



**“Global Project on the Implementation of PRTRs as a tool for POPs reporting, dissemination and awareness raising for Belarus, Cambodia, Ecuador, Kazakhstan, Moldova and Peru”**

# **National PRTR Proposal**

**Environnemental Pollution Prevention Office**

**Chisinau, Moldova**

**July 2017**



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## List of abbreviations

AA	Association Agreement between the European Union and the European Atomic Energy Community and their Member States and the Republic of Moldova
AIS WM	Automated Information System "Waste Management"
BAT	Best available technique
BEP	Best environmental practice
CH	Sanitary norms
E-Governance	Electronic Governance
EIS	Environmental Information System
ELV	Emission limit value
EPL	new Environmental Protection Law
EPPO	Environmental Pollution Prevention Office
E-PRTR	European Pollutant Release and Transfer Register
EU	European Union
FTE	Full-time Equivalent
GD	Governmental Decision
GDP	Gross Domestic Product
GEF	Global Environmental Facility
LEP	Law on environmental protection of 1993
LPA	local public administration
MAC	Maximum Allowable Concentrations
MCloud	Joint Government Technology Platform (MCloud)
MoE	Ministry of Environment
NBS	National Bureau of Statistics
NGO	Non-governmental organization
ODS	Ozone depleting substances
POPs	Persistent organic pollutants



- REACH Regulation No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals
- REC Regional Environmental Centre
- PRTR Pollutant Release and Transfer Register
- SE State Enterprise
- SEI State Ecological Inspectorate
- UNITAR United Nations Institute for Training and Research



## Introduction

Over the past few decades, pollutant release and transfer registers have emerged as an important new tool in the field of chemicals management. By bringing information on polluting emissions into the public domain, PRTRs raise awareness about major sources of threat to health and the environment and enable the public to play a more effective role in influencing the decision-making processes related to such threats. The resulting increase in transparency can create pressure on companies to reduce the pollution burden arising from their activities.<sup>1</sup>

The Protocol on Pollutant Release and Transfer Registers was adopted at an extraordinary meeting of the Parties to the Aarhus Convention<sup>2</sup> on 21 May 2003. The meeting took place in the framework of the fifth Ministerial Conference “Environment for Europe”, Kyiv, 21-23 May 2003. Thirty-six member States and the European Community signed the Protocol in Kyiv.

The *objective* of this Protocol, laid down in its Article 1, is “to enhance public access to information through the establishment of coherent, integrated, nationwide pollutant release and transfer registers (PRTRs) in accordance with the provisions of this Protocol, which could facilitate public participation in environmental decision-making as well as contribute to the prevention and reduction of pollution of the environment.”

The Protocol became international law binding its Parties on 8 October 2009. It entered into force on 8 October 2009. The first session of the Meeting of the Parties to the Protocol was held on 20-22 April 2010 in Geneva, Switzerland, the second session on 3-4 July 2014 in Maastricht, Netherlands.

As of 15 July 2016, the Protocol has been ratified by 35 countries and the European Union.<sup>3</sup>

The Republic of Moldova signed the PRTR Protocol on 9 August 1999 and ratified it on 26 April, 2013<sup>4</sup>. The instrument of ratification was deposited by the country on 23 December, 2013.

A PRTR, is a publicly accessible register containing information on the releases (emissions) from facilities into the environment, and transfers to other facilities, of a defined set of pollutants from certain specified activities. The information contained in a PRTR is generated through periodic reporting, usually on an annual and mandatory basis, by the facilities responsible for the activities causing the releases and transfers. The PRTR shall be accessible via the Internet and searchable according to individual facility, owner/operator, type of pollutant, type of activity and environmental medium (air, water, land).<sup>5</sup>

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<sup>1</sup> UNECE, Your Right to a Healthy Community: A simplified guide to the Protocol on Pollutant Release and Transfer Registers, 2011.

<sup>2</sup> Convention on access to information, justice and public participation in environmental decision-making

<sup>3</sup> <http://www.unece.org/env/pp/prtr.html>

<sup>4</sup> Law on ratification of the Protocol on Pollutant Release and Transfer Registers to the Convention on access to information, justice and participation public in decisions on the environment No. 99 of April 26, 2013.

<sup>5</sup> UNECE, Your Right to a Healthy Community: A simplified guide to the Protocol on Pollutant Release and Transfer Registers, 2011



The PRTR implementation shall contribute to the application of other international commitments of the Republic of Moldova within ratified multilateral environmental agreements, implying pollutant release and transfer recording and reporting, such as:

- United Nations Framework Convention on Climate Change, including its Kyoto Protocol;
- Convention for the Protection of the Ozone Layer and the Montreal Protocol, including its Montreal Protocol;
- Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;
- Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;
- Convention on Persistent Organic Pollutants (POPs);
- Convention on Long- Range Transboundary Air Pollution, including its Protocol on Persistent Organic Pollutants, Protocol on Heavy Metals, ;
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes, including its Protocol on Water and Health;
- Convention on Co-operation for the Protection and Sustainable Use of the River Danube;
- Minamata Convention on mercury.

Furthermore, the Republic of Moldova is involved in the implementation of the Strategic Approach to International Chemicals Management (SAICM)), which is a policy framework to foster the sound management of chemicals.

This National PRTR Proposal is prepared under the Global Project on the Implementation of PRTRs as a tool for POPs reporting, dissemination and awareness raising for Belarus, Cambodia, Ecuador, Kazakhstan, Moldova and Peru financially supported by the Global Environment Facility (GEF) and United Nations Institute for Training and Research (UNITAR). The project implementation is scheduled during the period 2016-2018. The project has five components, consisting of the following activities:

1. Identification of national needs focusing on review of existing PRTR related materials and updating/development of PRTR national executive proposals and drafting of national PRTR legal framework.
2. Building capacity to implement PRTRs as a National POPs Reporting System aiming at development and implementation of training modules for global use/national training for key sectors, preparation of national guides on estimation techniques and conducting pilots using PRTRs to report on POPs.
3. Standardization and comparison of PRTR data including collection and analysis of materials on standardization, review and updating of guidance on PRTR implementation and POPs reporting as well as analysis and comparison of PRTR data from pilots.
4. Access to PRTR data and public information by development and implementation of national strategies for public access to environmental information and PRTRs.
5. Gaining lessons learned and replication envisioning organization of workshops to analyse the lessons learned as well as to bring together all the insights and experiences of countries involved in the project.



## 1. Objectives of the National PRTR System

The **overall objective** of the National PRTR System is to enhance public access to information through the establishment of coherent, integrated, nationwide pollutant release and transfer registers in accordance with the provisions of the PRTR Protocol and the European Union's E-PRTR Regulation<sup>6</sup> with the purpose to:

- Facilitate public participation in environmental decision-making;
- Improve the accounting of pollutant releases and transfers at both national and local levels;
- Identify major sources of release and transfer of pollutants;
- Track emissions trends;
- Integrate and harmonize the reporting requirements
- Ease the pollutant release and transfer reporting by operators;
- Deliver data for policy and decision makers;
- Contribute to the implementation of international obligations.

## 2. Legal Implementation of the National PRTR System

### 2.1 Existing and new legislation under which PRTR system will operate

The existing and new legislation which shall contribute to shaping the PRTR information system in the Republic of Moldova is described below.

#### **Environmental protection**

The *Law on environmental protection* (LEP) of 1993<sup>7</sup> establishes the current legal framework for the environmental protection in the Republic of Moldova.

Among others, the law regulates the following aspects:

- Main principles of environmental protection;
- Competences and tasks in the field of environmental protection of the Parliament, President, Government and local public administration (LPA);
- Environmental rights and obligations of legal and natural persons;
- Main directions for the protection of natural resources, including soil, water, subsoil, and ambient air;
- Requirements for the management of waste, toxic substances, fertilizers and pesticides.

The Law requires that businesses apply for and renew their environmental and natural resource use authorizations. The sectoral laws (i.e. 2013 Water Law, 2009 Subsoil Code, 1997 Law on atmospheric

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<sup>6</sup> 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.

<sup>7</sup> The Law on environmental protection No.1515 of 16.06.1993:  
<http://lex.justice.md/index.php?action=view&view=doc&id=311604>





air protection, 1997 Law on production and household waste) require businesses to apply for environmental authorizations for the use of natural resources and/or discharges into the air, water and soil and for waste management.

### **Ambient air quality and pollution control**

Currently, the *Law on atmospheric air protection* of 1997<sup>8</sup> is the main law concerning air quality in the Republic of Moldova. It aims to maintain and improve the air quality, prevent and reduce the harmful effects of physical, chemical, biological, radioactive and other factors with adverse consequences for the population and / or the environment and regulates the activity of natural and legal persons, regardless of the type of ownership and legal form of organization, which directly or indirectly affect or may affect atmospheric air quality.

The Law provides for the establishment of:

- Maximum Allowable Concentrations (MAC) to be set by the Ministry of Health (art. 10 (1)).<sup>9</sup> However, these have not been developed until nowadays. The country uses the MACs established during the Soviet period.
- Emission standards for stationary and mobile sources of pollution are established with the purpose of atmospheric air protection (Art. 11 (1)).<sup>10</sup> The emission standards for stationary sources of pollution are provided in the authorizations issued by the State Environmental Inspectorate (Art. 12 (1)).<sup>11</sup> The emission standards are calculated based on the dispersion of pollutants in atmospheric air.

The law does not include provisions on emission limit values (ELV), use of best available techniques (BAT) and best environmental practices (BEP) to control pollutant emissions as well as on establishing air emissions inventories, emissions control strategies and plans.

Art.12 is focused on authorization of pollutant emissions from stationary sources of pollution, which shall be allowed in each case, based on the authorization issued by the State Environmental Inspectorate. The authorization shall establish the standards for limited allowable emission of pollutants and other conditions and regulations that ensure air protection.

Art.13 of the law refers to the obligations of natural and legal persons engaged in production generating emissions, which, among others, include the following:

- Keep a permanent record of the composition, quality and quantity of pollutant emissions into the atmosphere;
- Create an auto-monitoring network and automatic recording of pollutant emissions into atmosphere and to use a uniform methodology for data collection and initial processing with their transmission to the territorial environment subdivisions (i.e. ecological inspections at district level and municipal ecological agencies;

The establishment of registries release to air is not required by the sectoral legislation in force.

In accordance with the Action Plan for the implementation of the Association Agreement of 2014<sup>12</sup>, a *new Law on ambient air quality and protection* in line with the Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe is envisioned to be developed by the Ministry of Environment (MoE) by quarter IV in 2017. The new law

<sup>8</sup> Law on atmospheric air protection No.1422 of 17 December 1997:

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=312772>

<sup>9</sup> Ibidem

<sup>10</sup> Ibidem

<sup>11</sup> Ibidem

<sup>12</sup> Governmental Decision (GD) No 808 of 07.10.2014 on approval of the National Action Plan for the implementation of the Association Agreement Moldova - European Union in the period 2014-2016:

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=354939>



shall provide the legal basis for the use of emission limit value (ELV), best available technologies (BAT) and best environmental practices (BEP) to control pollutant emissions as well as for the establishment of air emissions inventories, emissions control strategies and plans.

### Releases to water

The 2013 *Water Law*<sup>13</sup> established the legal framework for:

- Management and protection of surface and ground water, including measures to prevent and combat flooding, erosion and measures to approach drought and desertification;
- Activities that have an impact on surface water and groundwater, including abstraction and water use, wastewater and pollutants discharge and other activities that could harm water quality.

Art. 23 stipulates that the special water use shall be undertaken only on the basis of an environmental permit for the special use of water. The special water uses are as follows:

1. abstraction of water from surface water and groundwater sources with the purpose of water supply for human consumption;
2. capture and use of water from surface water and groundwater sources for technical and industrial applications including food processing and agro-industry;
3. capture and use of water for irrigation from different sources;
4. water use in aquaculture and fisheries;
5. discharge of wastewater;
6. use of water for hydro-electric power generation;
7. operation of wharves, jetties and other hydraulic structures;
8. development and commercial exploitation of beaches and recreation areas.

Art. 42 establishes that the environmental authorization of special water use operator shall establish the requirements for the mandatory monitoring of wastewater to be conducted by operators, and the frequency with which the monitoring information shall be provided to the competent institution.

The law does not provide for an online reporting on releases to water, provision that shall be integrated into the law.

In accordance with the *Regulation on recording and reporting of used water*<sup>14</sup>, provides for the recording and reporting by operators of wastewater quality based on the monthly/annual averages of the results of the physico-chemical and bacteriological investigations carried out in authorized laboratories. Amendments shall be integrated into the regulation with the purpose to reconfirm the online reporting of releases to water.

The *Regulation on conditions of wastewater discharge into water bodies* of 2013<sup>15</sup> establishes the conditions of wastewater release, introduction of specific substances into surface or ground water.

The reference methods for the analysis of pollutants in wastewater are listed in the table 13 of the Regulation, which comprises 116 parameters to be measured, from which 110 are substances.

The regulation provides for self-monitoring of wastewater quality by operators holding environmental authorization on wastewater discharge (p.42). The minimum frequencies of self-monitoring are based on the maximum allowable flow of wastewater to be discharged provided in the environmental authorization of special water use and are listed in the Annex 14 of the Regulation.

The emission limit values for the operators involved in the following sectors: slaughterhouses and meat processing; milk treatment and processing; beer and malt production; fruit, vegetables and potatoes processing; beverage production; production of alcohol and alcoholic beverages intended for

<sup>13</sup> Water Law No. 272 of 25 December 2013: <http://lex.justice.md/md/342978/>

<sup>14</sup> GD No.835 of 29.10.2013 on approval of the Regulation on recording and reporting of used water: <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=350127>

<sup>15</sup> Regulation on conditions of wastewater discharge into water bodies approved by the GD No. 802 of 09.10.2013: <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=350109>



human consumption; vegetables feed production; production of gelatine and glue from hides, skins and bones.

The requirements for the quality of industrial wastewater discharged into the sewage systems of localities are provided in the *2013 Regulation on requirements for the collection, treatment and discharge of wastewater into the sewage system and / or in water bodies in urban and rural areas*<sup>16</sup>. The list includes 26 substances and reference standard methods of analysis.

The Annex 2 of the Regulation lists the pollutant emission limit values for 40 substances in industrial and urban wastewater released in artificial surface or ground water bodies.

The establishment of registries on releases to water available online is currently not required by the legislation in force.

In addition, the reference standard methods of laboratory analysis shall be brought in line with the internationally approved standards for each of the substances found in releases of pollutants to water (see *Annex 3*)

### **Chemicals management**

Currently, the legal framework for the environmental protection from the use of chemicals is established mainly by the *Law on environmental protection* of 1993 and the *Law on harmful products and substances* of 1997.

The *Law on Harmful Products and Substances Regime*<sup>17</sup> adopted in 1997 establishes the legal framework for the manufacture, storage, transportation, handling, use and neutralization of harmful products and substances as well as their import and export in order to exclude, reduce or prevent the impact of such products and substances on humans and the environment.

A new draft *Law on chemicals* in line with EU chemicals legislation was adopted by the Government of Moldova on 27 July, 2016 and submitted to the Parliament of Moldova for review and adoption. Since the draft legal act intends to provide the legal framework for an institutional reform to ensure a sound management of chemicals, by now (i.e. July 2017) it is still in the Parliament awaiting a political decision with regard to a forthcoming substantial Governmental reform planned to take place during 2017-2018. However, the current version of the draft legal act aims to regulate the following aspects:

- obligations of natural and legal persons who produce or place on the market substances or chemical mixtures
- prohibitions and restrictions on production, marketing, import, export and use of hazardous chemical substances and mixtures
- conditions of classification, packaging and labelling of chemical substances and mixtures
- establish and maintain a register of chemicals
- chemicals reporting procedure.

In accordance with its Article 30, an Automated Information System "Registry of chemicals placed on the Moldovan market" shall be established based on the reporting forms submitted by operators involved in the manufacture or import of a chemical in a volume of at least 100 kg per year. The list of chemicals to be reported and reporting requirements shall be developed and approved by the Government of Moldova.

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<sup>16</sup> Government Decision No. 950 of 25.11.2013 approving the Regulation on requirements for the collection, treatment and discharge of wastewater into the sewage system and / or in water bodies in urban and rural areas:

[http://www.justice.gov.md/file/Centrul%20de%20armonizare%20a%20legislatiei/Baza%20de%20date/Materiale%202013/Acte/PNAL/HG\\_950\\_din\\_25.11.13.pdf](http://www.justice.gov.md/file/Centrul%20de%20armonizare%20a%20legislatiei/Baza%20de%20date/Materiale%202013/Acte/PNAL/HG_950_din_25.11.13.pdf)

<sup>17</sup> Law on Harmful Products and Substances Regime No. 1236-XIII of 3 July 1997:

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=311560>



It is expected that the law will be adopted by the Parliament of Moldova in quarter IV of the year 2016. It will enter into force within one year after it is published in the *Monitorul oficial*. During this time the secondary legislation under the law shall be developed and adopted by the Government of Moldova.

### **Waste management**

The *LEP of 1993* constitutes the basic legal framework for the development of special normative acts and instructions in the field of waste management.

According to the 1993 Law, the state policy on waste management is to be based on:

- Recognition that the excessive accumulation of waste is a consequence of an irrational use of energy and raw materials affecting the environment, its factors and health;
- Awareness measures aimed at the implementation of technical solutions, economic and management mechanisms, which would permit the reduction of waste accumulation, energy production and recyclable portions of production and household waste, disposal and efficient isolation of non-recyclable waste.

The Law establishes, inter alia, the competences in the field of waste management of the Government to:

- Recommend and implement economic mechanisms and top management technologies with the purpose of efficient use of water and raw materials in production processes limiting the use of components with negative effects on environment and human health, their substitution by alternative inert materials obtaining final recyclable products, energy and recyclable components;
- Establish annual limits for the accumulation of household and production waste, supervise the compliance with those limits;
- Impose charges for storage and processing of household and production waste and establish technical standards for transport, landfill, incineration and burying of non-recyclable waste in order to minimize harmful effects on human health and environmental quality;
- Create conditions to facilitate and encourage the collection and recycling of metal, textile, leather, timber, rubber, oil wastes as well as the energy production from waste.

The legal act prohibits the importation of crude or processed waste residues of any kind, except of processed waste paper and glass shards to be used as secondary raw material by companies in Moldova for either processing, temporary storage, storage, spreading on soil or water or destruction by any means. Control and customs authorities bear responsibility for the compliance with the provisions of this article on import and transportation of waste and residues on the territory of the country.

The *Law on Production Waste and Household Waste* of 1997<sup>18</sup> provides a framework for the regulation, record keeping, planning, control, supervision and monitoring in the field of waste management.

It regulates the management of waste generated from:

- Raw material extraction and processing of primary minerals;
- Manufacture, transportation and storage of technical articles, consumer goods, energy and energy resources;
- Construction, agricultural, mining and other works;
- Service delivery;
- Industrial and food products consumption.

The Law establishes the waste management related competences of the Government, central public authority for environment protection and natural resources, central public authority for health

<sup>18</sup> Law on Production Waste and Household Waste No. 1347-XIII of 9 October 1997:  
<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=311576>



(currently: Ministry of Environment and the Ministry of Health) and local public administration authorities as well as the responsibilities of natural and legal persons. As such, the Law incorporates ecological security requirements related to:

- The production of new materials and technologies, design and construction of any facilities;
- Landfills and storage of waste;
- Prohibitions on waste disposal in water drainage systems and water, their storage and processing in the protection zones of water bodies, sanitary protection zones of drinking water supply sources and aqueducts, in recreational areas, natural protected areas and parks and protection belts of railways and roads;
- Prohibitions on landfill and processing of hazardous waste as well as production and household waste in urban and rural areas, underground aquifer, recreation areas and other places where it would endanger the environment and human health; landfill of waste in underground sites may be permitted in exceptional circumstances and only after special investigations, in compliance with specific rules, regulations and the requirements of legislation;
- Collection and purchase from natural persons of residues and waste of ferrous and non-ferrous metals, excluding waste batteries.

In accordance with Art.8, the natural and legal persons are obliged, among others to keep strict records of all waste generated by their production activities.

Art. 10 of the law specifies that all industrial and domestic waste are subject to record-keeping by natural and legal persons engaged in production activities.

Art. 16 stipulates that in order to prevent the negative impact of hazardous waste on environment and human health, it is prohibited to undertake any activity generating hazardous waste without having an authorization for storage (burial), processing, use, dismantling and evacuation.

The *Order No. 20 of 14.03.2005 of the Ministry of Natural Resources and Environment regarding the authorization of activities related to the use of natural resources and pollution prevention*<sup>19</sup> establishes the requirements to apply for a waste management authorization. Thus, the authorization of waste management shall be grounded on the opinion of the territorial ecological agency on the basis of the undertaken inspection with the purpose to check the compliance with environmental protection legislation (for businesses in operation) and informative note.

A new Law on waste was adopted on 29 July 2016 by the Parliament of Moldova and published in the *Monitorul Oficial* on 23 December 2016<sup>20</sup>. It will enter into force within one year after the date of its publication in the *Monitorul Oficial* and will repeal the Law on Production Waste and Household Waste of 1997 mentioned above. The legal act is harmonized with the EU legislation on waste and provides for a five-step waste hierarchy, development of waste management plans and waste prevention programs, specific obligations on hazardous waste management, permitting system etc. According to its Article 26c), the operators, holding an environmental authorization for waste management, shall record the information on amount of collected, recovered or eliminated waste and report in electronic form on annual basis to the MoE. The requirements on waste management activities recording and reporting shall be provided in an Instruction on the recording and reporting of data and information on waste and their management to be adopted by the Government of Moldova. Its draft has been developed by the MoE and shall be sent to public authorities for official endorsement soon.

In accordance with the Article 33 of the law, an Automated Information System "Waste Management" (AIS WM) shall be established. The law provides for the following:

<sup>19</sup> Order No. 20 of 14.03.2005 of the Ministry of Natural Resources and Environment regarding the authorization of activities related to the use of natural resources and pollution prevention:

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=313820>

<sup>20</sup> Law on waste No.209 of 29 July 2016: <http://lex.justice.md/md/368030/>



(1) The operators involved in the activities of waste management, including waste producers, shall participate in the reporting of data and information about waste and its management according to the requirements stipulated in this law and the provisions of the technical concept of the AIS WM, approved by the Government.

(2) AIS WM represents all software and technical equipment products for the collection, storage and processing of information, forming the information resource Registry "Waste Management", which will include events related to their economic cycle, documents accompanying this circuit, including export and import of waste, waste producers and companies authorized to work in this field as well as automatization of business processes of waste circuit subjects and providing information on the waste stream to public authorities, natural and legal persons through a departmental portal.

(3) Information on implementation of measures related to the implementation of extended producer responsibility and data on the quantity of products available on the market specified in tonnes and number of units, as well as information on the amount, number and categories of waste collected and treated is part of the AIS WM.

(4) The AIS WM shall comprise at least the following:

- a) records on waste, which contains data on generation, collection, transportation and treatment of waste, including hazardous ones;
- b) records of issued permits;
- c) records of waste transfer notes;
- d) List of manufacturers of products subject to extended producer responsibility regulations;
- e) list of operators exempted from the waste permitting requirements regarding waste recovery and disposal activities.

(5) The owner of the Registry "Waste Management" is the central public administration in the field of environment.

(6) Establishment, operation and exploitation of the AIS WM shall be carried out in accordance with the legislation on electronic communications and information technology, as well as specific technical standards and regulations.

(7) The issues on functional space of the AIS WM, content of the information resource and procedure of collection, storage, processing, updating and receiving information from the AIS WM, are established in the technical concept and the Regulation on maintenance of the Registry "Waste Management" to be approved by the Government.

The draft Technical Concept of the AIS WM has been developed by the MoE and shall be sent to public authorities for official endorsement.

## **PRTR Legislation**

Although the PRTR Protocol was ratified by the Republic of Moldova in the year 2013, no PRTR-specific legislation was developed and adopted by 2016.

In accordance with the National Action Plan for the implementation of the Aarhus Convention (2011-2015)<sup>21</sup>, the deadline for the establishment of the National PRTR System was planned by the end of the year 2015. However, due to lack of financial and technical capacity the system could not be established.

At the same time, the country already has a range of legal acts supporting the use of information technology and development of information systems.

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<sup>21</sup> GD No. 471 of 28.06.2011 on approval of the National Action Plan to implement the Convention on access to information, justice and public participation in environmental decision-making (2011-2015): <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=339051&lang=1>



The IT-related legislation relevant to the establishment of the PRTR system, among others, comprises the following:

- Law No.467-XV of 21 November 2003 on computerization and state information resources;
- Law No.71-XVI of 22 March 2007 on registers;
- GD No. 1032 of 06.09.2006 on the Concept of automated information system "Register of state information resources and systems"
- GD No.733 of 28 June 2006 on the Concept of E-Government;
- GD No.916 of 6 August 2007 on the Concept of Governmental Portal;
- GD No. 710 of 20 September 2011 on the Strategic Program for Governance Technological Modernization (e-Transformation);
- GD No. 188 of 3 April 2012 concerning official pages of Internet pages of the public administration authorities;
- GD No. 656 of 5 September 2012 on Approving the Interoperability Framework Program;
- GD No.128 of 20 February 2014 on the Joint Government Technology Platform (MCloud);
- GD No. 700 of 25 August 2014 on the Policy Concept on the principles of the open government data;
- Order No.94 of 17 September 2009 of the Ministry of Information and Communication Technology on the approval of some technical regulations;
- Standard ISO IEC 15288 Moldova SMV: 2009 "Systems Engineering and Software. System Lifecycle Processes";
- Technical Regulation "Processes of the software's lifecycle" RT 38370656-002: 2006, approved by the order No. 78 of 01.06.2006 of the Ministry of Informational Development.

The package of **specific PRTR legislation** to be developed shall consist of:

- Regulation on Implementation of the National PRTR based on the Law on ratification of the PRTR Protocol<sup>22</sup>.The Regulation shall be in line with the EU E-PRTR Regulation<sup>23</sup> and shall incorporate the following provisions: PRTR objective, scope, core elements, design and structure; reporting requirements, reporting cycle, data collection and record-keeping by operators; quality assessment; public access to information; confidentiality; public participation in the PRTR development; access to justice; capacity building, and international cooperation.
- Technical Concept on the PRTR Information System;
- Regulation on operation and maintenance of the PRTR Information System;
- PRTR Implementation Guidebook.

The PRTR legislation shall incorporate provisions on methodologies for the measurement, calculation and estimation of releases and off-site transfers. Since the atmospheric air protection legislation shall be reset, thee sectoral legislation in force comprises only the provisions on measurement of releases to water by wastewater.

## 2.2 Schedule for development of the requisite legislation

Currently, the PRTR legislation is in the process of development. It is envisioned that it shall be officially endorsed and approved during the year 2017.

In addition, based on the analysis of gaps within the existing Moldovan legislation in comparison with the PRTR Protocol carried out by the project in May-June 2016, a *range of amendments* to existing legislation on water (i.e. Water Law No. 272 of 23.12.2013, GD No. 835 of 29.10.2013 on approval of

<sup>22</sup> Law on ratification of the Protocol on Pollutant Release and Transfer Registers to the Convention on access to information, justice and participation public in decisions on the environment No. 99 of April 26, 2013: <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=348205>.

<sup>23</sup> 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: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R0166&from=EN>.

the Regulation on water use recording and reporting, GD No. 802 of 09.10.2013 on approval of the Regulation on conditions for wastewater discharge into water bodies, GD No. 950 of 25.11.2013 approving the Regulation on requirements for the collection, treatment and discharge of wastewater into the sewage system and / or in water bodies in urban and rural areas), Contravention Code No. 218-XVI din 24.10.2008 and Penal Code No. 985-XV of 18.04.2002 shall be prepared and approved in order to bring it in line with the PRTR protocol and national PRTR legislation under development.

Furthermore, as mentioned above, the new legislation on waste, chemicals and atmospheric air protection is under development and promotion by the country, which takes into consideration the PRTR requirements and will contribute to the harmonisation of the national sectoral legislation with the PRTR provisions. The Gantt chart below illustrates the schedule of legislation development.

Activity	2017				2018				2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>PRTR legislation</b>									
Development of a PRTR legal package (Regulation on Implementation of National PRTR, Technical Concept of PRTR Information System, Governmental Decision and Explanatory Note)	■	■							
PRTR Legal package Endorsement and Approval by the Government		■	■						
Publication of Governmental Decision on approval of the Technical Concept of PRTR Information System and Regulation on Implementation of National PRTR in the <i>Monitorul Oficial</i>				■					
Entry into force of Regulation on Implementation of National PRTR						■			
Development of the PRTR Implementation Guidebook				■	■				
Approval of the PRTR Implementation Guidebook by the Ministry of Environment					■				
Development of Regulation on PRTR functioning and maintenance									■
<b>Waste legislation</b>									
Waste Secondary Legislation Development, Endorsement and Approval by the Government	■	■	■	■					
Entry into force of Waste Legislation				■					
<b>Chemicals Legislation</b>									
Approval of the Law on Chemicals by the Parliament	■								
Publication of Law on Chemicals in <i>Monitorul oficial</i>				■					
Chemicals Secondary Legislation Endorsement and Approval by the Government		■	■	■	■				
Entry into force of Chemicals Legislation					■				
<b>Amendments to the legislation in force</b>									





Preparation, Endorsement and Approval of amendments									
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**Table 1. Schedule for development of the requisite legislation**

### 2.3 Current environmental data reporting requirements to be replaced, modified, or integrated with the PRTR reporting scheme

The operators with *stationary sources of atmospheric air pollution* shall report their emissions to atmospheric air on annual basis by filling in the relevant data in the Statistical Form No.1 “Atmospheric Air Protection”. The MoE in common with the National Bureau of Statistics (NBS) approves the content of statistical form and deadline of its submission to the NBS in a joint order<sup>24</sup>. The completed statistical form is submitted by the operators on paper to the territorial structures (i.e. inspections and agencies) of the State Ecological Inspectorate (SEI). After review and validation, the SEI submits the information to NBS. In 2016, the deadline for submitting the statistical forms by the SEI to the NBS was 22 January 2016<sup>25</sup>.

The operators involved in production, import, export, commercialization, and use of ozone depleting substances (ODS) and/or ODS-containing equipment or products have to report in accordance with the Statistical Form No.1 “Trade regime and regulation of the use of halogenated hydrocarbons that deplete the ozone layer”. The information is reported on paper to the SEI’s territorial structures. In 2016, the deadline for submitting the statistical forms by the SEI to the NBS was 12 February 2016<sup>26</sup>.

The operators, holding environmental permits for special water use, shall report on annual basis, among others, the data on water use, including wastewater discharge (i.e. discharged wastewater quality and quantity) in accordance with the Statistical form No.1 Water Use. The information is sent to the State Enterprise (SE) “Basin Division for Water Management” subordinated to the Apele Moldovei Agency. The state enterprise is in charge to check and validate the reported data, enter it in a relational database hosted in the M-Cloud, as part of the Water Resources Information System<sup>27</sup>. The information is provided by operators only on paper support due to absence of legal requirements and technical arrangements to submit the information in electronic form. In 2016, the deadline for submission of information on releases to water by the state enterprise to the NBS was on 20 May 2016<sup>28</sup>.

The operators involved in waste management-related activities shall report on annual basis in accordance with the Statistical form No.1 “Generation, storage, use, and neutralization of toxic waste” and Statistical form No.2 “Generation and use of waste”. The information is submitted on paper to the territorial structures of the SEI. In 2016 the deadline for submission of completed statistical forms by the SEI to the NBS was 24 February<sup>29</sup>.

Among others, the establishment of the PRTR information system shall integrate with the environmental information systems already established as follows:

<sup>24</sup> Joint Order of the Ministry of Environment and National Bureau of Statistics No.89/79 of 28.09.2015.

<sup>25</sup> Ibidem.

<sup>26</sup> Ibidem.

<sup>27</sup> The Water Resources Information System was set up in accordance with the provisions of the GD on approval of the Framework Concept and Regulation on the operation of water resources information system in Moldova No. 672 of 05.30.2016. Besides the information on wastewater, the information system comprises information on surface water quality and level in rivers and lakes, river flows, surface water abstraction, groundwater quality and level, groundwater abstraction, meteorological data, infrastructure (i.e. irrigation systems, dikes, dams etc.)

<sup>28</sup> Joint Order of the Ministry of Environment and National Bureau of Statistics No.89/79 of 28.09.2015.

<sup>29</sup> Ibidem.



- *Water Resources Information System* collecting, among others, the data on wastewater quality and discharge reported by operators on annual basis in accordance with the Statistical Form No.1 “Water Use” (see above).
- *Special Water Use Environmental Authorization One-stop Shop*<sup>30</sup>, which integrates the Registry of issued Special Water Use Environmental Authorizations<sup>31</sup>.

In addition, the development of the PRTR information system shall take into consideration the envisioned *Automated Information System "Waste Management"* to be established in accordance with the Article 33 of the new Law on waste adopted by the Parliament of Moldova on 29 July, 2016 (published on 23.12.2016 in *Monitorul oficial*).

The reporting requirements to be replaced and modified shall address the following issues:

- Introduction of electronic reporting requirements

Currently, the electronic reporting is required only in the waste sector in accordance with the provisions of the Article 33 of the new Law on waste adopted by the Parliament of Moldova on 29 July 2016. However, this requirement will become mandatory for operators from 23 December 2017, the date when the law will enter into force. The annual reporting of generated waste amount shall be done in electronic format within the AIS WM in line with the Technical Concept drafted by the MoE.

Relevant provisions on electronic reporting by operators on pollutant releases in atmospheric air and pollutant transfer by wastewater are provided in the draft PRTR legislation.

However, the requirements on electronic reporting by operators shall be introduced also by operating amendments to the atmospheric air protection and wastewater-related sectoral legislation.

- Introduction of deadlines for reporting by operators

Currently, only the deadlines for the submission of information by state institutions to the NBS are integrated in the legislation in force<sup>32</sup>, while the deadlines of reporting of releases by operators are missing. The PRTR legislation shall integrate provisions on such deadlines.

- Introduction of integrated reporting forms

The indicative content of the form is provided in the *Annex 1*. It is inspired from the PRTR reporting form from Romania. The integrated form shall be confirmed by the project team based on the consultations with stakeholders and pilot testing of the PRTR information system as well as it shall be included in the national PRTR legislation. The form will be available online for the electronic reporting of operators.

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<sup>30</sup> The Special Water Use Environmental Authorization One-stop Shop was set up according to the provisions of the GD No. 894 of 12.11.2013 on the organization and functioning of the one-shop stop for the environmental authorization of special water use:

<http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=350368>.

<sup>31</sup> The registry was created in accordance with the provisions of the Regulation on the Registry of environmental permits for special use of water integrated in the Annex 2 of the GD No. 894 of 12.11.2013 on the organization and functioning of the one-shop stop for the environmental authorization of special water use: <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=350368>.

<sup>32</sup> Joint Order of the Ministry of Environment and National Bureau of Statistics No.89/79 of 28.09.2015.



## 3. Reporting requirements and procedures for point sources of emissions

### 3.1 Definitions and technical terms

The relevant definitions to be included in the PRTR legislation are listed below.

**Competent authority** - the national authority or authorities, or any other competent body or bodies, designated to manage a national pollutant release and transfer register system;

**Diffuse sources** - the many smaller or scattered sources from which pollutants may be released to land, air or water, whose combined impact on those media may be significant and for which it is impractical to collect reports from each individual source;

**Disposal** - any of the operations provided for under the national legislation;

**Facility** - one or more installations on the same site, or on adjoining sites, that are owned or operated by the same natural or legal person;

**Installation** - a stationary technical unit where one or more activities (listed in *Annex 2* of this report) are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;

**Off-site transfer** - the movement beyond the boundaries of the facility of either pollutants or waste destined for disposal or recovery and of pollutants in waste water destined for waste-water treatment;

**Operator** - any natural or legal person who operates or controls the facility or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the facility has been delegated;

**Pollutant** - a substance or a group of substances that may be harmful to the environment or to human health on account of its properties and of its introduction into the environment;

**The public** - one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups;

**Recovery** - any of the operations provided under the national legislation;

**Release** - any introduction of pollutants into the environment as a result of any human activity, whether deliberate or accidental, routine or non-routine, including spilling, emitting, discharging, injecting, disposing or dumping, or through sewer systems without final waste-water treatment;

**Reporting year** - the calendar year for which data on releases of pollutants and off-site transfers must be gathered;

**Site** - the geographical location of the facility;

**Substance** - any chemical element and its compounds, with the exception of radioactive substances;

**Other waste** - waste that is not hazardous waste;

**Waste** means substances or objects which are:

- (a) Disposed of or recovered;
- (b) Intended to be disposed of or recovered; or
- (c) Required by the provisions of national law to be disposed of or recovered;



**Wastewater** - used water containing substances or objects that is subject to regulation by national law.

### 3.2 List of substances subject to PRTR reporting

#### 3.2.1 The PRTR list of substances

The reporting under the PRTR Protocol covers 86 substances and categories of substances generated by 64 activities grouped in 9 sectors (i.e. energy, metal production and processing, mineral industry, chemical industry, waste and waste-water management, paper/wood processing industries, intensive livestock and aquaculture, animal and vegetable products from the food and beverage sector, and others). The Annex II of the PRTR Protocol lists 86 polluting substances and categories of substances regulated also by a number of international instruments<sup>33</sup>.

Due to the fact that the Republic of Moldova is engaged to harmonize its legislation to the EU legislation, during the consultations meetings with stakeholders (i.e. Ministry of Environment, operators, designing institutes), it was decided to follow the requirements of the E-PRTR<sup>34</sup>, which incorporates 65 activities grouped in the same 9 activities. The E-PRTR regulates 91 substances, which are listed in the *Annex 3* of this report.

As it regards **the releases to air**, the *Annex 3* to this report lists also the internationally approved measuring methods for air pollutants, which are not yet approved in the national legislation. It shall be proposed in the PRTR legislation that the year 2020 shall be the target year for the operators to apply the listed internationally approved measuring methods for air pollutants in order to ensure the compatibility of data collected at national level with the data collected at international level.

It is to be noted, that the information system to implement PRTR requirements under development shall allow making changes to the data reported by adding to or deleting the substances from the list.

Due to the fact that the operators will be not able to report on all substances from the beginning, the original list of pollutants underwent a process of screening based on a range of criteria and factors as follows: provisions of Multilateral Environmental Agreements, interdictions under the national legislation, and measurement standards and laboratory capacity.

The *Table 2* below lists some of the PRTR substances that fall under the mandatory reporting requirements of *air emissions* in accordance with other multilateral environmental agreements (MEAs) to which the Republic of Moldova is a party PRTR such as: United Nations Framework Convention on

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<sup>33</sup> International instruments referred to are the following: (a) The IPPC/European Pollutant Emission Register (EPER) list of substances; (b) The EU Water Framework Directive list of priority substances; (c) The principal substances regulated under the United Nations Framework Convention on Climate Change; and (d) Substances regulated under the Stockholm Convention on Persistent Organic Pollutants (POPs), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Convention for the Protection of the Marine Environment of the North-East Atlantic, the International Convention for the Prevention of Pollution from Ships, and the UNECE Convention on Long-Range Transboundary Air Pollution.

<sup>34</sup> 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: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R0166&from=EN>.

Climate Change (UNFCCC), Long-Range Transboundary Air Pollution Convention (LRTAPC), Montreal Protocol on Substances that Deplete the Ozone Layer and Stockholm Convention on Persistent Organic Pollutants (POPs). Moreover, there are substances that are reported under the requirements of two MEAs (e.g. UNFCCC and LRTAPC with text coloured in blue or Montreal Protocol on Substances that Deplete the Ozone Layer and Stockholm Convention on Persistent Organic Pollutants with text coloured in green in the table). Besides the PRTR legislation, it shall be ensured that this list of substances is integrated in the new atmospheric air protection legislation to be developed. Also, the listed substances shall be part of the list of pollutants to be reported by the operators that will require an environmental authorization of air emissions.

**Substances reported under the PRTR and multilateral environmental agreements to which the Republic of Moldova is a party**

UNFCCC	LRTAPC	Montreal Protocol on Substances that Deplete the Ozone Layer	Stockholm Convention on POPs
1. Methane (CH <sub>4</sub> )	1. Ammonia (NH <sub>3</sub> )	1. Hydrochlorofluorocarbons (HCFCs)	1. Aldrin
2. Carbon monoxide (CO)	2. Non-methane volatile organic compounds (NMVOC)	2. Chlorofluorocarbons (CFCs)	2. Chlordane
3. Carbon dioxide (CO <sub>2</sub> )	3. Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	3. Halons	3. Chlordecone
4. Hydrofluorocarbons (HFCs)	4. Sulphur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	4. Tetrachloromethane (TCM)	4. DDT
5. Nitrous oxide (N <sub>2</sub> O)	5. Arsenic and compounds (as As)	5. Trichloromethane	5. Dieldrin
6. Non-methane volatile organic compounds (NMVOC)	6. Cadmium and compounds (as Cd)		6. Endrin
7. Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	7. Chromium and compounds (as Cr)		7. Heptachlor
8. Perfluorocarbons (PFCs)	8. Copper and compounds (as Cu)		8. Hexachlorobenzene (HCB)
9. Sulphur hexafluoride (SF <sub>6</sub> )	9. Mercury and compounds (as Hg)		9. 1,2,3,4,5,6-hexachlorocyclohexane (HCH)
10. Sulphur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	10. Nickel and compounds (as Ni)		10. Lindane
	11. Lead and compounds (as Pb)		11. Mirex
	12. Zinc and compounds (as Zn)		12. PCDD +PCDF (dioxins +furans) (as Teq)
	13. Aldrin		13. Pentachlorobenzene
	14. Chlordane		14. Polychlorinated biphenyls (PCBs)
	15. Chlordecone		15. Toxaphene
	16. DDT		16. Brominated diphenylethers (PBDE)
	17. Dieldrin		17. Hexabromobiphenyl
	18. Endrin		18. Hexachlorobutadiene
	19. Heptachlor		19. Pentachlorophenol (PCP)
	20. Hexachlorobenzene (HCB)		20. Endosulfan
	21. 1,2,3,4,5,6-hexachlorocyclohexane (HCH)		
	22. Lindane		
	23. Mirex		
	24. PCDD +PCDF (dioxins		

	+furans) (as Teq) 25. Toxaphene 26. Hexabromobiphenyl 27. Pentachlorophenol (PCP) 28. Polychlorinated biphenyls (PCBs)		
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**Table 2. Substances reported under the PRTR and multilateral environmental agreements to which the Republic of Moldova is a party**

The determination and reporting of air emissions required under the *UNFCCC* is carried out by the country in accordance with the Guidelines for National Greenhouse Gas Inventories developed by the Intergovernmental Panel on Climate Change (IPCC). Hence, this list of substances was integrated into the National list of PRTR substances subject to reporting by operators.

The reporting on the *LRTAPC* list of substances is prepared by the country in accordance with the EMEP/EEA air pollutant emission inventory methodology. The *LRTAPC* pollutants were integrated into the national PRTR list of substances. However, several POPs regulated by the *LRTAPC* and prohibited under the Stockholm Convention on POPs are not part of the PRTR reporting as it is explained below.

In accordance with the Annexes A and B of the *Stockholm Convention on POPs*, a list of substances is subject to elimination and restriction. Thus, according to the first country report submitted to the Convention Secretariat in the year 2007, the production and use of Aldrin, Dieldrin, Heptachlor, Toxaphene and DDT were prohibited since the Soviet times during 1970 – 1990. Moreover, the new legislation on chemicals, which is currently under development in the Republic of Moldova in line with provisions of MEAs and EU legislation, shall prohibit the import and production of the listed above substances. Hence, these substances were proposed to be **exempted** from the PRTR reporting and are marked with “\*\*\*” in the *Annex 3* of the paper.

Other POPs listed in the Annex A, B and C of the Stockholm Convention are as follows: Chlordane, Chlordecone, Endrin, Hexabromobiphenyl, Hexabromocyclododecane (HBCD), Hexabromodiphenyl ether and heptabromodiphenyl ether, Hexachlorobenzene (HCB), Hexachlorobutadiene, Alpha and Beta hexachlorocyclohexane, Lindane, Mirex, Pentachlorobenzene, Pentachlorophenol and its salts and esters, Polychlorinated biphenyls (PCB), Polychlorinated naphthalenes, Technical endosulfan and its related isomers, Tetrabromodiphenyl ether and pentabromodiphenyl ether, Polychlorinated dibenzo-p-dioxins (PCDD), Polychlorinated dibenzofurans (PCDF).

Due to the fact that the PRTR list of pollutants does not include a range of substances (i.e. Hexabromocyclododecane and 1,2,5,6,9,10-hexabromocyclododecane (HBCD); Polychlorinated naphthalenes, Tetrabromodiphenyl ether and pentabromodiphenyl ether), it was proposed to incorporate them into the National PRTR list of pollutants (see *Annex 3*, substances number 92, 93, and 94).

Also, it was proposed to supplement the National List of PRTR substances with the chemicals proposed for listing under the Stockholm Convention as follows: Decabromodiphenyl ether, Dicofol, Short-chained chlorinated paraffins, Pentadecafluorooctanoic acid (see *Annex 3*, substances number 95, 96, 97 and 98).

All the POPs listed under the Stockholm Convention are not included in the official Register of substances permitted for import / export and use in agriculture, including individual farms, forestry and



household. That is why efforts shall be undertaken to find out in which other sectors these might be in use.

In accordance with the decisions taken under the *Montreal Protocol on Substances that Deplete the Ozone Layer*, the Republic of Moldova banned the use of Halons, Tetrachloromethane (TCM) and Trichloromethane by the Law No. 852 of 14.02.2002. Hence, these substances were excluded from the list of substances reported under the PRTR. These substances are marked with “\*” in the *Annex 3* of this paper.

With regard to PRTR substances reported as part of **emissions to water**, the *Annex 3* of this report provides the list of water pollutants and measuring methods approved in the Republic of Moldova in comparison with internationally approved measuring methods. As it is reflected in the table, some of substances are not considered for measurement under the national legislation (i.e. Lindane, PCDD +PCDF, Pentachlorobenzene, Tetrachloromethane, Vinyl chloride, Triphenyltin and compounds, Xylenes). Moreover, the measurement standards used for some substances under the national legislation are not in line with the internationally approved measuring methods (i.e. Trichlorobenzenes, Ethyl benzene).

In several instances the approach in the national legislation is not consistent with the European practice and shall be clarified. That concerns few cases when the Moldovan legislation incorporates standards that are not found on the E-PRTR site to be applied for certain pollutants' measurement (i.e. Alachlor, Hexachlorobutadiene, Nonylphenol and Nonylphenol ethoxylates). Another aspect to be clarified concerns the cases on the discharge of several pollutants with wastewater is forbidden in the national legislation (i.e. Halogenated organic compounds, Organotin compounds, Polycyclic aromatic hydrocarbons), while the national legislation does not establish the measurements methods for such pollutants in wastewater and accredited laboratories have no capacity to determine it.

The releases to air generated from diffuse sources of pollution are addressed in the Section 4 of this report.

A *piloting* of the PRTR system will be undertaken within the support of the Global Project on the Implementation of PRTRs as a tool for POPs reporting, dissemination and awareness raising for Belarus, Cambodia, Ecuador, Kazakhstan, Moldova and Peru. The piloting will take place in parallel with the PRTR legislation development and promotion during the year 2017.

In accordance with paragraph 56a) of the draft Regulation on Implementation of the National PRTR, starting with the first reporting year, the operators will report the pollutants listed in its Annex II under the following numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 57, 61, 62, 63, 64, 65, 68, 70, 71, 72, 74, 76, 79, 82, 83, 88, 90, 91, 92, 93, 94, 95, 96, 97, 98. The indicated substances are those addressed in the multilateral environmental agreements to which the country is a Party. According to paragraph 56c), all other pollutants shall be reported within five years.

Hence, the operators will report on substances according to paragraph 56a) during the piloting.

### 3.2.2 Procedures for reviewing, adding, or deleting substances from the PRTR list



In accordance with paragraph 56a) of the draft Regulation on Implementation of the National PRTR, starting with the first reporting year, the operators will report the pollutants listed in its Annex II under the following numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 57, 61, 62, 63, 64, 65, 68, 70, 71, 72, 74, 76, 79, 82, 83, 88, 90, 91, 92, 93, 94, 95, 96, 97, 98. The indicated substances are those addressed in the multilateral environmental agreements to which the country is a Party.

According to paragraph 56c), all other pollutants shall be reported within five years.

The list of substances shall be reviewed in cases when new substances will be fall under reporting requirements in accordance with amendments introduced to multilateral environmental agreements to which the country is a Party.

A review of the substances at national level shall take place after about -5 years of reporting by operators on the entire list of pollutants. The revision shall take into consideration the laboratory capacity to undertake measurements, operator's capacity to provide data as well as the experience of data collecting. The review shall also confirm the relevance of the list of pollutants reported by operators.

The MoE shall undertake the revision in consultation with stakeholders.

### **3.3 Criteria and thresholds that trigger PRTR reporting by facilities/emissions sources**

The *Annex 2* to this report presents the list of sectors, activities per sector and capacity thresholds falling under the PRTR reporting.

The Environmental Pollution Prevention Office (EPPO) collected information on operators per sector during April-June 2016. The information was prepared by the district and municipal structures of the State Ecological Inspectorate (SEI) under the Ministry of Environment (MoE), after being acquainted with the requirements under the PRTR in a working meeting organized by the EPPO and MoE on 30 March, 2016.

The exercise revealed that the number of installations falling under the E-PRTR thresholds totals to about 140 operators. Most of installations do not meet the PRTR thresholds in the sectors, with the exception of the Sector 7 "Intensive livestock production and aquaculture", in which 60 % of reported poultry rearing installations and 70 % of pig rearing installations meet the PRTR capacity threshold. No operators are reported under the activities of the Sector 6 "Paper and Wood Production and Processing" and Sector 9 "Other activities".

Despite the fact that currently not all PRTR economic sectors, activates and thresholds are relevant for the country, it is proposed to keep the entire list within the National PRTR system in case new economic activities are launched in the future.

Moreover, although most of operators in Moldova do not meet the thresholds established under the E-PRTR, it is proposed that all operators, holding environmental permits for air emissions, waste management and wastewater discharge, shall report within the National PRTR system. Such an arrangement is needed to avoid duplicating reporting efforts by operators and to prevent the establishment of a range of reporting systems. Hence, the draft Regulation on Implementation of the National PRTR does not list any thresholds. All operators holding environmental permits for pollutant release and/or transfer shall report to the National PRTR.





The *piloting* of the National PRTR system planned under the Global Project on the Implementation of PRTRs as a tool for POPs reporting, dissemination and awareness raising for Belarus, Cambodia, Ecuador, Kazakhstan, Moldova and Peru shall address only the installations falling under the E-PRTR thresholds.

### 3.4 Facilities or sources exempted from PRTR reporting

During the *piloting stage* of PRTR establishment, the operators that do not meet the E-PRTR thresholds shall be not involved in the reporting.

The exemptions on substances to be reported by the operators are presented in the Section 3.2.1.

### 3.5 Management of confidentiality claims

The confidentiality claims in the National PRTR shall be considered in accordance with the Moldovan legislation which is in line with the provisions of the PRTR Protocol (see Legal gap analysis of the Moldovan legislation against the provisions of the PRTR Protocol), with the exception of the aspect of generic chemical information that shall be addressed in the forthcoming PRTR legislation.

### 3.6 Data elements to be included in the reporting format

The suggested reporting form that includes the data elements to be reported by operators is provided in Romanian language in the *Annex 1* of this report. The main data elements to be covered by the reporting format are provided below.

#### 3.6.1 Facility specific data elements

- Company name;
- Identification code;
- Main activity (number of activity in accordance with Annex 2);
- Designed capacity thresholds for the main activity according to environmental permits for pollutant release and/or transfer;
- Secondary activity (number of activity in accordance with Annex 2);
- Statistical classification code;
- Capacity thresholds for the secondary activity;
- Location, latitude and longitude of the site;
- Number of employees;
- Environmental operating permits;
- Name and telephone number/address of facility contact person;
- Signature of a plant executive or other high-level company official.

#### 3.6.2. Chemical specific data elements

- Identification of the substance (Chemical Abstract Service(CAS) number or other standard chemical classification);
- On-site emissions/discharges to air, water, land (specify units of measurement);
- Off-site transfers (specify units of measurement and quantities recycled, recovered, treated, and/or finally disposed including identification of the receiving locations);
- Explanations of changes in quantities emitted/released or transferred since the previous report.

#### 3.6.3. Specific data on releases to water

- River Basin District Water (e.g. the Nistru River Basin District or the Danube-Prut and the Black Sea River Basin District);



- Sources of water supply: surface/underground;
- The purpose of water use;
- Location of water intake and wastewater discharge (preferably, latitude and longitude);
- Substance released into water (kg/year);
- Accidental release to water (kg/year);
- Laboratory analysis (measurement), estimation or/and calculation methods used for determination of the quantity of discharged chemical substances (M, C, E).

#### 3.6.4 Specific data on releases to air

- Substance released into air (kg/year);
- Accidental release to air (kg/year);
- Laboratory analysis (measurement), estimation or/and calculation methods used for determination of the quantity of discharged chemical substances (M, E, C).

### 3.7 Emissions Measurement/Calculation/Estimation Methods

The reported data shall be prepared base on measurement, calculation or estimation of releases and off-site transfers.

#### 3.7.1 Measurement methods

The release data based on measurements will be classified with the letter “M”.

#### Emissions to water

The reporting by operators of wastewater quality is undertaken based on the monthly/annual averages of the results of the physicochemical and bacteriological investigations carried out in accredited laboratories (see Section 2.1 of this report). Additional calculations are needed to convert the results of measurements into annual release data.

The list of currently used measurement methods approved at both national and international levels for releases to water are provided in the *Annex 3* of this report. Due to inconsistencies revealed in the measurement methods applied at national and international levels, it is proposed to provide a transition period to operators and testing laboratories to harmonize their measuring methods to internationally approved standards by setting the year 2020 as the target year for the compliance with the internationally approved standards (See Section 3.2.1).

#### Emissions to air

Currently, the determination of emissions to air from stationary sources of pollution is grounded on Maximum Allowable Concentrations (MAC) and emission standards calculated based on the dispersion of pollutants in atmospheric air using methodologies developed during the Soviet times. The emission standards are provided in the authorizations issued by the State Environmental Inspectorate (see Section 2.1).

The internationally approved measuring methods for air pollutants, which are not yet approved in the national legislation, are provided in the *Annex 3* to this report. It is recommended to provide a transition period to operators and testing laboratories to harmonize their measuring methods of emissions to air to internationally approved standards by setting the year 2020 as the target year for the compliance with the internationally approved standards (See section 3.2.1)



### 3.7.2 Acceptable procedures for calculating emission

The release data based on calculations shall be classified with the letter “C”.

Calculations are based on activity data (fuel used, production rate) etc. and emission factors or mass balances, which are representative for certain pollutants and industrial sectors. In some cases, more complicated calculation methods can be applied, using variables like temperature, global radiance etc.<sup>35</sup>

The internationally approved calculation methods are listed below:

- Estimating anthropogenic emissions methodology developed by the Intergovernmental Panel on Climate Change (IPCC) used to support reporting on greenhouse gases;
- European Monitoring and Evaluation Programme (EMEP)/ Core Inventory of Air Emissions (CORINAIR) atmospheric emissions inventory methodology developed and approved by the UN-ECE/EMEP used for the reporting under the UN/ECE Convention on Long-Range Transboundary Air Pollution Convention (LRTAPC);
- Emission Trading Scheme (ETS) Guidelines for the monitoring and reporting of greenhouse gas emissions issued by the European Commission.

The Republic of Moldova has already experience to apply the EMEP/CORINAIR and IPCC methodologies to report data in the framework of the LRTAPC and UN Framework Convention on climate change (UNFCCC).

In the case of off-site transfers of waste, the calculation of the annual quantity of waste(s) may use factors agreed on international, national or sectoral level which, for example, indicate the waste amount in relation to the material produced or the input of raw material.

As it regards the identification and quantification of releases of dioxins, furans and other unintentional POPs, the methodology is available in the Toolkit for identification and quantification of releases of dioxins, furans and other unintentional POPs developed under the Stockholm Convention on Persistent Organic Pollutants.<sup>36</sup>

The quantification of mercury releases shall be undertaken in accordance with the UNEP Toolkit for identification and quantification of mercury releases<sup>37</sup>. The country has used the toolkit to establish its inventory of mercury releases during the year 2015-2016 with the support of the UNEP Project / GEF Project “Enabling Activity Development of Minamata Initial Assessment in Moldova”.

### 3.7.3 Acceptable procedures for estimating emission

The release data that is based on non-standardised estimations shall be classified with the letter “E”. Estimations are used when the releases are determined by best assumptions or expert guesses that

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<sup>35</sup> European Commission, Guidance Document for the Implementation of the European PRTR, 31 May 2006.

<sup>36</sup> Toolkit for Identification and Quantification of Releases of Dioxins, Furans and Other Unintentional POPs: <http://toolkit.pops.int/>.

<sup>37</sup> UNEP Toolkit for identification and quantification of mercury releases: <http://www.unep.org/ErrorPage.asp?aspxerrorpath=/chemicalsandwaste/Mercury/ReportsandPublications/MercuryToolkit/tabid/4566/Default.aspx>



are not based on publicly available references or in cases of absence of recognised emission estimation methodologies or good practice guidelines.<sup>38</sup>

### 3.8 Assistance or support provided to reporting facilities

#### 3.8.1 Information, instructions, and training activities for reporting industries

The implementation of PRTR information and reporting system requires a targeted assistance and support to reporting facilities/operators that shall encompass the following:

- Development of a Guidance Document on PRTR implementation (available in hard and electronic versions) explaining the legal framework, who has to report, what, how and when to report, methodologies for measurement/calculation/estimation of releases and off-site transfers, quality assurance procedures etc.;
- Development of sectoral guidelines on pollutant release and transfer reporting (available in hard and electronic versions) explaining the methodologies for measurement/calculation/estimation of releases and off-site transfers;
- Posting instructions on PRTR reporting on the PRTR web site as part of the Governmental web site (i.e. [www.prtr.gov.md](http://www.prtr.gov.md));
- Organization of sectoral training activities to introduce the PRTR information system, to teach and practice the methodologies for release and off-site determination and reporting;
- Appointment of civil servants in charge to provide help and assistance to operators on PRTR-related reporting within the competent authority.

#### 3.8.2 Assistance and services to be provided during the first reporting cycle

In the first reporting cycle, the availability of staff within the competent authority for the instruction of operators as well as of sufficient printed versions of the above-mentioned guiding documents will be crucial to the success of the PRTR implementation.

## 4. Treatment of non-point and non-reporting point sources of emissions

The sources addressed under this category include:

- non-sanitary and illegal landfills;
- transport emissions;
- agricultural activities (i.e. use of pesticides and fertilizers);
- livestock farms with unorganized surface and waste water discharge.

It is proposed to cover all diffuse sources listed above in the National PRTR system.

### 4.1 Definitions of non-point, diffuse, and non-reporting sources

The PRTR Protocol provides the following definition:

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<sup>38</sup> European Commission, Guidance Document for the Implementation of the European PRTR, 31 May 2006.



**Diffuse sources** mean the many smaller or scattered sources from which pollutants may be released to land, air or water, whose combined impact on those media may be significant and for which it is impractical to collect reports from each individual source.

#### 4.2 Procedures for estimating emissions/releases from non-point, diffuse, or nonreporting point sources

The PRTR competent authority shall be in charge to collect the data on pollution from diffuse sources, process and integrate it into the PRTR information system.

The information on non-sanitary and illegal landfill shall be collected by the municipal and district offices of the State Ecological Inspectorate under the Ministry of Environment.

With the purpose to calculate the transport emissions the PRTR competent authority shall use the relevant information on transport units per administrative-territorial units (i.e. districts) from the State Information Resources Centre "Registru" and fuel used by transport units per administrative-territorial units (i.e. districts) from the National Bureau of Statistics.

The information on use of pesticides and fertilizers and livestock farms shall be collected from the National Agency of Food Safety under the Ministry of Agriculture and Food Industry.

The methodologies of evaluation of emissions from diffuse sources of pollution shall be based on the methodologies developed in the framework of the UNCCC and the CLRTAP.

#### 4.3 Procedures and format for including these emissions estimates in the general PRTR database

The calculation methodologies, procedures and format for including these emissions into the PRTR database shall be integrated in a guiding document to be used by the PRTR competent authority.

The Guidance document shall serve as basis for training the PRTR competent authority how to address the diffuse sources of pollution.

## 5. PRTR Data Management System

The PRTR Data Management System is an electronic register of data objects related to National PRTR System, including the list of pollutants, sources of pollutants, owners and operators of pollutant sources, pollutant emissions, pollutants transfer, accepted emission rate for each type of pollutant, etc.

The PRTR Data Management System will be a custom developed cloud based software solution hosted in a cloud computing environment provided by Government of Republic of Moldova in accordance with GD No. 128 on the Joint Government Technology Platform (MCloud).

The PRTR Data Management System will provide online web forms for data collection. The offline options for data collection will be available as well.

### 5.1. Software and Hardware requirements for PRTR Data Management System

All required infrastructure will be provided from MCloud. No additional hardware will be needed for PRTR Data Management System server side.

The PRTR Data Management System will be accessed through internet using personal computers, laptops or any other devices. The involved institutions and economical entities will be responsible to ensure access to internet and personal computers for their users. The following table shows the minimum and recommended server-side hardware and software requirements:

Component	Application Server		Database Server	
	Min	Recommended	Min	Recommended
CPU (vCore)	2	4	2	4
RAM (GB)	4	8	8	12
HDD (GB) for Storage	50	100	200	500
Operating System	CentOS 7	Windows Server 2012 R2*	CentOS 7	Windows Server 2012 R2*
Software	Apache HTTP Server 2.4.25, hMailServer 5.6		PostgreSQL 9.6.1	

\* The license for Windows Server 2012 R2 is provided free of charge by E Government Center.

**Table 3. Minimum and recommended server-side hardware and software requirements**

### 5.2. Software and Hardware requirements for PRTR Data Management System users' computers

The following table shows the minimum requirements for PRTR Data Management System users' computers.

Component	Min	Recommended
CPU	Intel Pentium dual-core or AMD A4 APU	Intel Core i5 or equivalent
RAM (GB)	2	4
HDD (GB) for Storage	50	80
Networking Hardware:	10/100 Fast Ethernet Adapter / 802.11g or higher WiFi adapter	10/100 Fast Ethernet Adapter / 802.11g or higher WiFi adapter
Operating System*	Windows 7 or earlier	Windows 10
Software*	Antivirus, Microsoft Office 2010, Internet browsers	Antivirus, Microsoft Office 2016, Internet browsers



\*It is users' responsibility to ensure the licenses for Operating system or other software needed to be installed on users' computers in order to access and use PRTR Data Management System.

**Table 4. Minimum requirements for PRTR Data Management System users' computers**

## 6. Administration of the National PRTR System

### 6.1 Institutional responsibilities for data collection and management

In current institutional framework, the responsibility for data collection and management shall be shared between the SEI and SE "Basin Division for Water Management" under the *Apele Moldovei* Agency. In such circumstances, the SEI shall be in charge of the air and waste-related data collection, while the state enterprise shall manage the wastewater related data.

In case the institutional reform will take place as envisioned by the Ministry of Environment, the Environmental Protection Agency, which will take over some competences of the SEI and *Apele Moldovei* Agency, shall become the PRTR competent authority and be in charge of the PRTR-related data collection and management.

A large Governmental reform is planned to take place during 2017-2018. The Government announced that the number of ministries shall be reduced from 16 to 9. During the piloting, EPPO will act as the competent authority. After the Governmental reform, the MoE shall officially appoint a PRTR competent authority or delegate the competency to EPPO.

The PRTR competent authority will be responsible for PRTR Data Management System administration and maintenance.

#### 6.1.1 Specification of procedures and agencies responsible for:

Thus, the competent authority shall undertake the following tasks:

- data collection;
- data verification and quality check;
- error correction;
- support/assistance services for data estimation;
- use PRTR Data Management System with the purpose of:
  - online data collection for diffuse sources;
  - database maintenance.
  - Reporting.

The procedure of data collection, quality assurance and reporting will be described in the Regulation on functioning and operation of the PRTR Database Management System developed by Ministry of Environment and approved by a Government Decision.



### 6.1.2 Staffing and training needs for the operation of data collection and management procedures

The staffing needs for the operation of data collection and management procedures will depend on the institutional option.

The staffing needs for the operation of data collection, management procedures and emission reporting to PRTR is 4 Full-time Equivalent (FTE).

Also, two more FTE shall be considered for administrating and maintaining the PRTR Database Management System

The training shall cover all the tasks to be undertaken by the institution/institutions for the PRTR data collection and management listed under the section 6.1.1.

The following training sessions are recommended:

Training: Using PRTR Database Management System

Training type: class room training

Duration: 40 hours

Participants: at least 3 persons from each agency, max 20 persons per group.

Provider: PRTR Database Management System Supplier

Training: Administrating PRTR Database Management System

Training type: class room training

Duration 24 hours

Participants: 5 persons from PRTR Competent Authority

Provider: PRTR Database Management System Supplier

Training: Online reporting using PRTR Database Management System

Training type: on-line training

Duration 8 hours

Participants: registered users from economical entities

Provider: PRTR Competent Authority

Training: PRTR Data collection and interpretation

Training type: class room training / on-line training

Duration 8 hours

Participants: registered users from agencies

Provider: PRTR Competent Authority

Training: QA/QC of PRTR Data

Training type: class room training / on-line training

Duration 8 hours

Participants: registered users from agencies





Provider: PRTR Competent Authority

### **6.1.3 Infrastructure and budget requirements for the operation of data collection and management procedures**

The PRTR Database Management System will be used for data collection and management procedures. The required infrastructure will be provided by the Government of Moldova in accordance with GD No. 128 on the Joint Government Technology Platform (MCloud).

The PRTR Competent Authority will be responsible to maintain and ensure the operation of data collection and management procedures.

The annual estimated effort for data collection and emission reporting to PRTR is 4 FTE is about 600,000 MDL (equivalent to 30,000 USD) including taxes.

The estimated effort for administrating and maintaining the PRTR Database Management System is estimated to 2 FTE for first two years and 1 FTE for next years.

The annual budget for 1 FTE is about 200,000 MDL (equivalent to 10,000 USD) including taxes.

## **6.2 Institutional responsibilities for data analysis and dissemination**

### **6.2.1 Specification of procedures and agencies responsible for:**

The competent authority shall be in charge of:

- data aggregation;
- data analysis;
- data access and dissemination;
- data use and applications.

The procedures shall be described once the institutional framework will be clarified.

### **6.2.2 Data access and dissemination mechanisms**

The PRTR web page, available to all stakeholders holding access to Internet, will serve as the main sources of pollutant release and transfer data.

The stakeholders with no access to Internet shall be enabled to access the PRTR data on hard copies per request.

Another way of data access and dissemination shall involve the preparation of annual and other specific reports.

The minimum content of the annual report shall include information on sectors and pollutants release and transfer organized by districts and cities. After the first reporting cycle, the annual reports shall provide the trends of pollutant release and transfers.



### **6.2.3 Staffing and training needs for the operation of data analysis and dissemination procedures**

The staffing needs for the operation of the National PRTR system are presented in the Section 6.1.3

### **6.2.4 Infrastructure and budget requirements for the operation of data analysis and dissemination procedures**

The budget requirements for the operation of data analysis and dissemination procedures is included in the Section 6.1.3.

## **6.3 Coordination and enforcement of the national PRTR system**

The framework for the coordination and enforcement of the National PRTR system shall be provided in the PRTR legislation under development.

# **7. National Implementation Plan**

## **7.1 Preparatory activities**

The preparatory activities towards the implementation of the National PRTR System will consist of the following:

1. Development and approval of PRTR legislation, including amendments to the existing legislation.

This activity is described in the Section 2.2 of this paper, while the schedule for development of the requisite legislation is provided in the Table 1. Thus, the legislation development and approval process is planned during the period 2017-2018. It is expected that the PRTR legislation shall enter into force in January 2019 launching the first PRTR reporting cycle.

2. Implementation of the PRTR Database Management System will involve the following stages:
  - Development of Software Concept and Technical Specification will result in Terms of Reference for the Software Supplier.
  - Bidding process and Supplier identification will consist of publication of announcement on Software supplier selection competition, applications' submission, selection process and contract signature with software supplier.
  - Software Analysis and Design shall include the development and approval of the Software Requirements Specification (SRS) and Software Design Document.
  - Software Development shall comprise the software development and its installation on testing environment.
  - Software Testing shall be finalised with software acceptance by beneficiary.
  - Software Deployment to production shall be completed with software configuration in production environment.



- Training on Database administration shall include class room and on-line training sessions.
- Software Installation and Go Production shall be the final stage to be finalized with the PRTR Database Management System launched in production.

3. Piloting of the National PRTR system:

- Review and adjustment of sectoral release, including POPs release determination methodologies to be integrated in the National PRTR Implementation Guideline.
- Development of a National PRTR Implementation Guideline that will comprise information, among others, on data to be reported, reporting procedures, quality assurance and assessment, release determination methodologies etc.
- Organization of training activities for the competent authority and operators is aimed to provide targeted training on PRTR implementation-related topics to the competent authority and operators per sector.
- Pilot testing the reporting format and Data Management System among operators and production plants
- Operating support/assistance services for reporting facilities will be available during the PRTR reporting stage.

Activity	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Implementation of the PRTR Database Management System</b>												
Development of Software Concept and Technical Specification												
Bidding process and Supplier identification												
Software Analysis and Design												
Software Development												
Software												

Activity	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Testing												
Software Deployment to production												
Training												
Software Installation and Go Production												
<b>Piloting of the National PRTR system</b>												
Work on sectoral release determination methodologies												
Development of a National PRTR Implementation Guideline												
Organization of training activities												
Support/ assistance to reporting facilities												
<b>First PRTR reporting cycle</b>												
Data collection from operators												
Data analysis by the competent authority												



Activity	2017				2018				2019																																						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4																																			
Collection of missing data or clarifications																																															
Finalization of the National PRTR																																															
Preparation of annual report																																															

**Table 5. National PRTR System Implementation Plan**

## 7.2 Activities in preparation for the first PRTR reporting cycle

It is expected that the first reporting year under the National PRTR System will be the year 2019. The envisioned preparatory activities shall consist of the following:

- Data collection from operators;
- Data analysis by the competent authority;
- Collection of missing data or clarifications on submitted pollutant release and transfer data;
- Finalization of the National PRTR data collection;
- Preparation of the annual report;
- Dissemination and publication of results.

The schedule of activities for the first PRTR reporting cycle is provided in the *Table 5* above.

## 8. Review Procedures

### 8.1 Responsibilities and procedures for periodic review and update of the national PRTR system

The review and update of the national PRTR system shall take place periodically each three years.

For this purpose the competent authority shall carry out an assessment of the PRTR system performance and identify eventual bottlenecks. The outcomes of the assessment shall be integrated in a report to be made available in both electronic and hard copies. In case changes are proposed to the National PRTR system, these shall be discussed and agreed with stakeholders.



## **9. Recommendations for further development of the PRTR System**

### **9.1. Additional elements to be phased into the PRTR system**

The proposed National PRTR System will be designed in such a way as to allow phasing of additional elements. The system shall be able to generate various standardized reports, provide information on trends, and even provide data for modelling purposes.

The integration of additional elements shall be addressed each three years, when the performance of the National PRTR System will be assessed.

### **9.2 Possible additional applications/uses of the PRTR system**

Since the National PRTR System is envisioned to incorporate data relevant for the UNCCC, Stockholm Convention, CLRTAP and Montreal Protocol, it could support additional applications for the preparation of reporting under the above listed and other multilateral agreements in the future.