision of technical assistance in creating a PRTR database and portal for Bosnia and Herzegovina (Zagreb, 20 June 2013).

Provide any further comments relevant to the Party's implementation, or in the case of Signatories, preparation for implementation, of the Protocol. Parties and Signatories are invited to identify any challenges or obstacles encountered in setting up, gathering data for and filling in the register.

Answer:

In the process of implementing the PRTR, the most demanding task was the establishment of the EPR system and coordination of the EPR-related activities of all involved entities and quality public involvement. Data quality assurance and control procedures are considered priorities in the EPR

system coordination and management process. Further organisation of workshops, coordination meetings and provision of professional assistance (e.g. through the EPR help desk) are important for ensuring quality system management and transparency.

The persons obliged to submit data, operators and facilities are responsible for the quantity and quality of data. The CAs and the competent inspectorates are, on the other hand, responsible for the assessment of completeness, consistency and credibility of the submitted data. In this respect, cooperation between the CAs and the facilities is of key importance.

Although certain improvements have been made in terms of comparability and harmonisation of the data submitted by different Parties (thanks to the efforts of the EU, UNECE, OECD, etc.), further continuous improvement is necessary in order to achieve better harmonisation of data at the global level. This can be achieved only through continuous and quality exchange of information between the CAs, all involved institutions, facilities and the public.

We are aware of the fact that this task is extremely difficult due to the differences between the countries and industries. It is necessary to find alternatives, including comparative tables presenting different methods/methodologies used for listing industrial activities/pollutants or, for example, geographic areas. UN and EU Working and Expert groups can contribute to this with their expertise.

The exchange of information between the industry and the competent authorities as well as among different competent authorities and process participants is of key importance not only for the purpose of improving process validation but also for the purpose of optimizing the environmental aspect of the industry as a whole.

With the aim of removing all barriers to further successful implementation of the Protocol, we believe that the Parties would benefit from further intensification of the following activities:

- ensuring the flow of information and technical assistance among the Parties;
- promoting bilateral cooperation between the Parties in which the PRTR has been successfully implemented and those in need of assistance;
- Supporting PRTR Secretariat in organizing workshops, educational activities and regional meetings with the participation of various experts, including IT specialists.

Table 1. A comparative table of pollutant release thresholds that differ between the EPR and the PRTR Protocol (Ordinance, Annex 2, List of Pollutants; PRTR Protocol, Annex II, Pollutants).

The data **in blue** are the release thresholds prescribed by the Ordinance. They are stricter than those prescribed under the Protocol (in the case of 39 air pollutants, 25 water pollutants and 1 soil pollutant). If the threshold is not indicated by a number but by “**ND**”, it means that it has not been determined, which makes reporting to the EPR required for any amount of pollutant release, thus making this requirement also stricter than the one prescribed by the Protocol. The thresholds **in black** are the thresholds that are the same in both, the EPR system and the Protocol.

The data contained in columns **in gray** (the last and the one before the last) are collected in the EPR system in accordance with Article 7 of the Ordinance. The EPR data on wastewater release or transfer are collected under the same conditions, i.e. in accordance with the prescribed release thresholds since the release and transfer are not separated within the EPR system.

No.	CAS No.	Pollutant	Threshold for releases (Column 1)			Threshold for off-site transfers of pollutants (Column 2) kg/year	Manufacture, process or otherwise use thresholds (Column 3) kg/year
			to air (Column 1a) kg/year	to water (Column 1b) kg/year	to soil (Column 1c) kg/year		
1	74-82-8	Methane (CH ₄)	100 000- 10 000	-	-	-	*
2	630-08-0	Carbon-monoxide (CO)	500 000 30	-	-	-	*
3	124-38-9	Carbon-dioxide (CO ₂)	100 million 30 000	-	-	-	*
4		Hydro-fluorocarbons (HFC)	100	-	-	-	*
5	10024-97-2	Nitrous oxide (N ₂ O)	10 000	-	-	-	*
6	7664-41-7	Ammonia (NH ₃)	10 000 1 000	-	-	-	10 000
7		Non-methane volatile organic compound (NMVOC)	100 000 200	-	-	-	*
8		Nitrogen oxides expressed as nitrogen dioxide (NO _x /NO ₂)	100 000 30	-	-	-	*
9		Perfluorocarbons (PFCs)	100 10	-	-	-	*
10	2551-62-4	Sulphur hexafluoride (SF ₆)	50 5	-	-	-	*
11		Sulphur oxides expressed as sulphur dioxides (SO _x /SO ₂)	150 000 100	-	-	-	*
12		Total nitrogen	-	50 000 ND*	50 000	10 000	10 000

13		Total phosphorous	-	5 000 ND*	5 000	10 000	10 000
14		Hydrochlorofluorocarbons (HCFCs)	1	-	-	100	10 000
15		Chlorofluorocarbon (CFCs)	1	-	-	100	10 000
16		Halons	1	-	-	100	10 000
17	7440-38-2	Arsenic and compounds (as As)	20 2	5 ND*	5	50	50
18	7440-43-9	Cadmium and compounds (as Cd)	10 1	5 ND*	5	5	5
19	7440-47-3	Chromium and compounds (as Cr)	100 10	50 ND*	50	200	10 000
20	7440-50-8	Copper and compounds (as Cu)	100 10	50 ND*	50	500	10 000
21	7439-97-6	Mercury and compounds (as Hg)	10 1	1 ND*	1	5	5
22	7440-02-0	Nickel and compounds (as Ni)	50 10	20 ND*	20	500	10 000
23	7439-92-1	Lead and compounds (as Pb)	200 50	20 ND*	20	50	50
24	7440-66-6	Zink and compounds (as Zn)	200 50	100 ND*	100	1 000	10 000
25	15972-60-8	Alachlor	-	1	1	5	10 000
26	309-00-2	Aldrin	1	1	1	1	1
27	1912-24-9	Atrazine	-	1	1	5	10 000
28	57-74-9	Chlordane	1	1	1	1	1
29	143-50-0	Chlordecone	1	1	1	1	1
30	470-90-6	Chlorfenvinphos	-	1	1	5	10 000
31	85535-84-8	Chloro-alkanes, C ₁₀ -C ₁₃	-	1	1	10	10 000
32	2921-88-2	Chlorpyrifos	-	1	1	5	10 000

33	50-29-3	DDT	1	1	1	1	1
34	107-06-2	1,2-dichloroethane (EDC)	1 000 100	10	10	100	10 000
35	75-09-2	Dichloromethane (DCM)	1 000 100	10	10	100	10 000
36	60-57-1	Dieldrin	1	1	1	1	1
37	330-54-1	Diuron	-	1	1	5	10 000
38	115-29-7	Endosulphan	-	1	1	5	10 000
39	72-20-8	Endrin	1	1	1	1	1
40		Halogenated organic compounds (as AOX)	-	1 000 ND*	1 000	1 000	10 000
41	76-44-8	Heptachlor	1	1	1	1	1
42	118-74-1	Hexachlorobenzene (HCB)	10	1	1	1	5
43	87-68-3	Hexachlorobutadiene (HCBd)	-	1	1	5	10 000
44	608-73-1	1, 2, 3, 4, 5, 6-hexachlorocyclohexane (HCH)	10	1	1	1	10
45	58-89-9	Lindane	1	1	1	1	1
46	2385-85-5	Mirex	1	1	1	1	1
47		PCDD +PCDF (polychlorinated dibenzodioxins + polychlorinated dibenzofurans) (as TEQ)	0.001 0.0001	0.001 0.0001	0.001 0.0001	0.001	0.001
48	608-93-5	Pentachlorobenzene	1	1	1	5	50
49	87-86-5	Pentachlorophenol (PCP)	10 1	1	1	5	10 000
50	1336-36-3	Polychlorinated biphenyls (PCBs)	0.1	0.1	0.1	1	50

51	122-34-9	Simazine	-	1	1	5	10 000
52	127-18-4	Tetrachloroethylene (PER)	2 000 200	- 10	-	1 000	10 000
53	56-23-5	Tetrachloromethane (TCM)	100 20	- 1	-	1 000	10 000
54	12002-48-1	Trichlorobenzenes (TCB)	10 2	- 1	-	1 000	10 000
55	71-55-6	1,1,1-trichloroethane	100 10	-	-	1 000	10 000
56	79-34-5	1,1,2,2-tetrachloroethane	50 5	-	-	1 000	10 000
57	79-01-6	Trichloroethylene	2 000 200	- 10	-	1 000	10 000
58	67-66-3	Trichloromethane	500 50	- 10	-	1 000	10 000
59	8001-35-2	Toxaphene	1	1	1	1	1
60	75-01-4	Vynil chloride	1 000 100	10	10	100	10 000
61	120-12-7	Anthracene	50 5	1	1	50	50
62	71-43-2	Benzene	1 000 100	200 (as BTEX) ^{af} ND*	200 (as BTEX) ^{af}	2 000 (as BTEX) ^{af}	10 000
63		Brominated diphenyl ethers (PBDE)	-	1	1	5	10 000
64		Nonylphenol and nonylphenol ethoxylates (NP/NPE) and related substances	-	1	1	5	10 000
65	100-41-4	Ethylbenzene	-	200 (as BTEX) ^{af}	200 (as BTEX) ^{af}	2 000 (as BTEX) ^{af}	10 000
66	75-21-8	Ethylene-oxide	1 000 100	10	10	100	10 000
67	34123-59-6	Isoproturon	-	1	1	5	10 000
68	91-20-3	Naphtalene	100 10	10	10	100	10 000
69		Organotin compounds	-	50	50	50	10 000

		(as total Sn)		ND*			
70	117-81-7	Di-(2-ethyl-hexyl)-phthalate (DEHP)	10 1	1	1	100	10 000
71	108-95-2	Phenols (as total C)	-	20	20	200	10 000
72		Polycyclic aromatic hydrocarbons (PAU) ^{b/}	50 5	5	5	50	50
73	108-88-3	Toluene	-	200 (as BTEX) ^{a/} ND*	200 (as BTEX) ^{a/}	2 000 (as BTEX) ^{a/}	10 000
74		Tributyltin and compounds	-	1	1	5	10 000
75		Triphenyl tin and compounds	-	1	1	5	10 000
76		Total organic carbon (TOC) (as total C or COD/3)	-	50 000 ND*	-	-	**
77	1582-09-8	Trifluralin	-	1	1	5	10 000
78	1330-20-7	Xylenes	-	200 (as BTEX) ^{a/} ND*	200 (as BTEX) ^{a/}	2 000 (as BTEX) ^{a/}	10 000
79		Chlorides (as total Cl)	-	2 million ND*	2 million	2 million	10 000 ^{c/}
80		Chlorine compounds expressed as hydrochlorides (HCl)	10 000 100	-	-	-	10 000
81	1332-21-4	Asbestos	1	1	1	10	10 000
82		Cyanides (as total CN)	-	50 ND*	50	500	10 000
83		Fluorides (as total F)	-	2 000 ND*	2 000	10 000	10 000 ^{c/}
84		Fluorine compounds expressed as hydrofluoride (kao HF)	5 000 50	-	-	-	10 000
85	74-90-8	Hydrogen cyanide (HCN)	200 20	-	-	-	10 000

86		Particulate matter (PM ₁₀)	50 000 1 000	-	-	-	
----	--	--	-----------------	---	---	---	--