IMPLEMENTING A NATIONAL POLLUTANT RELEASE AND TRANSFER REGISTER DESIGN PROJECT

2018 | Guidance Document

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United Nations Institute for Training and Research

Welcome to UNITAR's Guidance Series for Implementing a National Pollutant Release and Transfer Register (PRTR) Design Project

Based on the lessons learned through ongoing activities supporting PRTR development world-wide, UNITAR has developed the following documents in a guidance series intended to facilitate the design and implementation of Pollutant Release and Transfer Registers (PRTRs):

- Implementing a National PRTR Design Project: A Guidance Document
- **Series 1: Preparing a National PRTR Infrastructure Assessment**
- Series 2: Designing the Key Features of a National PRTR System
- Series 3: Implementing a PRTR Pilot Reporting
- Series 4: Structuring a National PRTR Proposal
- Series 5: Addressing Industry Concerns Related to PRTRs
- Series 6: Guidance for Facilities on PRTR Data Estimation and Reporting
- Series 7: Guidance on Estimating Non-Point Source Emissions

To access **additional resources** on various aspects of PRTR design and implementation, see:

unitar United Nations Institute for Training and Research PRTR Platform

UNITAR's PRTR Platform highlights the activities of the UNITAR Chemicals and Waste Management Programme in support of the implementation of PRTRs. The site includes a library of Resources from UNITAR and other international organizations focused on supporting the development of PRTRs. The PRTR Platform also provides access to video training modules on different aspects of the development and implementation of national PRTRs through PRTR:Learn http:prtr.unitar.org

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List of Acronyms

NGOs	Non-Governmental Organizations
NCT	National Coordinating Team
OECD	Organization for Economic Cooperation and Development
POPs	Persistent Organic Pollutants
PRTR	Pollutant Release and Transfer Register
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNECE	United Nations Economic Commission for Europe
UNITAR	United Nations Institute for Training and Research
US EPA	United States Environmental Protection Agency

UNITAR, in cooperation with OECD, the United Nations Economic Commission for Europe (UNECE), and the Secretariat of the Kiev Protocol on PRTRs, has supported developing and industrializing countries in exploring the feasibility of introducing PRTRs as an effective environmental management tool. UNITAR is fostering knowledge exchange in a number of ways: publishing guidance documents, such as this one; and providing training and technical expert support for countries considering or developing new PRTRs.

To further support PRTR systems in industrializing and developing countries, UNITAR continues to update its guidance series on PRTR design and implementation. The guidance series is comprised of this document and seven supporting documents to provide a suggested step-wise approach for undertaking the design of a national PRTR system. The updated version of the UNITAR Guidance Series draws on the lessons learned and experiences from the more than 70 countries that have implemented or are developing a PRTR.

Part A of the Guidance Document provides an introduction to the PRTR concept and the potential benefits to government, industry and the public; an overview of the international policy framework and activities of international organizations related to PRTRs; and brief descriptions of several national PRTR programmes.

Part B provides considerations and actionable suggestions on how countries might organize the process of designing a national PRTR system. A key element of this process is the involvement of all concerned parties, both within and outside of government, to ensure that the national PRTR system will meet intended objectives and the needs of affected and interested parties at the national level.

Part C provides practical guidance on the PRTR design process based on UNITAR's six-stage framework which countries around the world have used to develop their national PRTRs. For each stage, an overview of activities is presented, including the main objective, key tasks involved, guidance questions, and expected outputs.

PART A: Introduction to PRTRs and Relevant National and International Activities

What is a Pollutant Release and Transfer Register (PRTR)?

A Pollutant Release and Transfer Register (PRTR) is a regional or national database of releases and transfers of potentially harmful chemicals and pollutants including information on the nature and quantity of such releases, disposals and transfers. PRTRs include data from point sources of pollution, such as industrial facilities, and many also include data from diffuse sources, such as agricultural operations or transportation activities.

A PRTR is a means for obtaining regular, periodic information about releases and/or disposals and/or transfers of chemical substances and other pollutants of interest and for making this information accessible to those who may be interested and/or affected by it. As such, a PRTR is a tool for promoting efficient and effective policies for environmental protection and sustainable development.

Key features of a PRTR include:

- Industrial facilities quantify and report the amounts of substances released to each environmental medium (air, water, land) or transferred off-site for treatment or disposal;
- Data are collected periodically (usually annually) to allow tracking of trends over time;
- Data may be made available to the public through online search engines or in documents, typically published on a PRTR website, summarizing or interpreting the information and as raw data files; and
- PRTRs vary in pollutants reported, industry categories that must report, and reporting thresholds, however, PRTRs strive to include a core common set of information.

Although a PRTR does not directly regulate emissions, it raises awareness about pollution sources by bringing information on chemical and pollutant releases into the public domain. Making this information accessible enables the public to play a more effective role in influencing decision-making at the community, regional and national levels. In PRTRs around the world, such transparency has created a powerful incentive for reporting facilities to take voluntary measures to reduce pollution.

1 Introduction

Part A of the guidance document provides an introduction to the concept of PRTRs and their potential benefits to government, industry and the public. An overview of the international policy framework for PRTRs and a summary of the activities of international organizations related to PRTRs are also provided. Selected national PRTR systems are described to illustrate how PRTR systems have been adapted to meet the specific needs and circumstances of individual countries. The 2018 update of this document draws on the substantial PRTR resources developed by UNITAR, OECD, and individual countries' PRTR guidance documents. This background information is critical to countries considering the development of a PRTR or that are now working to implement their PRTR programme.

2 Background on PRTRs

Since the 1990s, Pollutant Release and Transfer Registers, known for short as PRTRs, have been established throughout the world to track emissions of potentially harmful chemical wastes, and to make that information available to the public. PRTRs are national or regional environmental databases of regularly-reported data from a range of sources on the releases to air, water and land of a defined set of pollutants.

The idea of establishing a PRTR first emerged in the United States in 1986 in response to the tragic chemical release accident in Bhopal (India). Other countries, including Canada and Australia soon followed in developing their own national PRTR systems. International interest in developing PRTRs further expanded with the 1992 United Nations Conference on the Environment and Development and the adoption of Agenda 21. In 1996, the Organization for Economic Cooperation and Development (OECD) published a Guidance Manual for Governments to assist governments in establishing PRTRs. Since then, OECD has continued to publish PRTR guidance manuals and technical resources, with more than 20 documents in the series.

PRTRs have been established throughout the world to track releases and transfers of pollutants. Initially, a primary goal of PRTRs was to disseminate the information collected to inform the public of the pollutants released in their communities and empower those communities to participate in decision-making that could impact their environment. While strengthening participation by the public in environmentally related decision-making remains a cornerstone of PRTR design, stakeholders have recognized a number of additional benefits of PRTRs including:

- Providing data to support the identification and assessment of possible risks to human health and/or the environment by identifying sources and amounts of pollutant releases and transfers to each environmental medium;

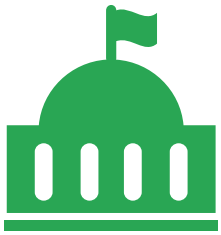
- Encouraging the prevention of pollution at source, e.g., by encouraging implementation of cleaner technologies or chemical substitutes;

- Evaluating the progress of environmental policies and assessing to what extent regional or national environmental goals are or can be achieved;
- Identifying, planning for, and monitoring progress towards sustainability goals; and
- Promoting corporate accountability and compliance with environmental obligations.

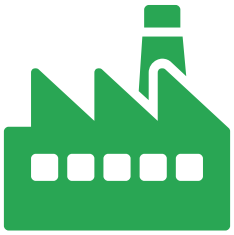
3 Benefits of PRTRs to National Stakeholders

One of the reasons for the success of PRTR programmes is that they create a new flow of information that has a wide range of uses not only for governments, but also for the reporting industries and members of the public. For example, PRTRs provide government authorities with useful data for setting environmental management priorities, enhancing knowledge within industry about inefficient and wasteful production processes, raising public awareness about chemical use in the community and potentially toxic releases, and empowering all stakeholders to participate in environmental decision-making.

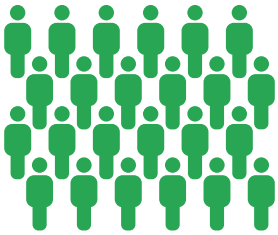
The following are some of the possible uses and benefits of PRTRs from the perspective of three main stakeholder groups:



Government



Industry



Public

3.1 Benefits to Government

A PRTR adapted to the needs of governments allows for tracking the releases and transfers of pollutants over time. With such information, governments can more readily and accurately examine progress in reducing emissions, set priorities for reducing the most potentially damaging releases and transfers, and comply with international reporting requirements.

By providing such information, a PRTR programme can considerably improve the capability of government to meet important environmental management objectives.

National government environmental objectives that can benefit from the PRTR data include:

- Measuring national progress toward risk reduction goals;
- Measuring national progress toward pollution prevention goals;
- Rationalizing and integrating existing media-specific pollution reporting requirements;
- Identifying geographic areas of concern (“hot spots”);
- Tracking trends in chemical-specific emissions;
- Targeting specific chemicals of concern for risk reduction, use reduction or phase-out;
- Tracking progress for risk reduction, use reduction or phase-out of specific chemicals or concern;
- Monitoring enforcement of current regulations;
- Providing consistent data for inventories;
- Providing transparency;
- Providing release, transfer, and other PRTR information to all interested parties for their own end uses; and
- Fulfilling international reporting requirements under various international conventions and agreements, such as the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants (POPs).


Picture by Pixabay

3.2 Benefits to Industry

Through the systematic collection of data required for PRTR reporting, industrial facilities will also benefit from implementing a PRTR. Different advantages are included, such as:

- Using PRTR data to identify opportunities to reduce their releases;

- Maintaining the safety of workers, industrial facilities and production units;
and improving processes and reducing cost, hence making an industry more efficient and competitive, as a result of implementing pollution prevention initiatives such as the use of alternative chemicals, improved chemical use controls, increased equipment efficiency, improved manufacturing processes, and reduced point source and fugitive emissions;

- Incentive for finding innovative solutions and cleaner technologies to improve environmental performances;

- Evaluating an industry progress towards sustainable development by using PRTR data as a metric to record trend;

- Accessing markets with higher environmental requirements;

- Working with communities to improve environmental protection;

- Giving industry the possibility to identify mitigation actions that are more likely to meet with public and government acceptance;

- Strengthening the corporate image and enhancing the relation with the society and communities, as dissemination of PRTR data can help establish trust and confidence in the company among members of the community; and

• Benchmarking industries' performances to that of their peers, which may foster the transfer of technology and knowledge within and among companies.

A study conducted by the U.S. Environmental Protection Agency used data on 370,000 source reduction activities reported to the U.S. Toxics Release Inventory over the past 25 years to quantify the impact of these activities on chemical releases. The study found that source reduction projects implemented by industry prevented the release of between 5 and 15 billion pounds of chemicals over the period analysed (http://prtr.unitar.org/site/document/1312).

Picture by Riccardo Bresciani

3.3 Benefits to the Public

The principle that workers and communities should have access to information on chemical risks has its origin in a straightforward notion: those who are potentially exposed to risks from chemicals are entitled to know about these risks, so they can make informed choices that take into account potential exposures and other risks related to chemicals in the community and workplace. However, benefits from implementing a PRTR go beyond this advantage and can include:

• Providing consistent, accurate and reliable information to facilitate participation in the decision-making process on environmental issues, as well as to promote and monitor the progress of environmental improvement efforts.

• Enabling society to find out about major sources of pollution in their neighbourhood;

• Enhancing democracy and raise awareness on environmental issues;

• Grasping basic knowledges on health issues once being in possession of pollution's information;

• Empowering communities with environmental knowledge;

• Contributing to strengthening technical capacities of future generation, as PRTR training and course can be implemented in universities;

• Giving guidance to development of research and studies on environmental quality and risk-management;

• Providing a source of valuable information to fire departments, police, hospitals and other emergency response professionals who must respond to chemical-related emergencies; and

• Allowing media access to reliable and timely PRTR data that can be used to describe trends and characterize individual facilities, industries and geographic areas.

4 The International Policy Framework for PRTRs

PRTRs have been receiving increasing attention at the international level in a variety of fora. The following are brief summaries of international policy on PRTRs.

4.1 Principle 10 of the Rio Declaration and Agenda 21

The Rio Declaration, as agreed by heads of states in 1992 at the United Nations Conference on Environment and Development (UNCED), provide specific references to the establishment of national emission inventories and the right of the public to access this information. The Principle 10 of the Declaration aims to safeguard the right to a healthy and sustainable environment for present and future generations. This principle also bridged government's accountability with environmental protection. It states that "environmental issues are best handled with the participation of all concerned citizens" and that "*each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes*". In addition, "*states shall facilitate and encourage public awareness and participation by making information widely available*."[1] This Principle will lay the ground for PRTRs. The Agenda 21 was also adopted during the UNCED[2]. Through Chapter 19, which addresses the environmentally sound management of toxic chemicals, Agenda 21 recommends that "*governments and relevant international organizations with the cooperation of industry should improve databases and information systems on toxic chemicals, such as emission inventories programmes*". Chapter 19 also points out that governments should "consider adoption of community-right-to-know or other public information dissemination programmes as possible risk reduction tools". In the absence

[1] http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm

[2] https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf

of such requirements "*industry should be encouraged to adopt, on a voluntary basis, community right to know programmes ... including sharing of information on causes of accidental and potential releases ... and reporting on annual routine emissions of toxic chemicals to the environment*."

4.2 OECD Council Recommendation[3]

In 1996, the OECD Council adopted its "Recommendation of the Council on Implementing Pollutant Release and Transfer Registers", which was revised in 2018. Through this recommendation, OECD encourages Adherents (i.e., Members and non-Members having adhered to the Recommendation) to design and establish PRTRs through a transparent and objective process. The Council recommends that Adherents take into account certain principles in implementing PRTRs which include: fostering enhanced international comparability of PRTR data by incorporating core elements such as triggers for reporting based on a harmonised list of pollutants and sectors; making the data accessible to the public in a timely and regular basis and in a user friendly format such as through an electronic search tool; ensuring the quality and timeliness of the data; and regularly evaluating the effectiveness of the PRTR.

4.3 Aarhus Convention

The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters[4] was adopted in 1998 in the Danish city of Århus at the Fourth Ministerial Conference as part of the "Environment for Europe" process. The Aarhus Convention establishes a number of rights of the public with regard to the environment:

- The right of everyone to receive environmental information that is held by public authorities ("**access to environmental information**"). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. Applicants are entitled to obtain this information within one month of the request and without having to say why they require it. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;

- The right to participate in environmental decision-making. Arrangements are to be made by public authorities to enable the public affected and environmental non-governmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it ("**public participation in environmental decision-making**");

- The right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("**access to justice**").

[3] https://www.unece.org/env/pp/treatytext.html

[4] http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

4.4 Kiev Protocol[5]

Ensuing from the Aarhus Convention, the Kiev Protocol on Pollutant Release and Transfer Registers (adopted in 2003 and entered into force in 2009) is the first legally binding international agreement on PRTR. It is the only legally binding international instrument on pollutant release and transfer registers, meaning that once a country has ratified it, it must implement a PRTR at a national level. However, the number of reported chemicals are at the discretion of the country. Its objective is "to enhance public access to information through the establishment of coherent, nationwide pollutant release and transfer registers 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" (Article 1). In itself, the Protocol covers 64 activities and 86 substances and categories of substances which must be reported. However, countries can choose to add more chemicals to the list if they want. All UN Member States can join the Protocol, including those which have not ratified the Aarhus Convention and those which are not members of the United Nations Economic Commission for Europe (UNECE). It is by design an 'open' global treaty.

4.5 Stockholm Convention on Persistent Organic Pollutants (POPs)[6]

The Stockholm Convention on Persistent Organic Pollutants (POPs) (adopted in 2001 and entered into force in 2004) aims to protect human health and the environment from the 23 listed POPs and, if possible, to ultimately eliminate them. POPs are carbon-based organic chemical substances which remain intact for exceptionally long periods of time (many years); widely distributed throughout the environment; accumulated in the fatty tissue of living organisms including humans and are found at higher concentrations at higher levels in the food chain; and are toxic to both humans and wildlife. The Convention requires parties to exchange information (article 9), facilitate public information, awareness and education (Article 10), report to the Secretariat on the measures they have taken to implement the provision of the convention (Article 15) and periodically update implementation plans (Article 7). Article 10 explicitly acknowledges the value of PRTRs for the collection and dissemination of information on estimates of the annual quantities of the POPs that are released or disposed of. Article 11 encourages parties to undertake appropriate monitoring pertaining to POPs. Countries are using their PRTRs as a valuable tool to assist in monitoring and reporting POPs to facilitate compliance with the Stockholm Convention requirements.

4.6 Minamata Convention on Mercury[7]

The Minamata Convention on Mercury is a global treaty which aims to protect human health and the environment from the adverse effects of mercury that was adopted in 2003 and entered into force in 2017. Major highlights of the Minamata Convention include a ban on new mercury mines, the phase-out of existing ones, the phase out and phase down of mercury use in a number of products and processes (Article 5), control measures on emissions to air (Article 8) and on releases to land and water (Article 9), and the regulation of the informal sector of artisanal and small-scale

[5] http://www.unece.org/env/pp/prtrng.html
[6] http://www.pops.int/
[7] http://www.mercuryconvention.org

gold mining (Article 7).The Convention also addresses interim storage of mercury and its disposal once it becomes waste, sites contaminated by mercury as well as health issues. The parties are required to report annually information on these topics and to exchange information (Article 17), as well as to facilitate public information, awareness and education (Article 18) and periodically update implementation plans (Article 20). Article 18 mentions PRTR as a mechanism for the collection and dissemination of mercury data that parties should use or consider developing. Indeed, "*each Party shall use existing mechanisms or give consideration to the development of mechanisms, such as pollutant release and transfer registers where applicable, for the collection and dissemination of information on estimates of its annual quantities of mercury and mercury compounds that are emitted, released or disposed through human activities*."


Picture by Frederik Sorensen

4.7 United Nations Framework Convention on Climate Change[8]

This Convention is a framework for international cooperation to fight climate change by limiting average global temperature increases and the resulting climate change and coping with inevitable impacts. The ultimate objective is to stabilize the greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (Article 2). This Convention also highlights the principle of shared responsibilities with different capabilities. Indeed, the information required vary depending which party is reporting. The parties, in order to monitor their progress, must report to the secretariat on their own emissions of greenhouse gases and differentiate the different sources of emissions by sectors (Article 12). Most of these pollutants reported and sectors used are usually also present in a national PRTR. The convention also required parties to promote education, training and public awareness related to climate change and encourage the widest participation in the process (Article 4).

[8] https://unfccc.int/

4.8 2030 Agenda: UN Sustainable Development Goals (SDGs)[9]

In 2015, the United Nations published Transforming Our World: *The 2030 Agenda for Sustainable Development*. This Agenda sets forth a plan to "shift the world on to a sustainable and resilient path" by setting 17 Sustainable Development Goals (SDGs) that encompass the economic, environmental, and social dimensions of sustainability. While the SDGs are far-reaching in scope, each one is supported by multiple associated targets that are more specific and actionable. As countries and stakeholders take action toward achieving the SDGs, the plan emphasizes that it will be necessary to measure progress toward the Goals. While recognizing that countries have varying capacity to measure progress, the plan stresses that "data and information from existing reporting mechanisms should be used where possible."

One such existing data source for many countries is their PRTR data. In particular, PRTR data may contribute to measuring progress toward the following targets: 3.9 (substantially reducing the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination); 6.3 (improving water quality); 9.2 (promoting inclusive and sustainable industrialization); 9.4 (upgrading infrastructure and retrofitting industries to make them sustainable); 12.2 (achieving the sustainable management and efficient use of natural resources); 12.4 (achieving the environmentally sound management of chemicals and all wastes); 12.5 (substantially reducing waste generation through prevention, reduction, recycling and reuse) and 16.10 (ensuring public access to information).

4.9 Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean[10]

In 2018, representatives of 24 Latin American and Caribbean countries adopted a binding regional agreement to protect the rights of access to information, public participation and access to justice in environmental matters (Principle 10 of the Rio Declaration on Environment and Development):

[9] http://www.mercuryconvention.org
[10] https://www.cepal.org/en/escazuagreement

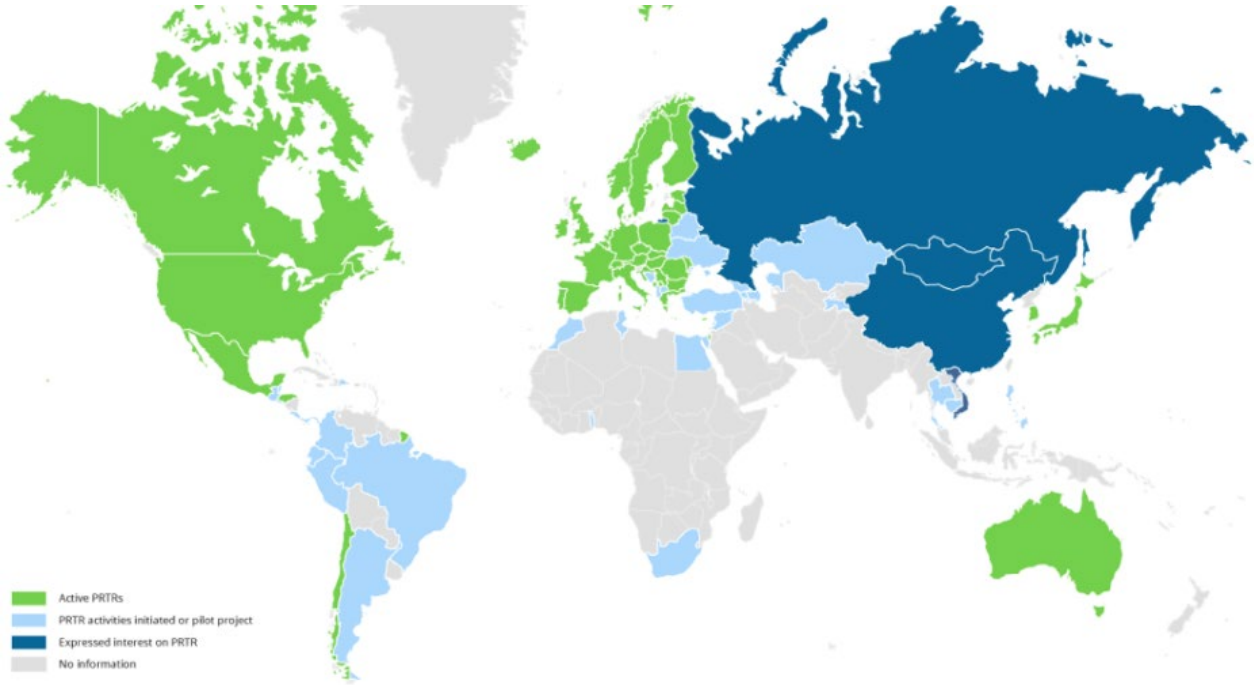
an unprecedented legal instrument for the region. The agreement's objective is "to guarantee the full and effective implementation in Latin America and the Caribbean of the rights of access to environmental information, public participation in the environmental decision-making process and access to justice in environmental matters, and the creation and strengthening of capacities and cooperation, contributing to the protection of the right of every person of present and future generations to live in a healthy environment and to sustainable development" (Article 1). Article 6 states that "Each Party shall take steps to establish a pollutant release and transfer register covering air, water, soil and subsoil pollutants, as well as materials and waste in its jurisdiction. This register will be established progressively and updated periodically." The agreement will be open to the signature of all countries in Latin America and the Caribbean (33 nations) later in 2018.


Picture by Yogendra Singh

5 National PRTR Programmes and Initiatives

Countries throughout the world have implemented PRTR programmes or are in the process of establishing such programmes. The map below illustrates where PRTRs are in place (green), where PRTR activities or a pilot project has been initiated (light blue), and where the country has expressed interest in a PRTR (dark blue). See PRTR.net[11] for the latest version of this map as additional countries continue to initiate and express interest in developing a PRTR. Brief summaries of several national PRTR programmes follow the map.

[11] https://prtr.unece.org/prtr-global-map



5.1 United States Toxics Release Inventory (TRI)

The U.S. Toxics Release Inventory (TRI) was the first regulatory pollutant inventory to be introduced by a national government. The TRI was established under the Emergency Planning and Community Right-to-Know Act of 1986 which requires, inter alia, that industrial facilities handling above threshold quantities of certain chemicals provide the Environmental Protection Agency (EPA) with annual information on the amounts released and transferred off-site. The United States requires TRI reporting from all facilities in the manufacturing sector with 10 or more employees, and which manufacture more than 25,000 pounds or otherwise use more than 10,000 pounds of a listed chemical, with lower thresholds for persistent bio accumulative toxic chemicals (PBTs). Over 600 toxic chemicals are listed on the TRI. For each chemical, reporting facilities must provide data on releases to air, water and land, offsite waste transfers, and information on recycling, energy recovery, treatment and waste reduction activities. The data may be derived from monitoring or direct measurements, or based upon estimates (e.g., mass-balance calculations or estimates obtained by using emission factors).

TRI was established to support the principle of community right-to-know, thus the information that is submitted by facilities is readily accessible and actively disseminated to the public. The U.S. EPA publishes annual TRI reports summarizing the data, and the data are available for download on the TRI Program website.

5.2 Canadian National Pollutant Release Inventory (NPRI)

Established in 1993, Canada's National Pollutant Release Inventory (NPRI) collects information from Canadian industrial, commercial and institutional facilities on their releases (i.e., to air, water, and land), disposals and transfers of pollutants and other substances of concern. The NPRI is legally mandated, and the information collected is publicly accessible. It is a key tool for identifying and monitoring sources of pollution in Canada and a starting point for better understanding how pollutants are entering the Canadian environment. It exists to support priority setting and monitoring of environmental performance measures, to contribute to the compilation of pollution patterns and trends, to provide environmental information in the public interest and to fulfill international reporting obligations.

Not all facilities in Canada have to report to the NPRI. The NPRI requires that facilities that meet certain reporting criteria report their releases, as applicable, of more than 300 substances. Releases and transfers must be reported if one or more NPRI substances was manufactured, processed or otherwise used at a facility during the year, and the total number of hours worked at the facility exceeded the 20,000-hour employee threshold (i.e., approximately 10 full-time employees). There are exceptions, however, and facilities should determine if a report is required regardless of the number of employees.

Data collected are publicly available via the NPRI website.

5.3 Australian National Pollutant Inventory (NPI)

The Australian National Pollutant Inventory (NPI) came into effect in 1998. The goals of the NPI are to:

- Collect a broad base of information on emissions and transfers of substances on the reporting list, and

- Disseminate the information collected to all sectors of the community in a useful, accessible and understandable form.

The NPI contains data on 93 substances that have been identified as important due to their possible effect on human health and the environment. Companies which "handle" listed substances above a specified threshold are required to report total yearly emissions of the listed substances. The data come from facilities like mines, power stations and factories, and from other sources such as households and transport. Facility operators determine their own emissions and transfers, and diffuse emissions from households and other sources like motor vehicles are estimated by government agencies.

The National Pollutant Inventory database is available on the NPI website and allows data users to download the full dataset or explore the information on a map.

5.4 Japan's PRTR

Japan's PRTR requires businesses handling chemical substances potentially hazardous to the environment to estimate the amounts of the substances released and transferred in waste, and to report the data to their local governments. The national government then compiles the data submitted and makes the results public. The aggregate data has been published since the end of FY2002.

Japan's PRTR aims to establish a common background of risk communication among the government, the business operators and the public by providing the data about releases of chemical substances to the environment. These data also help the business operators to manage their own amount of releases, which contribute to reducing environmental risks from chemical substances.

The PRTR website provides stakeholders with compiled data which the national government totaled based on the statute. The data can be browsed and downloaded through Japan's website, which also provides graphs of the PRTR data created by their Ministry of Environment.[12]

5.5 European Pollutant Release and Transfer Register (E-PRTR)

The *European Pollutant Release and Transfer Register (E-PRTR)* is the Europe-wide register that provides easily accessible key environmental data from industrial facilities in European Union Member States and in Iceland, Liechtenstein, Norway, Serbia and Switzerland.

The E-PRTR contains data reported annually by more than 30,000 industrial facilities covering 65 economic activities across Europe. For each facility, information is provided concerning the amounts of pollutant releases to air, water and land as well as off-site transfers of waste and of pollutants in waste water from a list of 91 key pollutants including heavy metals, pesticides, greenhouse gases and dioxins for years 2007 onwards. Some information on releases from diffuse sources is also available.

The register contributes to transparency and public participation in environmental decision-making. It implements for the European Community the UNECE PRTR Protocol[13] to the Aarhus Convention[14] on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters[15].

5.6 Chile's Registro de Emisiones y Transferencia de Contaminantes (RETC)

Starting in 2002, Chile began the evaluation process for developing the RETC. In 2013, the "Regulation of RETC" law was published, defining the objectives, structure, information included, and

[12] https://prtr.unece.org/prtr-global-map
[13] http://www.unece.org/info/ece-homepage.html
[14] http://www.unece.org/env/pp/introduction.html

administration of the RETC. It also established that the database would be accessible to the public, and would analyze and disseminate information on emissions, waste and transfers of potentially harmful contaminants. In 2014, Chile launched Single Window reporting ("Sistema de Ventanilla Única") to integrate the PRTR system with the existing sources of environmental information, such as licenses or operating permits.

6 Activities of International Organizations Related to PRTRs

6.1 Organisation for Economic Cooperation and Development (OECD)

In 1993, the OECD initiated work towards the development of a PRTR guidance manual for governments. Activities were conducted together with other international organizations involved in implementation of Chapter 19 of Agenda 21 (i.e., the World Health Organization (WHO), the United Nations Environment Programme/International Register of Potentially Toxic Chemicals (UNEP/IRPTC), UNITAR, and the International Programme on Chemical Safety (IPCS)), through a process involving all concerned parties (e.g. governments at all levels, industry, citizen groups, non-OECD representatives, etc.). A series of five workshops were held during 1994/95 on the various topics and issues to be covered in the manual. The resulting OECD document entitled Pollutant Release and Transfer Registers: A Tool for Environmental Policy and Sustainable Development: Guidance Manual for Governments was published in early 1996. The manual is designed to assist national governments by providing key considerations and guidance related to the development of a national PRTR system. It is a key document both in regard to international activities and discussions related to PRTRs as well as for PRTR development projects at the country level. Since then, OECD has continued to publish PRTR guidance manuals and technical resources, with more than 18 documents in the series.

6.2 UNITAR's Programme to Facilitate the Design and Implementation of PRTRs in Developing and Industrializing Countries

A. Meeting the Needs of Developing Countries

UNITAR's activities related to PRTRs are designed to support and facilitate the national PRTR design process within developing and industrializing countries that are interested in establishing PRTR systems. The purpose of the guidance materials and support services provided by UNITAR is to support a country-driven, multi-stakeholder approach towards the design of national PRTR systems that are consistent with each country's environmental and development objectives. UNITAR's efforts are closely linked to, and largely based on, the Guidance Manual for Governments developed by OECD on the establishment of national PRTRs. The OECD document provides the substantive basis upon which UNITAR is building a comprehensive training and capacity building programme designed specifically to meet the needs of developing and industrializing countries.

[15] http://prtr.ec.europa.eu/#/home

As part of this programme and to assist countries in the process of designing a PRTR system, UNITAR has developed a 6-stage framework which is meant as a starting point for organizing a national PRTR design project. This suggested framework is summarized in Table 1.

Table 1: Stages of the Suggested PRTR Design Framework

	Activity	Objective
STAGE 1	Identifying the goals of the National PRTR System	To identify and agree on the national environmental objectives for the PRTR system by undertaking consultations with all affected and interested parties
STAGE 2	Assessing the existing infrastructure relevant to a National PRTR	To conduct a comprehensive assessment of the existing legal, regulatory, institutional, administrative and technical infrastructure and available national expertise relevant for designing and implementing a National PRTR system
STAGE 3	Designing the key features of a National PRTR system	To make decisions on key features and characteristics of the National PRTR system in line with the established PRTR objectives
STAGE 4	Conducting a PRTR pilot reporting	To test the PRTR system on a limited scale to gather practical insights into operational challenges and as an input towards finalizing the national PRTR proposal.
STAGE 5	Finalizing the National PRTR proposal	To prepare a final document which outlines the complete specifications of the national PRTR system to be submitted for approval by national authorities
STAGE 6	Organizing a National PRTR implementation workshop	To hold a national workshop to secure policy commitment and launch an action plan for implementation of the national PRTR system

The development of the UNITAR PRTR training and capacity building programme has been based largely upon experiences gained through experience in piloting and implementing PRTRs worldwide since the early 1990s. UNITAR's objectives in assisting countries in designing a national PRTR proposal include supporting a process that involves all interested parties, and continuing to build a better understanding of the challenges associated with introducing PRTRs in developing and industrializing countries.

Guidance on the PRTR Design Process

Each of the six stages of UNITAR's suggested framework for designing and implementing a national PRTR system are covered in detail in Part C of this guidance document. To complement the guidance provided in this document, UNITAR has developed a series of supplementary guides on several of the key stages:

• *Series 1: Preparing a National PRTR Infrastructure Assessment* address Stage 2 of the suggested PRTR design process. It provides advice and information on how to document and evaluate the legal, institutional, administrative and technical infrastructure relevantto a national PRTR system. The National PRTR Infrastructure Assessment integrates available PRTR-related information into one coherent national reference document to be used throughout the PRTR design process.

• *Series 2: Designing the Key Features of a National PRTR System* address Stage 3 of the suggested PRTR design process. It outlines the issues to consider in designing the key features of the national PRTR system and provides references to additional literature addressing various technical issues.

• *Series 3: Implementing a PRTR Pilot Reporting address Stage 4* of the suggested PRTR design process. It provides guidance for the planning and operation of a PRTR pilot reporting to test and fine-tune the proposed national PRTR design prior to full scale implementation. The document covers the content and scope of a pilot reporting trial as well as organizational issues.

• *Series 4: Structuring a National PRTR Proposal* address Stage 5 of the suggested PRTR design process. It provides recommendations for structuring the final national PRTR proposal to ensure that the final document addresses all important aspects of PRTR implementation, including technical issues (e.g. the list of chemicals), as well as institutional aspects, such as the role of various agencies in operating the national PRTR system.

Technical Support and General Reference Materials

UNITAR also developed technical support and guidance materials on specific aspects of PRTR design and implementation:

• *Series 5: Addressing Industry Concerns Related to PRTRs* addresses five of the most common concerns of industry regarding PRTR reporting. It describes how the issues have been addressed in countries with existing PRTR systems and, based on these experiences, provides some observations and practical guidance to assist both government and industry in successfully addressing the concerns.

• *Series 6: Guidance for Facilities on PRTR Data Estimation and Reporting* provides guidance for industry on estimating emissions of pollutants from industrial facilities for the purpose of PRTR reporting. The document provides procedural guidance to help company managers address the organizational and managerial aspects of PRTR data estimation and reporting, and also provides a step-by-step approach and general technical guidance to assist technical staff in estimating pollutant releases/transfers at the facility level.

• *Series 7: Guidance on Estimating Non-Point Source Emissions* provides guidance primarily for governments on estimating non-point sources of pollution, such as agricultural run-off and transportation emissions. It covers sources of emissions, data needed for calculation, and estimation methods.

Box 1: UNITAR'S PRTR programme

UNITAR, through its Programme to Facilitate the Design and Implementation of National PRTRs, is committed to providing assistance to developing countries and countries in economic transition to support a national PRTR design process. This Guidance Document and other UNITAR documents that are referred to throughout the text are considered a starting point and framework for countries for organizing the process of designing a national PRTR.

Some countries may wish to pursue direct cooperation with UNITAR in developing their national PRTR systems. UNITAR is interested in working with countries on a cooperative basis, subject to availability of resources, to support the national PRTR design process and provide technical, informational, and financial support to meet the country's specific needs and circumstances. Countries interested in establishing this type of formal cooperation should contact UNITAR. Following this request, UNITAR will attempt to identify potential donors to support a national PRTR design project.

The following are the responsibilities to be fulfilled by countries that have a cooperative arrangement with UNITAR toward the design and implementation of a national PRTR:

• The government should be committed to implementation of Agenda 21, in particular

those sections that refer to chemicals emissions inventories;

• The government should designate an agency or institute involved in environmental pollution monitoring, control and/or prevention as the National Coordinator for the PRTR design project;

• The National Coordinator should serve as the contact point with UNITAR and ensure that a close dialogue is maintained;

• The PRTR design process should involve all concerned government ministries, as well as organizations and associations outside of government, such as industry associations, universities, research institutes, and public interest groups;

• The government should commit human and financial resources towards the organization and coordination of workshops, consultations, research studies and publications; and

• National industry and public interest groups should be interested in and willing to become directly involved in the national PRTR design effort.

6.3 PRTR Support Activities of Other International Organizations

A. United Nations Environment Programme/International Register for Potentially Toxic Chemicals (UNEP Chemicals/IRPTC)

UNEP Chemicals (IRPTC) serves as a general PRTR information clearinghouse on behalf of the UN system. As part of this effort, UNEP Chemicals (IRPTC) has established an Internet World Wide Web site for information on PRTRs and is building up the contents of the site to include information on national PRTR initiatives, international PRTR-related activities and programmes, and sources of additional information on PRTRs. UNEP Chemicals (IRPTC) is committed to providing information and technical assistance to countries, in particular on data collection, management and dissemination, in the context of national PRTR design projects implemented through the UNITAR PRTR training and capacity building programme. UNEP Chemicals (IRPTC) and UNITAR are also collaborating to explore issues related to the communication, dissemination and use of PRTR data, including the use of PRTR information by communities, industry and NGOs.

B. World Health Organization (WHO)

WHO is developing approaches for estimating releases from various emission sources, integrating and building upon the work of UNEP and UNITAR. At present, WHO is evaluating models, resource needs, required input information and most useful outputs. These data estimation methods are likely to be of particular use to national governments that choose to include data from diffuse sources in their PRTRs, as has been done in the Netherlands.

C. United Nations Industrial Development Organization (UNIDO)

UNIDO views PRTRs as an important tool for measuring and monitoring the criteria for assessing the environmental compatibility of industrial development. Through its various projects in virtually every industrial sector in many developing countries, UNIDO can play a key role in involving industry in the development and implementation of PRTRs. UNIDO is planning a specific contribution to the PRTR data collection process at the national level through the development of industry specific emission factors as a basis for estimating industrial pollutant releases.

D.World Wildlife Fund (WWF)

WWF has been actively involved in international activities related to PRTRs. In particular, WWF played a key role in organizing the efforts of non-governmental organizations during the develop-

ment of the OECD Guidance Manual for Governments by coordinating NGO involvement in the OECD workshop series. WWF has also helped to create an international right-to-know NGO network. In 1995 WWF published a key document on PRTRs entitled A Benchmark for Reporting on Chemicals at Industrial Facilities. WWF is also supporting research and pilot projects in developed and developing countries to assess the potential for PRTRs to reduce toxics use, to ensure that community groups will have the capacity to use PRTR-type information when it becomes available, and to assist communities in obtaining this information where it is not yet available.

7 For more information

Many additional resources are available to assist with the design and implementation or PRTRs through UNITAR's PRTR Platform and through PRTR.net:

UNITAR's PRTR Platform[16] highlights the activities of the UNITAR Chemicals and Waste Management Programme in support of the implementation of PRTRs. The site includes a library of Resources[17] from UNITAR and other international organizations focused on supporting the development of PRTRs. The PRTR Platform also provides access to video training modules on different aspects of the development and implementation of national PRTRs through PRTR:Learn[18].

The PRTR.net[19] website provides a global portal to PRTR information and activities from around the world. The website aims to assist countries in the development, implementation and improvement of PRTR programmes by providing access PRTR data worldwide and PRTR resources for authorities, industry, the public, and researchers. It was developed and is maintained by the Work Group on PRTRs of the Organisation for Economic Co-operation and Development (OECD), in cooperation with the United Nations Economic Commission for Europe (UNECE).

[16] https://prtr.unece.org/prtr-global-map
[17] http://www.unece.org/info/ece-homepage.html
[18] http://www.unece.org/env/pp/introduction.html
[19] https://prtr.unece.org/

PART B: Organizing the National PRTR Design Project

1 Introduction

This part of the guidance document (Part B) provides suggestions for organizing a national PRTR design project. These suggestions focus on the coordination and groundwork that precedes the six stages of UNITAR's suggested framework for designing and implementing a national PRTR system (covered in Part C). As a roadmap, Box 2 lays out the typical PRTR design process including how this groundwork leads into the six stages presented in Part C.

Box 2: A Typical PRTR Design Project

Following the initial commitment at the national level to pursue a PRTR programme, an agency or institution that will serve as the National Coordinator throughout the design process is identified. At this point, consultations with the various stakeholders (governmental ministries, industry, non-governmental organizations, etc.) are initiated to raise awareness of the PRTR project and to identify preliminary objectives of the PRTR system. The consultative process may take place through a national workshop, a series of regional workshops, or on a more informal basis.

Once awareness-raising and initial consultations have taken place, a National Coordinating Team (NCT) is established. The NCT is a core group of representatives from key stakeholder groups which have an interest in the national PRTR system. In order to clearly define its role and to ensure momentum throughout the design process, the NCT develops a Terms of Reference designating specific tasks, time frames and responsibilities. The NCT will undertake the tasks and activities involved in designing the national PRTR system including articulating the goals of the PRTR (covered in Stage 1). One of the first tasks of the NCT is to undertake a comprehensive assessment of the existing legal, institutional, administrative and technical infrastructures relevant to the PRTR, and to compile this information into a National PRTR Infrastructure Assessment Report (Stage 2). Once this groundwork has been laid, specific technical issues related to the structure and implementation of the PRTR system are identified and the key features of the PRTR system are designed, drawing upon the input of concerned parties (Stage 3).

At this point, a PRTR pilot reporting is conducted as a means for testing and fine-tuning the preliminary PRTR design (Stage 4). After the NCT has incorporated the results and feedback from the pilot reporting trial into a revised version of the PRTR design (Stage 5), to be presented at a national workshop (Stage 6). The National PRTR Implementation Workshop is an opportunity to announce the proposed PRTR system to a wide range of audiences and secure the commitment of key authorities towards implementation of the PRTR. The input received during the workshop (?) contributes to the development of action items for implementing the PRTR system on a national scale.

Key to the success of this process is the active involvement of all concerned parties at the national level. Without broad, multi-stakeholder input, the PRTR proposal may fail to address the concerns of key groups or may not meet the intended national objectives for the system. An important task, therefore, is to secure the involvement of the various interested parties in the process of designing the national PRTR system.

One way to achieve broad participation in the PRTR design process is by establishing a National Coordinating Team (NCT) comprised of representatives from the various interested parties (e.g. government, industry, non-governmental organizations) who together will undertake the tasks and activities involved in designing the national PRTR system.

The following sections discuss some important steps in initiating the national PRTR design project, including the selection of an agency to serve as the National Coordinator throughout the process and some potential strategies for raising awareness and generating policy commitment towards the development of a national PRTR. Suggestions are also provided on how to organize a National Coordinating Team by identifying the key stakeholders, initiating a productive dialogue among them, assigning roles and responsibilities, and finally creating a PRTR design work plan that can deliver a national PRTR system within the specified time frame.

2 Starting the PRTR Design Project

Laying a solid foundation for the national PRTR design project will help ensure the successful development of a PRTR design proposal. Tasks involved in this initial groundwork include identifying the entity that will serve as the National Coordinator and raising the awareness of and consulting with the various stakeholders that are likely to be involved or concerned with the process.

2.1 Selecting the National Coordinator

The National Coordinator is the agency that is responsible for organizing and facilitating the national PRTR design project. The National Coordinator acts as the central coordinating point within the country and serves as the liaison to outside organizations. The National Coordinator should be located in a national ministry or agency which is responsible for, or closely associated with, the monitoring and/or regulation of emissions of pollutants to the environment.

Once the National Coordinator has been selected, an individual within that agency should be identified to serve as project coordinator. This person should have a clear understanding of PRTRs and be able to work effectively with other ministries and stakeholders, both within and outside of government.

The leading agency responsible for introducing the initial concept of developing a PRTR might be a natural candidate to serve as the National Coordinator. In the case in which there are several agencies that are potential candidates, discussions should be held among them to determine

what qualifications and capacities the National Coordinator should ideally possess. The national coordinating agency should be selected based on those criteria. Some key questions in defining these criteria might include:

1. What will be the role and function of the National Coordinator within the national PRTR design project?

2. What type of agency (e.g., regulatory, permitting, monitoring, etc.) should serve as the National Coordinator? In which ministry should the National Coordinator be located?

3. Who might serve as the project coordinator within the coordinating agency and what are their responsibilities and level of authority?

4. What resources and services of the agency or ministry selected as the National Coordinator will be required to conduct the various activities and tasks associated with coordinating the national PRTR design effort?

2.2 Increasing Awareness of PRTR

Another important initial step in the process of designing a national PRTR system is to raise awareness among the various parties of interest regarding what a PRTR system is, what opportunities it can provide, and the implications and responsibilities it holds for those who will be involved in and affected by its implementation. The experiences of countries that have designed and implemented PRTR systems indicate that an effective awareness raising and communication effort, combined with broad-based consultations with stakeholders, should be undertaken by the National Coordinator prior to establishing any formal structure for overseeing the development of the national PRTR. This awareness raising and communication efforts contribute to the establishment of a national team that can effectively lead the PRTR design project.

Due to the variety of stakeholders in a national PRTR design process, it is useful to tailor the awareness raising strategy to the particular situation and concerns of each stakeholder group.

Some issues to consider in developing an awareness raising strategy include:

1. What is the message to be conveyed to various stakeholders regarding PRTRs and the PRTR design project?

2. How can the PRTR concept be most effectively promoted among the various stakeholders?

3. For each stakeholder group, what are the objectives of engaging in discussion, what are the key issues to be addressed, and what are likely to be their main interests and concerns?

The following are some suggested activities for increasing awareness about the PRTR system and reaching out to the various potential stakeholders.

A. National PRTR Website

Establishing a national PRTR website provides stakeholders with a central location for up-to-date information on the PRTR design process as it develops. To benefit the widest audience, the website can be structured with a public section and a password-protected area. In the public section, regular status updates can be posted along with information, as it is developed, on the objectives, design concepts, and benefits of the PRTR. In the password-protected area, NCT members could access document drafts, submit comments, and access schedules and agendas for upcoming meetings.

After the PRTR is implemented, the site can transition to a public site where the reported data, reporting guidance, and other information can be posted.

B. PRTR Briefing Document

The preparation of a national PRTR briefing document could be useful for facilitating outreach and awareness raising efforts. Such a document might include information on international PRTR activities, a description of what a PRTR is and how it can be used, the potential benefits and objectives of a national PRTR, an introduction to the national PRTR design project, and the importance of stakeholder involvement in the design process. This briefing document could be posted

on the PRTR website and disseminated to various parties of interest as the basis for subsequent meetings and discussions.

C. Meetings

One-on-one conversations with the leaders of key stakeholder groups can be an effective way to inform them of the potential benefits of a PRTR, encourage their support for the PRTR initiative and find out about their concerns and perspectives regarding the development of a PRTR. Meetings can be conducted through conference calls or web conferencing to minimize the costs and time commitments for the participants, however, some meetings should be in-person to accelerate and strengthen the relationship building among stakeholders. Meetings or small seminars can help to enlist the participation of government agencies or industrial associations that may initially perceive the PRTR development effort as contrary to their interests. Such attitudes may be based on a lack of information, which can be addressed through well-targeted communication and educational efforts. It is important to emphasize the opportunities a PRTR can provide for each of the affected groups, and to highlight the potential linkages to other environmental management initiatives. For more information on potential industry concerns, see the Addressing Industry Concerns Related to PRTRs document in this guidance series. Consulting with and encouraging the involvement of various parties of interest throughout the design project will help to ensure that the resulting PRTR system will meet the needs of the country.

D. Awareness Raising Workshop

Some countries have found the organization of a national workshop, and/or a series of regional workshops, to be an effective means for raising awareness and getting concerned parties directly involved in the design project. To be effective, such a workshop should involve a wide range of participants representing the various viewpoints and concerns of all interested parties. Achieving this level of participation will entail considerable outreach to ensure that all stakeholder groups are aware of and are invited to participate in the workshop. During the workshop, background information should be presented and discussions held on the concept of a PRTR system, its potential benefits and applications, and its relevance to national goals and objectives. A national workshop of this nature could be organized with the cooperation of international agencies that have experience with and knowledge of PRTRs.

The desired outcome of these awareness raising efforts is that key participants from national interest groups who are genuinely interested in developing a national PRTR will actively join the PRTR design process. Another desired outcome is the mobilization of interest and commitment of top decision makers. This policy support will be helpful throughout the PRTR design process and during the implementation phase.

2.3 Identifying Concerned Parties

What does it mean to be a "concerned party" in the context of a national PRTR design project? A concerned party or stakeholder can be a governmental ministry, agency, institution, non-governmental organization (NGO), public interest group, or other body concerned about information on pollutant emissions, the related risks to health and environment, and implications of risk reduction efforts. These groups recognize that the decisions made during the PRTR design process could have an impact on their activities or affect issues with which they are concerned.

The concerned parties in a national PRTR design project will vary among countries. In most cases concerned parties will come from four general sectors:

A. Federal, Regional and Local Government Ministries, Agencies or Other Bodies

Concerned governmental entities at the national level may include the Ministry of Agriculture, Commerce, Economics, Energy, Environment, Health, Industry, Justice, Labour, Public Works, Transportation, or other governmental entities responsible for the development and implementation of laws, regulations and policies related to pollution and environmental management.

In some countries, provincial, state, or regional governments also may participate as important stakeholders in the design of the PRTR system. For example, if environmental monitoring typically is the responsibility of individual regions or states within the country, then the national government may be unable to achieve the development of a successful PRTR without obtaining the cooperation and agreement of these entities. Similarly, the municipal governments of large cities may also play a key role in the development and implementation of the PRTR system.

B. Industry Groups and Associations

These may include chemical industry associations, manufacturers associations, and other industrial groups that may be subject to PRTR reporting. Industrial groups that are well organized and interested in improving their capacity to track and reduce emissions of pollutants can be key partners in a PRTR design process. Box 3 addresses the importance, as well as potential benefits, of industry participation in the national PRTR design project.

Box 3: Facilitating a dialogue with industry

Considering the views of industry is important because of industry's key role, not just in the development of a national PRTR system, but also in the ongoing effort to monitor and reduce pollution and chemical risks. A decision-making process that industry perceives as responsive to its concerns is far more likely to gain their support and participation. Industry participation in the PRTR design project is likely to be most successful if potential benefits of cooperation are clearly identified and communicated. Potential benefits to industry of participating in the PRTR design effort include:

- **Simplification of reporting requirements**

In many countries, industry faces a multitude of reporting requirements, with different agencies requiring reports on chemical releases or transfers according to different time-frames and with varying measurement methods and data elements. Participation in designing a multi-media PRTR has the potential to simplify the reporting requirements of industry, thereby saving substantial time and money.

- **Building relationships with government and other companies**

Participation in the PRTR design project can provide companies with a competitive edge as they build relationships with important government and industry partners.

- **Enhancing the company's reputation**

Participation in the PRTR initiative can improve a company's public image and its reputation as a company with a focus on environmental protection and sustainability.

C. NGO and Interest Group Representatives

These may include environmental, consumer or other community-based organizations, labour unions, and other associations that share a concern about releases and transfers of pollutants within the country. Typically, the basis of this concern will be issues regarding human health or environmental risks of emissions and transfers of pollutants.

It may be difficult to determine the appropriate NGO and interest group representatives, particularly if the groups are too numerous for all to be directly involved. Therefore, it may be necessary to establish a mechanism to determine the most qualified or interested NGOs and interest groups or to establish a means for allowing the NGOs and interest groups to determine for themselves who should represent their interests and concerns.

D. Academic and Research Institutions

This group typically includes researchers from major universities as well as representatives of industrial, agricultural, oil or mining research centres and other sources of scientific/technical information on releases and transfers of pollutants.

If the number of concerned parties is very large, it may be impractical to involve everyone. In such cases, it is generally advisable to involve at least one representative from the principal groups that may be affected by the PRTR system and whose views will span the range of relevant perspectives. In some cases, it may be important to include a person or group for political reasons. For example, the presence of a specific individual may be necessary to ensure the cooperation of the national legislature or to facilitate close cooperation with an industry or environmental coalition.

The bottom line is that the views of all groups with legitimate concerns should be included as part of the PRTR design process. All participants should recognize that the PRTR design process is a joint design exercise and not an opportunity for politically motivated lobbying.

3 Establishing the National Coordinating Team

The basis of a successful PRTR design project is the establishment of a clear management structure for overseeing and undertaking the necessary tasks and activities involved in the development of the PRTR system. It is therefore suggested that a National Coordinating Team (NCT) be established with representatives of the various concerned parties within and outside of government. Many of these participants will have been identified during the initial awareness raising activities and consultations.

3.1 The Role of the National Coordinating Team

The suggested role of the National Coordinating Team is to organize and supervise the work towards the preparation of a national PRTR proposal. This proposal should cover in detail all aspects of the design, implementation and operation of the national PRTR system.

Some key issues to consider in establishing the NCT and defining its mandate include:

1. What will be the main roles and functions of the National Coordinating Team?

2. Which governmental ministries and agencies should participate in the NCT?

3. What organizations and interests outside of government should be represented on the NCT?

4. Is it necessary to involve all interested parties or can a smaller number of key representatives be designated?

5. What specific contributions (time, expertise, constructive input, etc.) will be expected from the members of the NCT?

Ideally the national PRTR proposal delivered by the NCT at the end of the design project will not only be sufficiently comprehensive and well-designed but will also have enough policy support for final approval and execution by the pertinent national authorities. The role of the National Coordinating Team therefore involves more than the substantive design of the PRTR system. It also involves an effort to build the required policy support for the actual implementation of the PRTR system in the country. By organizing a PRTR design process that responds to the needs of the various concerned parties and interest groups, the NCT can maximize the chances of a successful implementation.

3.2 Managing an Effective Participatory Process

The basis for an effective, well-coordinated participatory process is clear communication. From the outset, participants in the National Coordinating Team need to understand their responsibilities and know what is expected from them in developing a national PRTR. They should understand that they have an important role to play in designing the national PRTR system and that their input will contribute to the development of a sound, well-designed system. Maintaining effective communication and coordination among concerned parties is an ongoing challenge that the NCT will have to face throughout the design project.

Coordination among a heterogeneous group such as the National Coordinating Team is a subtle and complex process which is constantly shifting in nature and priorities. What may be basic and essential communication to one party may be excessive or unnecessary to another. In addition, the actions and time commitments required of individuals and groups involved in the PRTR design project may vary significantly from one week or month to the next. The NCT must be able to anticipate these emerging requirements to maintain effective coordination and ensure timely accomplishment of design tasks.

In many cases, it will be possible to easily reach agreement and incorporate the input of most parties on specific issues. In other cases, however, simple consensus will not be a realistic goal due to differences in opinion and interpretations among members of the National Coordinating Team.

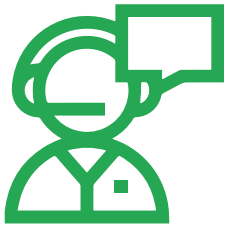
In such cases, the best that can be hoped for is to clarify areas of agreement and disagreement and, with this knowledge carefully recorded, move ahead towards the development of workable and generally acceptable strategies for completing the design of the national PRTR system.

One of the most common impediments to effective coordination among members of the National Coordinating Team is its size. As the number of participants increases, the task of coordinating among them becomes increasingly difficult and issues such as meeting logistics and costs become more complicated. If more than 15 concerned parties are involved, it might be advisable to organize smaller groups (drawn from the national team) to conduct specific tasks in the PRTR design process.

3.3 Organizational Structure of the National Coordinating Team

Once a National Coordinating Team has been convened, an important first step is to agree upon how it will be organized and decide what leadership and administrative positions should be created to ensure that the group will operate effectively. A possible organizational structure for the NCT may consist of the following elements:

Project Coordinator or Manager



Secretary of the National Coordinating Team

Members of the National Coordinating Team

Optional Consultative Committee (subgroup of NCT members to provide assistance to the Project Coordinator)

The following examples offer some ideas on how the various roles and management functions might be divided within this type of organizational structure.

The individual that has lead responsibility for the PRTR design project within the agency that is serving as the National Coordinator, or some other suitable national authority, could assume the role of ***Project Coordinator*** or manager of the NCT. This role would include:

1. General management of the NCT's decision-making and PRTR design activities until completion of the national PRTR proposal;

2. Appointing working groups and ad hoc committees within the NCT to carry out specific design tasks, enlisting the assistance of outside experts, and arranging any other mechanisms necessary to advance the PRTR design work;

3. Convening members, scheduling meetings, and preparing the NCT agenda; and

4. Verifying NCT consensus on submitted recommendations, resolving disagreements and differences, conducting further consultations and work on pending issues until decisions on the various design elements are arrived at by NCT members and incorporated in the final PRTR proposal.

One or several persons may be appointed to act as ***Secretary*** of the NCT. The main role for the Secretary is to assist the Project Coordinator in the following functions:

1. Maintaining a record of all decisions and recommendations adopted by the NCT during the PRTR design project;

2. Compiling draft and final chapters of the national PRTR proposal; and

3. Maintaining a mailing list of government agencies, civil associations, industrial chambers and companies for sending out periodic updates and soliciting comments on the progress of the national PRTR design effort.

If the National Coordinating Team is large, formation of a Consultative Committee may be necessary to assist the Project Coordinator in organizing the work of the NCT. The constituents of such a committee should be those NCT members with the greatest interest in the development of a national PRTR system. The Project Coordinator could appoint the members of the optional Consultative Committee by some method deemed appropriate (voting within the NCT, voluntary nomination, or through direct appointment). The members of the Consultative Committee should be prepared to assume leadership roles along with the Project Coordinator in moving the national PRTR design process forward.

3.4 Responsibilities of the Members of the National Coordinating Team

Active and responsible participation should be expected of all members of the National Coordinating Team in carrying out the necessary tasks involved in designing the national PRTR system. Specific responsibilities may include the following:

Participating in working groups

NCT members should actively engage in whatever design task is assigned to them by the Project Coordinator or other relevant authority in the NCT. They should present their recommendations and conclusions within the time frame stipulated in the NCT work plan.

Maintaining communication with their respective constituencies

NCT members should make every effort to ensure the continued support of their constituencies for the PRTR design effort. It is expected that members will regularly communicate with their constituencies on the progress being made in PRTR development and the positions adopted within the NCT. This will help ensure steady consensus building and broad political support for the final PRTR proposal produced by the NCT.

Contributing their respective expertise to the PRTR design

Members of the NCT should tap their respective individual resources, areas of expertise and institutional contacts to contribute to the PRTR design process.

3.5 Operational Procedures

The following are some issues to consider in developing operating procedures for the NCT. To prevent misunderstandings and inefficiency once the design process is underway, it is important to clearly define how the team will operate.

A. Meetings

Typically, an eighteen-month period should be sufficient to finalize the design of the national PRTR system. It is suggested that during this time the National Coordinating Team conduct at least one meeting per month to review progress on the various design tasks until the national PRTR proposal is completed. Meetings may be conducted via conference calls or web conferencing to minimize the costs and time commitments for the participants, however, some meetings should be in-person to accelerate and strengthen the relationship building among stakeholders.

The design of the national PRTR system can be approached by dividing the work into a series of stages. Each stage will be comprised of specific activities or design tasks that pertain to a certain aspect of the PRTR design. Once the stages of the design process have been identified, the NCT may decide to address each stage sequentially. One or several monthly meetings may be held for each stage depending on the magnitude of the work entailed. During each meeting all recommendations related to the current design task should be reviewed and finalized. Ideally the output of each stage would be a draft chapter for the final PRTR proposal document.

Another possibility is to address the PRTR design stages in parallel. For example, a number of working groups could be established, each one focusing on one of the various PRTR design elements or stages. Each working group would then develop concrete recommendations for the specific element of the national PRTR system for which they are responsible and produce the corresponding draft chapter of the national PRTR proposal. Under this format, the NCT may only meet as a whole once a month to review the progress of the various working groups, address any pending issues, and resolve concerns.

B. Decision-Making Procedures

The Project Coordinator or manager of the NCT must clearly delineate the team´s decision-making procedures. This entails defining which issues are open for discussion and which will be decided in some other way. A sure recipe for dissatisfaction of concerned parties is when input is sought but then is not utilized or considered in making the final decisions.
Likewise, clear rules for joint decision-making within the NCT should be laid out in advance. These rules should cover parameters such as whether a majority vote or some other means will be used to decide on specific proposals or PRTR design choices, who will put up issues for voting and under what circumstances.

3.6 Developing a Work Plan

A key to effective organization of the NCT is the development of a work plan for the entire PRTR design project. This work plan should put all activities and design tasks to be carried out into a specific time frame. A comprehensive work plan should clearly lay out the sequence of activities, as well as activities that may occur simultaneously, for achieving completion of the national PRTR system design during the allotted time frame.

Aside from timing considerations, the PRTR design work plan should also contain a clear assignment of responsibilities for each of the planned activities. If specific PRTR design activities will be delegated to particular working groups or individuals, the work plan should indicate the group or person responsible for each activity or design task. It should also include deadlines for finalizing the work and delivering recommendations and outputs to the National Coordinating Team.

In developing its work plan, the NCT may draw upon the design stages and tasks further described in Part C of this document. For each stage, consider the following guidance questions as a starting point:

1. What activities should take place within the PRTR design project and what is the time frame and sequence of these activities?
2. What should be the contributions and responsibilities of the various members of the NCT in carrying out these activities? Should working groups be formed for specific tasks?
3. Are resources available (both human and financial) to implement all activities to be included in the work plan?

3.7 Preparing a Terms of Reference Document

To formalize the organization of the national PRTR design project it is recommended that a Terms of Reference document be prepared by the NCT. This Terms of Reference document may consist of the following elements:

1. Organizational structure for the National Coordinating Team, including leadership roles and the responsibilities of participating members;
2. Operational guidelines for the National Coordinating Team, including meetings and decision-making procedures; and
3. The PRTR design work plan, with all the planned activities mapped out according to a reasonable time frame and with responsible parties identified for each task.

PART C: Success Stages of the National PRTR Design Project

1 Introduction

This part of the guidance document introduces a framework for the national PRTR design project. Based on experience gained in countries that have implemented PRTRs, there are several basic stages that most countries go through in formulating a national PRTR system. These stages are summarized in the following six stage framework.

1. Identifying the Goals of the National PRTR System
2. Assessing the Existing Infrastructure Relevant to a National PRTR
3. Designing the Key Features of the National PRTR System
4. Conducting a PRTR Pilot Reporting
5. Finalizing the National PRTR Proposal
6. Organizing a National PRTR Implementation Workshop

2 Stages of the PRTR Design Project

This part of the guidance document introduces a framework for the national PRTR design project. Based on experience gained in countries that have implemented PRTRs, there are several basic stages that most countries go through in formulating a national PRTR system. These stages are summarized in the following six stage framework.

Stage 1: Identifying the Goals of the National PRTR System

Objective

To identify and agree on the national objectives for the PRTR system by undertaking consultations with all affected and interested parties

After the initial commitment at the national level to pursue a PRTR programme, the agency acting as the National Coordinator for the PRTR design project should undertake consultations with the various concerned parties (governmental ministries, industry, nongovernmental organizations, etc.) to identify the objectives of the national PRTR system. Taking into consideration the perspectives of the various sectors is important in order to design a national PRTR which is realistic, and which addresses the needs of various parties of interest. A clear strategy should be developed on how to manage this consultation process.

The specific national objectives chosen for the PRTR system will shape and direct the overall PRTR design project. It is very important that the various national stakeholders agree upon and clarify the objectives of the national PRTR system before tackling the actual design of the system. The agreed national objectives should be formalized in writing to serve as a reference during the design process.

The following list of possible objectives of a PRTR might serve as a useful starting point, recognizing that PRTR objectives will be tailored to meet the specific needs of individual countries:

- Identifying and quantifying pollutant releases and transfers at the national and local levels;
- Tracking of substance specific emissions trends;
- Identifying geographic areas of environmental concern;
- Providing environmental information to the public (e.g., in support of a national policy on access to information;
- Promoting the prevention of pollution at its source (e.g., by encouraging cleaner technologies and pollution prevention activities);
- Identifying opportunities to reduce risks to human health and the environment;
- Evaluating the progress of environmental policies;

Integrating and harmonizing reporting requirements;

Integrating and harmonizing reporting requirements;

Promoting corporate accountability and compliance with environmental requirements;

Fulfilling international obligations to report emissions data and statistics;

Broadening of public participation and interest in environmental policy decision-making processes; and

Harmonising key design elements with PRTRs globally to facilitate analyses of international progress in meeting environmental goals and of the effectiveness of environmental policies.

Suggested Tasks

- Consultations with parties-of-interest to identify the objectives of a national PRTR system and raise awareness about the PRTR design project.
- Preparation of a National PRTR Briefing Document and website which includes information on international PRTR activities, potential benefits and objectives of a national PRTR, and an introduction to the PRTR design project; dissemination of this information to all interested parties.
- Formal documentation of agreed national objectives for the PRTR system to serve as a reference throughout the design project.

Key Considerations

- What are the potential benefits of a national PRTR for government, industry, and the public, respectively?
- What objectives have PRTR systems served in other countries? In what ways are these experiences relevant to the national situation?
- How would a national PRTR system advance national environmental management goals?

Suggested Outputs

- National PRTR Briefing Document and website.
- List of objectives for the national PRTR system as agreed upon by the various stakeholders in the country.

Stage 2: Assessing the Existing Infrastructure Relevant to a National PRTR

Objective

To conduct a comprehensive assessment of the existing legal, regulatory, institutional, administrative and technical infrastructure and available national expertise relevant for designing and implementing a national PRTR system

Once national PRTR objectives have been defined, it is useful to conduct a thorough assessment of the national infrastructure relevant to the design and implementation of the national PRTR system. A National PRTR Infrastructure Assessment Report should be prepared summarizing existing national information, programmes and activities in the area of pollution monitoring and emissions data collection.

The infrastructure assessment should identify available expertise and compile relevant national information into one coherent document to be used as a reference during the PRTR design project.

The National PRTR Infrastructure Assessment Report is considered a key document to ensure that the PRTR system is linked to, and builds upon, ongoing programmes and initiatives. Close cooperation and input from all sources of relevant national expertise is considered essential.

A PRTR infrastructure assessment should typically cover the following subject areas:

- National legal and regulatory infrastructure relevant to a national PRTR;
- National institutional and administrative infrastructure relevant to a national PRTR;
- Existing national databases on emissions data or releases/transfers of chemicals to various environmental media;
- Programmes and activities conducted by industry, research organizations and public/environmental interest groups relevant to a national PRTR; and
- Programmes and activities conducted with support of international organizations relevant to a national PRTR.

Suggested Tasks

- Conduct a "legal survey" of existing regulations and reporting requirements concerning the emission of pollutants to various environmental media (air, water, soil) and hazardous waste generation. The survey should also identify the specific legal responsibilities and mandates of each government agency related to collection of emissions data, licensing and permitting of industrial facilities, maintenance of environmental information databases.

- Conduct an "information survey" to map out current information flows within and among various agencies and institutions and identify existing databases of pollutant emissions. This survey should determine who is responsible for the data flow, who has access to the information in these databases, and the current uses of the information.

Suggested Tasks

- Conduct an "industry survey" to determine which companies are currently monitoring or estimating their emissions, and contact industry associations involved in chemicals management and emergency response programs. This survey provides an opportunity to assess the information currently available from industries on releases and transfers of pollutants and the estimated costs for its collection.

- Conduct a "background survey" of existing literature, previous studies undertaken, and available expertise at the national level relevant to the design of a PRTR system.

- Conduct a "stakeholder survey" to identify public and environmental interest groups, research institutes and industrial associations whose activities are relevant to the development of a national PRTR system.

- Compilation of the information gathered through these surveys into a National PRTR Infrastructure Assessment Report.

Key Considerations

- What reporting requirements covering releases and transfers of pollutants exist under the present regulatory system?

- Which government agencies collect data, keep databases, or conduct activities related to releases and transfers of pollutants to various environmental media?

- What emissions databases already exist? What is the current use of these databases? Who has access to the information in these databases?

- Are the existing data collection practices of various agencies consistent and/or compatible with each other? How suitable are they for integration into a single multimedia database?

- What sources of relevant expertise, previous studies and initiatives are available in the country that could be applicable to the design of a PRTR system?

Suggested Output

- National PRTR Infrastructure Assessment Report.
- For additional guidance please refer to the UNITAR document Preparing a National PRTR Infrastructure Assessment (Series 1).

Stage 3: Designing the Key Features of a National PRTR System

Objective

To make decisions on key features and characteristics of the national PRTR system in line with the established PRTR objectives.

A complete national PRTR system consists of several components or elements that need to be designed according to the national goals and objectives for the system. The experience of several countries that have implemented PRTR systems suggests that the different components or elements can be conveniently grouped into the following major clusters of design tasks:

1. Defining the scope of the national PRTR system
2. Addressing the legal implementation of the national PRTR
3. Developing data collection and management procedures; and
4. Developing data analysis and dissemination procedures

Suggested Tasks

1 Defining the scope of the national PRTR system

Defining the scope of the national PRTR system involves the following design tasks:

- Selecting the list of chemicals for reporting;
- Deciding to include point vs. non-point source emissions data;
- Deciding which sectors to include (e.g., manufacturing, resource extraction, service industries, public sector, etc.);
- Specifying reporting thresholds (e.g., facility size, chemical use levels, etc.);
- Specifying exemptions from reporting requirements (if any);
- Defining the data elements to be collected (e.g., facility identification/location, chemical identification, quantity and nature of releases/transfers, chemical use data, pollution prevention and recycling activities, etc.).

The decisions made in defining the scope of the PRTR system should be directly linked to the national objectives for the PRTR system. For example, if the goal is to get a comprehensive picture of all pollutant emissions, then authorities may decide to collect data for both point and non-point emission sources. If the goal of the PRTR is to target a specific sector such as manufacturing industries, then it may not be necessary to include non-point sources in the PRTR system. Similarly, in regard to the chemicals list, if there are specific chemicals or chemical categories that are of concern in the country, the authorities will want to ensure that these are included on the list of substances to be reported.

To realise maximum benefits from a PRTR, most countries design their PRTR to incorporate standardised data elements common to established PRTRs. This approach facilitates the design process by building on the PRTR work done by other countries, while also positioning the PRTR programme to be able to conduct both national and international analyses. Without standardisation, countries lose opportunities to both contribute to and learn from global analyses of PRTR data.

The challenge in defining the scope of the national PRTR system is to consider practical issues such as feasibility and available resources while ensuring that the PRTR will yield the types and depth of information needed to serve the national objectives for the system.

2 Addressing the legal implementation of the national PRTR

The legal implementation of the PRTR system involves addressing the following tasks:

- Ensuring the necessary legal authority for the PRTR;
- Deciding how to integrate the PRTR with existing reporting requirements;
- Deciding on mandatory vs. voluntary reporting; and
- Establishing legal provisions for enforcement.

Various legal issues should be considered to ensure the necessary legal foundation for the PRTR system. These legal issues include establishing the legal authority for requiring reporting of PRTR data from industrial facilities and other sources, particularly if reporting will be mandatory. Opportunities for integrating PRTR reporting with existing legally mandated reporting requirements should also be explored. In addition to streamlining reporting and reducing administrative burden for both government and industry, this will help ensure that PRTR reporting will not be unnecessarily duplicative of existing requirements. Another important legal issue is the handling of data confidentiality claims by industry. Finally, discussions should be held regarding the enforcement mechanisms to be used to ensure compliance with PRTR reporting requirements.

3 Developing data collection and management procedures

The development of data collection and management procedures involves addressing the following tasks:

- Determining whether to develop a stand-alone reporting system or to integrate the PRTR system with an existing environmental data collection system;
- Developing the reporting format to be used for data collection;
- Developing the reporting instructions and estimation guides to be distributed to reporting facilities;
- Specifying the PRTR system software;
- Specifying the required computer hardware;
- Specifying data collection procedures;
- Specifying data quality control and verification procedures; and
- Specifying procedures for database management.

In the process of designing a national PRTR system, the National Coordinating Team will have to develop and assign responsibilities for all data collection and management procedures involved in the operation of a complete PRTR reporting cycle. The NCT will also need to make decisions on which government agency will host the database and the resources and staff needed for its operation.

4 Developing data analysis and dissemination procedures

The development of data analysis and dissemination procedures involves addressing the following tasks:

- Specifying procedures for data aggregation;
- Specifying the various types of analysis that will be conducted with the PRTR data;
- Specifying what tools, if any, will be developed (e.g., data query tools);
- Specifying the format(s) for the posting the PRTR data on the public PRTR website;
- Specifying the outreach methods; and
- Specifying the intended applications and uses of PRTR data.

Among the tasks that need to be addressed in developing data analysis and dissemination procedures are identification of methodologies for extracting useful information from the raw PRTR data to support the objectives and applications that are planned for the national PRTR system. Decisions need to be made regarding the form and mechanisms through which the PRTR data will be made available and disseminated to the public and other interested parties. The power of the PRTR system to serve as an incentive for improved environmental performance depends on the transparency and public availability of the emissions data that are collected.

Key Considerations

· In thinking about the list of chemicals for the PRTR system, what types of chemicals or specific pollutants are of primary concern in the country? What existing national and international lists of chemicals (e.g., OECD's Harmonised List of Pollutants) could be used in developing a list of chemicals for the national PRTR?

· What types of point sources of pollution are of greatest concern? Are non-point sources of pollution (e.g., from agriculture, transportation activities, etc.) also of significant concern? Does the government have enough information to allow the estimation of emissions from these sources?

· What specific information or data elements need to be covered in the national PRTR? Aside from information describing releases/transfers of pollutants and their sources, what other information should be included to meet national goals (e.g. recycling methods, pollution prevention activities, etc.)?

Key Considerations

- How can the experiences and lessons learned from existing data collection mechanisms and current reporting requirements be used to guide the development of appropriate data collection and handling procedures for each step of a PRTR reporting cycle?
- What types of analyses and applications need to be conducted on the PRTR data to achieve national policy goals?
- What government agencies and sectors of the population would be interested in having access to and using PRTR data? How data download formats or data exploration tools will be provided?

Key Considerations

- Complete design specifications for each feature or design element of the national PRTR system.

For further considerations and more detailed discussion on each of the key features and design elements of a national PRTR system, please refer to the UNITAR document *Designing Key Features of a National PRTR System (Series 2).*

Stage 4: Conducting a PRTR Pilot Reporting

Objective

To test the PRTR system on a limited scale to gather practical insights into operational challenges and as an input towards finalizing the national PRTR proposal.

The purpose of the pilot reporting trial is to test the PRTR system on a pilot basis to gain necessary experience directly applicable to the design of the national PRTR. The pilot trial experience can be used to refine the various design elements of the national PRTR system, and to gain concrete insights into the human and financial resources needed for its operation on a national scale. The data collected in the reporting trial might also be used to test the potential uses, analyses and applications that authorities are planning for the national PRTR system.

A number of specific planning and implementation issues need to be addressed in relation to a PRTR pilot reporting. These include: defining the scope of the pilot trial (e.g. by choosing the industry sample and region); ensuring that the necessary technical PRTR elements are in place for operating the trial; deciding what local authorities to involve; and establishing clear responsibilities for all operational tasks involved in the trial. Establishing a cooperative relationship and good communication with the participating facilities is important to ensure a successful reporting trial. Achieving effective coordination between central and regional authorities is also critical for success in this exercise.

The feedback from the pilot reporting trial experience can be extremely valuable to the National Coordinating Team in refining and improving the design of the PRTR system.

Suggested Tasks

- Selecting a suitable region for the operation of the PRTR reporting trial;
- Selecting a representative sample of industrial facilities;
- Ensuring that all preparatory technical work is completed including specification of the chemicals list, data elements to be collected, software, hardware, reporting formats, reporting instructions, and other required infrastructure necessary to operate the PRTR reporting trial;
- Selecting government personnel and dividing roles and responsibilities for the operation of all activities involved in the PRTR reporting trial;
- Organizing a training workshop for government personnel on all aspects of emissions estimation as well as data collection and management procedures required for the reporting trial;
- Establishing a clear communication strategy for interacting with participating industries;
- Organizing a training session for participating industries to provide guidance on the reporting requirements and emissions estimation techniques;

Suggested Tasks

- Providing assistance to reporting facilities on data estimation and completing their reports;
- Oversight of all aspects of the online data collection and data quality review;
- Demonstration of planned policy applications and uses of the data collected during the trial; and
- Evaluating all aspects of the PRTR reporting trial and providing feedback to the National Coordinating Team and other relevant authorities.

Key Considerations

- Will the participation of industries in the reporting trial be voluntary or mandatory? What approach should be used by government to ensure participation (e.g. outreach or enforcement activities)?
- What level of training and types of assistance from government personnel will be needed by the participating industries in order to ensure correct estimation and reporting of PRTR data?
- What types of analyses will be performed with the reported data, how will the evaluation of reporting trial results be conducted, and how will feedback be provided to the national design effort?

Suggested Outputs

- Preparation of a PRTR Reporting Trial Report summarizing the experience gained and lessons learned from the exercise.
- Preliminary assessment of financial and human resource requirements to operate a PRTR system.

Suggested Outputs

- A preliminary set of PRTR data that can be used to demonstrate intended policy applications and uses.
- Recommendations for revisions to the preliminary design of the PRTR system.

Stage 5: Finalizing the National PRTR Proposal

Objective

To prepare a final document which outlines the complete specifications of the national PRTR system to be submitted for approval by national authorities.

The *National PRTR Proposal* is a document that contains all of the design features of the PRTR system, as developed by the National Coordinating Team, including the technical specifications. The proposal may also include an action plan for implementing the PRTR system on a national scale.

Once completed, the national PRTR proposal is likely to undergo a review and approval process by high-level national authorities before the PRTR system can enter the implementation phase. Ideally, enough policy commitment from higher authorities should have been built during the PRTR design process to prevent any major obstacles to its approval.

Suggested Tasks

- Drafting of a National PRTR Proposal which should include the intended national objectives, the complete design specifications for the national PRTR system, institutional responsibilities for its operation, and a plan for its implementation at the national level; and
- Circulation and review of the National PRTR Proposal by key national authorities whose policy support is critical for final approval and implementation.

Key Considerations

- Who should be involved in drafting the National PRTR Proposal?
- What should be the structure and format of the National PRTR Proposal?
- What are some key policy figures that need to be kept informed of the progress of the National PRTR Proposal to maximize the chances for its approval and implementation?
- To whom should the draft proposal document be circulated for review and comments?

Key Considerations

- The final National PRTR Proposal document.

For a more detailed discussion, please refer to the UNITAR document *Structuring a National PRTR Proposal (Series 4).*

Stage 6: Organizing a National PRTR Implementation Workshop

Objective

To hold a national workshop to secure policy commitment and launch an action plan for implementation of the national PRTR system.

Holding a National PRTR Implementation Workshop can be an effective way to finalize the PRTR design process and set the implementation phase into motion. This final workshop should serve to catalase broad policy support for the national PRTR proposal and initiate follow up actions. A well-planned agenda and the active involvement of key leadership figures in the organization and facilitation of the workshop can be instrumental in this regard. The National Coordinating Team will be in the best position to judge which political figures and stakeholder representatives should be

involved in the Implementation Workshop to achieve the required policy support and motivation to ensure timely implementation of the national PRTR system.

Suggested Tasks

- Identification of key participants, speakers, and policy figures to invite to the workshop;
- Development of the workshop agenda; and
- Holding the National Workshop on PRTR Implementation.

Key Considerations

- What are the intended outcomes of the workshop?
- Who should be invited to participate in the workshop?
- What is the role of international organizations in the workshop?
- How can the agenda and organization of the workshop be structured so that the intended workshop objectives will be achieved? How can the workshop be conducted so as to help secure broad policy support for the implementation of the National PRTR Proposal?

Suggested Outputs

- Workshop report endorsing the national PRTR proposal and laying out a plan for the implementation of the PRTR system.
- Broad consensus for implementation of the PRTR system at the national level.

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