Implementation of PRTR in Serbia - activities, problems and challenges, PRTR in other reporting obligation

Nebojsa Redzic
Environmental Protection Agency
Republic of Serbia
Republic of Serbia is a sovereign state situated at the crossroads of Central and Southeast Europe in the southern Pannonian Plain and the central Balkans.

Serbia is a parliamentary republic, with the government divided into legislative, executive and judiciary branches.

The country covers a total of 88,361 km².

Politically Serbia is divided into 4 territories: North Serbia (Vojvodina), Central, East and West Serbia.

There are 138 municipalities and 23 cities.

Population in 2016 – 7,058,322
The Environmental Protection Agency is a body within the Ministry of Environmental Protection, as a legal entity, performs professional tasks related to:

- Development, coordination and management of the national information system for environmental protection (monitoring of the state of environmental factors through environmental indicators, the registry of pollutants, etc.);
- The implementation of the national monitoring air and water quality;
- Management National Laboratory;
- The collection and compilation of environmental data, processing and preparation of State of the environment reports and implementation of environmental policy;
- The development of procedures for the processing of environmental data and their assessment;
- Keeping data on best available techniques and practices and their implementation in the field of environmental protection;
- Cooperation with the European Environment Agency (EEA) and the European Network for Information and Observation (EIONET), as well as other duties specified by law.
Department of National Register of Pollution Sources

National Register of Pollution Sources Department

Industrial and communal pollution Unit

Air Emission Inventories Unit
The National Register of Pollution Sources is a set of systematic information and data on environmental pollution sources. That is a register of all human activities that may have a negative impact on the quality of the environment in a given area. This Register is an information subsystem of the Environmental Information System of the Republic of Serbia, which is managed by the Environmental Protection Agency in accordance with the Law on Ministries and the Law on Environmental Protection. The National Register was established to meet the growing needs of state authorities, as well as the wider community, for information on sources and quantities of polluting substances emitted by the environment.
The most common questions we receive in the Department of National Registry is:

**WHY SHOULD WE SEND DATA?**

**WHY DO WE NEED TO REPORT?**

**WHAT DO YOU DO WITH COLLECTED DATA?**
SIGNIFICANCE OF MEASUREMENT

In respect of military method, we have, firstly, Measurement; secondly, Estimation of quantity; thirdly, Calculation; fourthly, Balancing of chances; fifthly, Victory.

Measurement owes its existence to Earth; Estimation of quantity to Measurement; Calculation to Estimation of quantity; Balancing of chances to Calculation; and Victory to Balancing of chances.

SUN TZU
THE ART OF WAR
IV century before new era
SIGNIFICANCE OF MEASUREMENT

Measurements are crucial.
If you can not measure something, you can not control it.
If you can not control it, you can not manage it.
If you can not manage it, you can not even improve it.

James Harington
one of the world's leading experts in business processes management
The activities of reporting and data collection started in 2007 with the establishment of the National Register of Pollution Sources.

During 2009 and 2010, a complete legal framework for managing the National Pollution Register was adopted.

In 2010 a set of by-laws was adopted, which regulated the reporting system.
It encompasses a series of thematic units:

- PRTR - Pollution Release and Transfer Register;
- Emissions to air;
- Emissions to water;
- Emissions to soil,
- Waste management;
- Products that become special waste streams after use.
The existing part of the register related to air emissions includes a series of databases and inventories such as:

- PRTR,
- Emissions to air in accordance with the Regulation on ELV,
- Large combustion plants,
- Inventory of main pollutants according to CLRTAP,
- Greenhouse Gas Inventory by UNFCCC,
- Inventory of unintentionally released long-lasting organic pollutants – Stockholm convention.
- VOC
- F gases
The existing part of the register related to water emissions includes:

- PRTR,
- Emissions to water from WWTP and communal water discharge system.

The current legal framework is not well developed and it is necessary to change it.
The area of the National Register related to waste management includes the following components:

- PRTR,
- Generation and management of municipal and Industrial waste,
- Packaging and packaging waste,
- Products that after use become special waste streams,
- Special waste streams,
- Medical waist,
- Hazardous waste,
- Landfills and waste landfilling,
- Recovery, recycle of waste
- Imports and exports of waste,
- PCBs and RSV waste,
- Register of issued waste management licenses.
### National Register of Pollution Sources vs PRTR

#### Number of reported waste generated facilities and facilities participating in National Register of Pollution Sources

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#### Number of reported waste generated facilities and facilities participating in PRTR

2011 – 2016 from 285 – 292 facilities
## National Register of Pollution Sources vs PRTR

### Number of submitted reports in National Register of Pollution Sources

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<th>Waste·reuse</th>
<th>Waste·disposal</th>
<th>Waste·import</th>
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*Number of reports submitted for 2016 as of 27.07.2017

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### Number of reported waste generated facilities and facilities participating in PRTR

2011 – 2016 from 455 – 521 reports
National Register of Pollution Sources vs PRTR

Total waste generation amount in National Register of Pollution Sources in 2016

9.197.100 tons

85.5%

Total waste generation amount in PRTR in 2016

7.864.400 tons
SEPA started with implementation of PRTR protocol and E-PRTR directive in 2008.

Adopted PRTR protocol and E-PRTR directive 166/2006 through the Bylaw of National Register of Pollution Sources in 2010.

PRTR protocol ratified in 2011.

IS developed in 2012.

GIS developed in 2016.
PRTR register – Challenges and Problems

Human Capacities in SEPA in 2008

In SEPA only one person was in charge on the PRTR.

Human Capacities in SEPA in 2018

In SEPA there are 3 permanent employees and 4 employees on contract in charge on the PRTR.
PRTR register – Challenges and Problems

The list of PRTR facilities

First list SEPA prepared in partnership with Business Register Agency (BRA) and Environmental Inspectors.

Now SEPA is directly connected with BRA and we are looking for changes in their register.

Now companies register alone to the Agency, and also companies claim their competitors.
PRTR register – Challenges and Problems

The reporting forms

In 2008, SEPA prepared reporting forms for Serbian National PRTR. There are 5 different forms:

1. General data,
2. Emissions to air
3. Emissions to water
4. Emissions to land
5. Waste management.

The forms are not developed in line with PRTR protocol. We asked for much more data than PRTR protocol.
PRTR register – Challenges and Problems

The reporting forms

Why?

We want to avoid the possibility of mistakes, cheating and fake emission data using different methods (drop down lists, mandatory fields etc).

We asked for data which give us opportunity to use emission models to calculate their emissions (air).

Companies from the register of the registry based on the “polluter pays” principle pay annual pollution charges.
PRTR register – Challenges and Problems

The reporting forms

After completing all forms, SEPA asked 25 companies from different PRTR categories to fulfill forms on voluntary basis and give us feedback about their problems to get data and to prepare reports.

After that we prepare official set of forms for PRTR.
PRTR register – Challenges and Problems

The reporting obligations – spreading information

The report submitting entities attempt to evade their obligations in all possible ways, no matter of the field – Air or water emissions, water etc., stating that they were not aware of the obligation to report, that they cannot collect data or that they simply do not want to report.

It is not acceptable that companies do not know about reporting obligations after 8 years from passing the bylaws. It is visible from practice that report submitting entities very successfully exchange information among themselves. For the purpose to overcome this problem, the Agency sends a letter to all report submitting entities each year, early in April, in order to inform them that they did not fulfil their obligations.
PRTR register – Challenges and Problems

The reporting obligations – spreading informations

One of the main problems is that companies do not have reporting continuity, except large operators. Some of them change person submitting the report each year, leading to different results each year.

For the purpose of building capacities of report submitting entities, the employees of the National Register Department hold 15 and 20 seminars a year, independently or in cooperation with the Ministry or Chamber of Commerce on all the report-related topics, especially for the newly established reporting.

For example, 7 seminars in the entire Serbia were held for the Document on waste movement, as new reporting obligation. Average report submitting entities response is over 100, or even 200 attendees.
PRTR register – Challenges and Problems

Existing PRTR register is high level instrument which can be used for data collection and report preparation for different international conventions and other reporting obligations.

PRTR register with minor data changes and extensions can be used for fulfill many other reporting obligations.
PRTR register – Challenges and Problems

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PRTR register with minor data changes and extensions can be used for fulfill many other reporting obligations.
Economic instruments - Polluter pays principle

The ‘polluter pays’ principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment. For instance, a factory that produces a potentially poisonous substance as a by-product of its activities is usually held responsible for its safe disposal.

The polluter pays principle is part of a set of broader principles to guide sustainable development worldwide (formally known as the 1992 Rio Declaration).
Economic instruments - Polluter pays principle

They have a dual function: fiscal and environmental. Their use provides financial resources, as well as an incentive for the private and business sector to align their behavior and activities with the policy objectives of the environment. Therefore, they have an incentive and criminal character.

According Serbian Environmental Law, all PRTR companies need to pay polluter pays fees.

- Emission to air,
- Waste generation and management,
- Products which after life cycle became a special waste streams,
- Emission to water.
National Register of Pollution Sources

PRTR register and other conventions and protocols

- All category 1c. facilities are at same time 1.A.1.a. category in CLRTAP and GHG inventories.
- All category 1c. in PRTR are LCP and LPS facilities and also, IPPC facilities.
- Some other categories also can be used for GHG and CLRTAP reporting.
- QA/QC of some categories in National energy balance used for GHG and CLRTAP reporting.

- EEA State of the Environment Reporting Information System - SERIS
- EEA and other environment indicators.
PRTR register and other conventions and protocols

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PRTR register and other conventions and protocols

- Waste generation
- Waste landfilling
- Waste reuse, recovery and recycled
- Waste export
- Waste import

- Basel convention
- EEA State of the Environment Reporting Information System - SERIS
- EEA and other environment indicators.