

European Pollutant Release and Transfer Register

Regulation (EC) N° 166/2006

April 2009



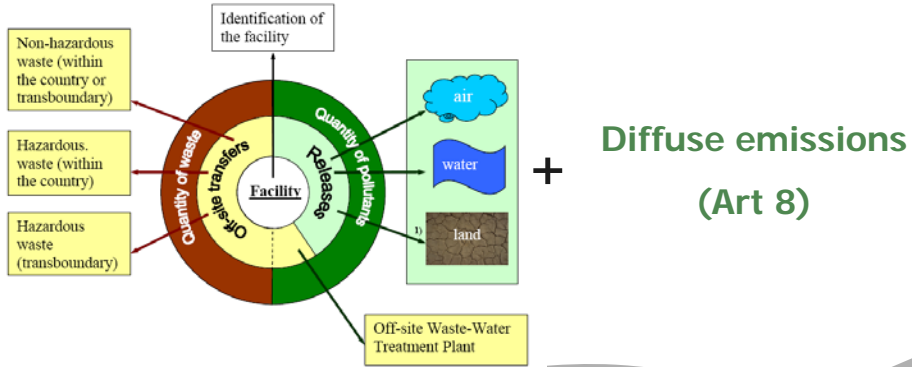
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E-PRTR Regulation: ¿what is it?

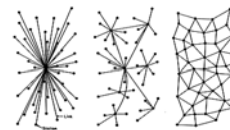
E-PRTR offers a new concept of register,
global and integrated



E-PRTR Regulation: ¿what is it?

E-PRTR is under the **SEIS** principles

(Shared environmental information system – COM(2008) 46 final)



- Information must be managed **as close** to the source **as possible**
- Information must be **gathered once** and be shared
- **Information must be accessible for public authorities**
 - To **inform**
 - To **assess** the environment + **efficiency** of policies
 - To envisage **new strategies**
- **Comparisons in the appropriate level** + promote **participation**
- Fully available for **general public**
- Common and standardized **software tools** (international standards UN/CEFACT), **free and open source**



E-PRTR: ¿what is it?

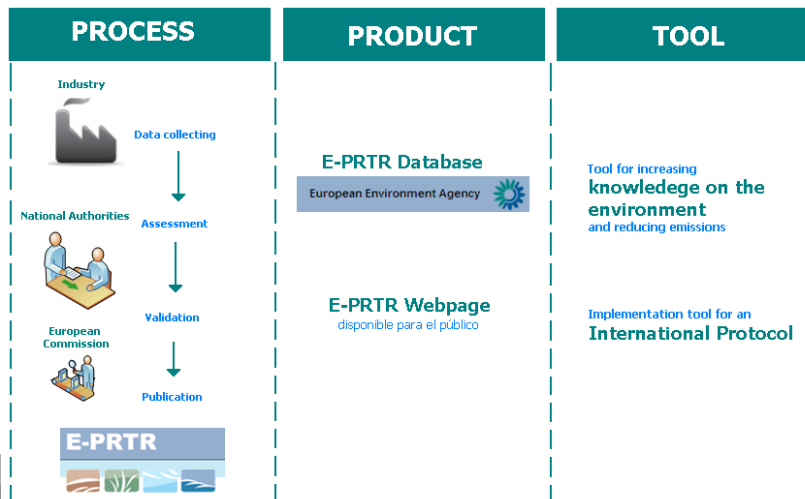
E-PRTR, cost-effective system

- **Data flow**
 - harmonization of data transfer among agents
- **Quality control on data**
 - harmonization, consistency and coherency
- **Databases for policy making**
 - set priorities
 - implementation assessment
- **Information access system**
 - participation and awareness



E-PRTR Regulation: what is it?

So E-PRTR is a...



E-PRTR Regulation: From EPER to PRTR

EPER Register

- Based on IPPC Directive
- 12.000 facilities involved
- Triennial data (2001 and 2004)
- 50 substances y 32 sectors
- Thresholds cover 90% of emissions from industrial facilities
- 350.000 visits to the website 2006

E-PRTR Register

- General register (not only for IPPC)
- First reporting year: 2007
- Annual data from 2009
- 91 substances and 65 sectors (56 under IPPC scope)
- Other data on:
 - Waste and wastewater transfers
 - Accidental releases
 - Releases to land
 - Diffuse emissions



E-PRTR Regulation: activities and substances

Activities

- 9 groups, similar to IPPC Annex 1
 - Energy sector
 - Production/process of metals
 - Mineral industry
 - Chemical industry
 - Waste and Wastewater management
 - Paper and wood
 - Intensive livestock and aquaculture
 - Food and beverages
 - Other (textile, surfaces...)

Substances/pollutants

- 91 substances
 - Heavy metals
 - Pesticides
 - Nitrogen and sulfur compounds
 - Organic compounds
 - Chlorinated, fluorinated and bromated compounds
 - Other



E-PRTR Regulation: European Commission's role

- 1) Coordinate work on **quality assurance** and quality assessment in consultation with the Committee (Art 9)
 - Agreement among COM + EEA + ETC for data checks and review
- 2) **Support implementation** in Member States
 - Guidance for implementation (2006) - Art 14 (22 languages and online)
- 3) Include information on **diffuse sources** assisted by the EEA (Art 8)



E-PRTR: Technical aspects – Data flow

Overview on the **data transfer process**

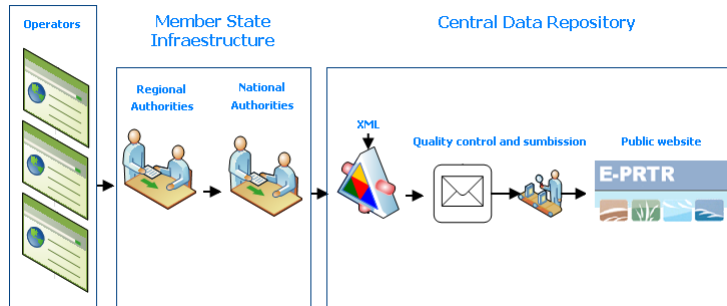
- **National procedure to submit data**
 - From operators to the Competent Authority
- **Annex I and II criteria**
 - Activity + thresholds listed in Annex I
 - If needed, substance + threshold in Annex II
- **Quality assurance and assessment (Art 9)**
- **Confidentiality criteria (Art 11) for environmental information**
- **Emission release determination method (M, C, E)**
- **Statistical codification of activities**



E-PRTR: technical aspects – Data flow

Data upload

- EEA has a Central Data Repository (CDR) which allows MS and other CA to upload data for a wide list of Directives, Regulations...
- EEA's data validation tool creates a XML file which may be accepted for the CDR



E-PRTR: technical aspects – Data flow

Quality assessment and validation rules



- Completeness- compulsory data is not missing
- Valid ranges for all values
- Reasons for confidentiality data are reported
- Data are in the appropriate format (number, length – UN/CEFAC standards)
- Facility is properly located

Technology based on XML ~ EPER

www.eionet.europa.eu/schemas/eprtr



E-PRTR: technical aspects – Web (2009)

Technology

- Database: SQL server
- Web interface: Microsoft.NET and Adobe Flash
- GIS Platform: ESRI (ArcIMS, ArcSDE, ArcGIS server and ArcMAP)
- Open source platform: available for MS and national websites

Functionalities

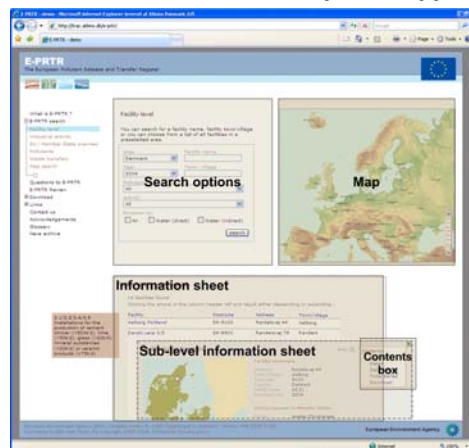
- It keeps EPER functionalities
- It includes new information (waste and wastewater transfers and releases to land)
- New functionalities to data visualisation
 - Geographical comparison (regional level)
 - New predefined queries
- New search options
 - Multicriteria
 - Map tools

New look and feel for the Website



E-PRTR: technical aspects – Web (2009)

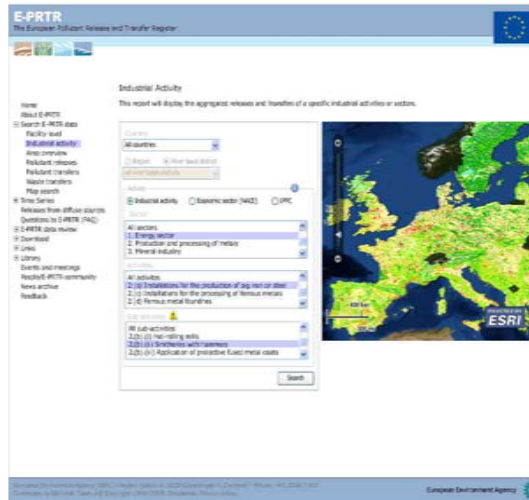
E-PRTR website – “Wikipedia” approach



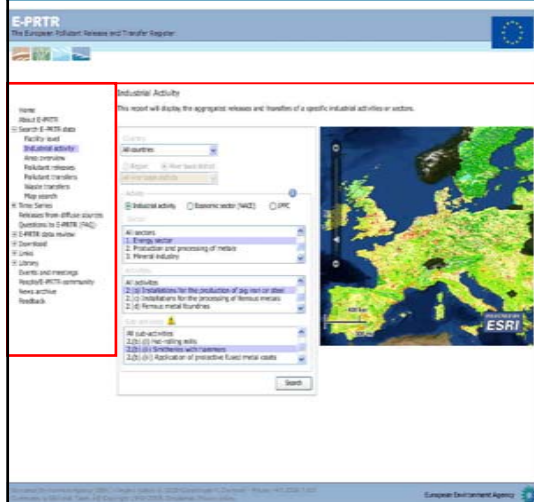
E-PRTR: technical aspects – Web (2009)

New look and feel:

- streamlining controls
- esthetical improvements
- reorganisation of information
- technical update



E-PRTR: functionalities overview I



Main menu



Data accessibility:

- Table queries
- Geographical queries
- Graphical sheets
- Data/maps download

E-PRTR: functionalities overview II

Facility data

The screenshot displays the E-PRTR Facility data search interface. It includes a search form with fields for Facility name, Address, and ZIP code. A map of Europe is visible in the background. Below the search form, there is a 'Facility level / search result' section with a table of search results and a 'Facility level / Summary' section with a detailed view of a facility, including its name, address, and coordinates.



E-PRTR: functionalities overview III

Emission releases results view for a facility EPER vs E-PRTR

The screenshot displays the E-PRTR Emission releases results view for a facility. It shows a comparison between EPER and E-PRTR data. The left side displays a table of emissions by substance, and the right side displays a table of industrial activity pollutant releases.

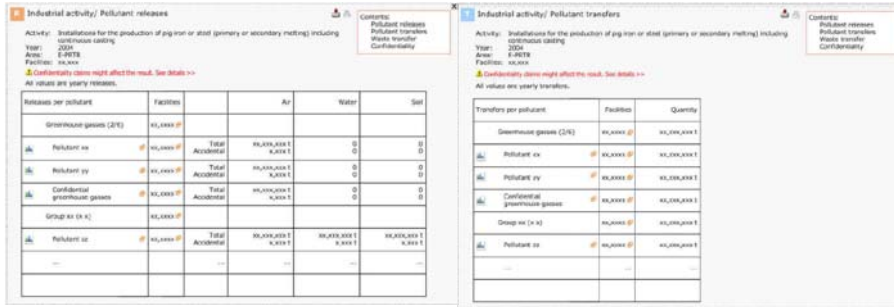
Substance	Direct release	Indirect Discharges (Transfer to air with city sewage water)
Hydrogen, total	3,820.00 t	M
Fluorinated, total	124.00 t	M
Ammonia, and its compounds	0.00 t	M
Chlorine, and its compounds	0.007 t	M
Carbon, and its compounds	12.00 t	M
Nitric acid, and its compounds	3.90 t	M
Zinc, and its compounds	0.20 t	M
Dichloromethane (DCE)	0.03 t	M
Dichloromethane (DCEO)	0.34 t	M
Hydrogenated organic compounds, LAGOS	40.40 t	M
Hydrocarbons, BTMO	4.22 t	M
Hydrogen	2,810.00 t	M
Total Organic Carbon (TOC)	276,000.00 t	M
Chloride	3.54 t	M
Carbonyl, total, CH	67.70 t	M
Fluoride	0.00 t	M
Carbon monoxide, CO	11,400.00 t	M
Carbon dioxide, CO2	3,800,000.00 t	C
Hydrofluorocarbon (HFC)	0.06 t	C
Nitrous oxide, N2O	14,000.00 t	C
Ammonia, NH3	365.00 t	M
Hexafluoroethane, perfluoroethane, perfluoroethane, HFE	602.00 t	M
Nitrogen dioxide, NO2	3,970.00 t	M
Sulfur dioxide, SO2	1,000.00 t	M
Carbon, and its compounds	0.03 t	C
Nitric acid, and its compounds	0.16 t	C
Nitrous acid, and its compounds	0.15 t	C
Zinc, and its compounds	0.20 t	M

Release per pollutant	Facilities	Air	Water	Soil
Greenhouse gases (EPE)	91,000 t			
Pollutant xx	91,000 t	Total	91,000 t	0
Pollutant yy	91,000 t	Total	91,000 t	0
Confidential greenhouse gases	91,000 t	Total	91,000 t	0
Group xx (E, C)	91,000 t			
Pollutant zz	91,000 t	Total	91,000 t	91,000 t

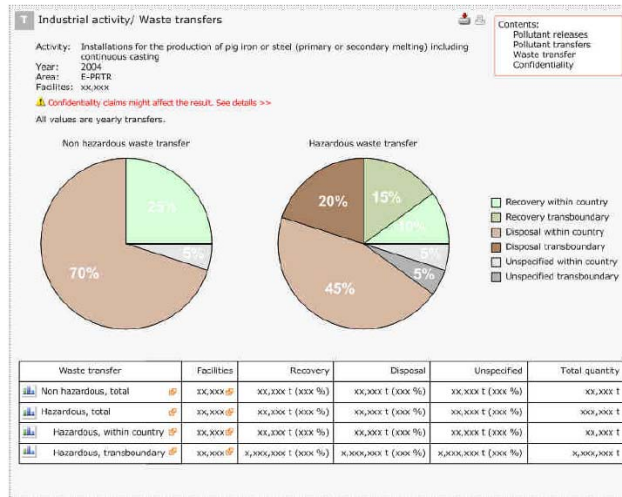



E-PRTR: functionalities overview IV

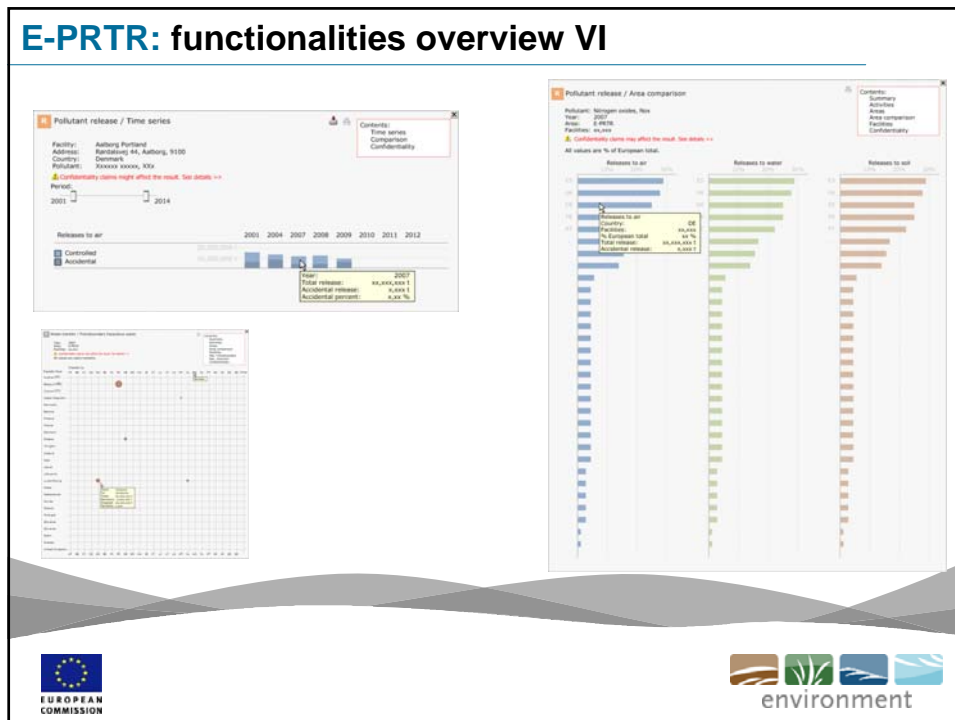
Information is presented separately for “releases” and “transfers”



E-PRTR: functionalities overview V



E-PRTR: functionalities overview VI



E-PRTR: Web content

- **Specific data for each facility**
- **PRTR data submitted for the RS:**
 - ➔ Wastewater releases
 - ➔ Waste and wastewater transfers
 - ➔ Releases to land
- **EPER Data (2001 y 2004) – different treatment for continuity**
- **Releases to air and water from diffuse sources**
- **Links:**
 - ➔ PRTR systems for every reporting country (27 EU MS + EFTA + volunteer RS)
 - ➔ another "PRTR" systems
 - ➔ Facilities' websites
 - ➔ Other Databases related to E-PRTR



E-PRTR: diffuse emissions

■ Previous data inventory

→ http://www.bipro.de/_prtr/sub/purpose_scope.htm

■ Work scheme

→ Working with ETC y JRC

- ETC/ACC air and climate change (<http://air-climate.eionet.europa.eu/>)
 - ETC/SCP sustainable production and consumption
 - ETC/WATER which will apply an internal audit
- EEA (AEMA) coordinates a trilateral action protocol

■ Diffuse emissions to water

→ Data and format identified – will be available en 2009

■ Diffuse emissions to air

→ Data and format identified

→ Information needs to be processed

→ Contract on this issue to make data available by 2010



E-PRTR: diffuse emissions

Data upload will be made through GIS layers

It will be possible to superimpose to the rest E-PRTR data



E-PRTR: a shared effort

- MS (RS) and industrial operators must cooperate to **improve data quality**
- General public and NGOs will be able to be informed and to inform themselves about the importance of industrial emissions through a EU-wide DB, set their views and **participate**
- Watch-dog: public **inputs**, comments and additional **information**
- It offers an opportunity to see **trends** on pollutant emissions and transfers inside and outside of the UE



Conclusions

- **Industrial operators** provide **data** and are responsible for their **quality**
- **Member States (and RS)** are responsible for the assessment of **data quality**
- **The Commission** is responsible for **making data publicly available annually**
- The register provides the **best available information**
- Methodologies must use **international available standard**
- E-PRTR make visible **achievements** in pollution prevention and reduction



For more information

- **Guidance on E-PRTR implementation**
- **DG Environment – Industrial emissions Unit**
<http://www.ec.europa.eu/environment/ippc/index.htm>
- **EPER (in the near future E-PRTR Web)**
www.eper.ec.europa.eu/
www.eper.eea.europa.eu/eper/



Thank you

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