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## Technical Assistance for Capacity Building on European Pollutant Release and Transfer Register (E-PRTR) in Turkey

TR2013/0327.06-01-02/001

### *Technical Assistance for Capacity Building on European Pollutant Release and Transfer Register (E-PRTR) in Turkey*

## Implications for Stakeholder Groups of Turkish PRTR

MoEU, Third Parties, Facilities



Peter Futo

Workshop: 5-9 March, 2018



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# Conceptual framework of impacts



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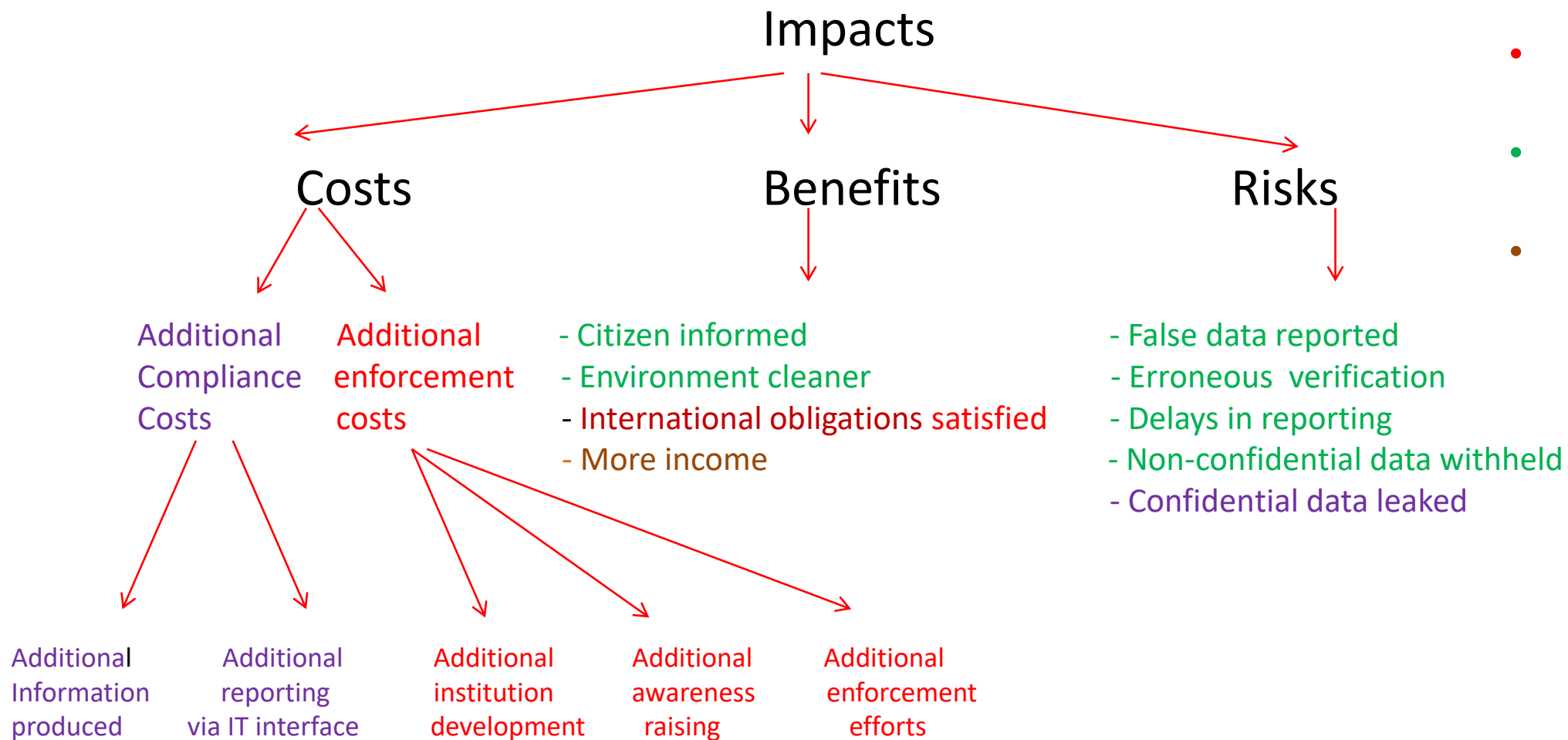


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## Conceptual framework of regulatory impacts of EPRTR



### Stakeholders:

- Industrial Facilities and Utilities
- State and Government
- Society and Environment
- Environmental Consultants





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# Implications for Industrial Facilities





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# Factors limiting E-PRTR compliance costs

E-PRTR is only an information obligation. It is an obligation to report true pollution data, but it is disconnected from the permitting procedure.

- Therefore it does not imply an obligation to reduce pollution.
- Therefore it does not imply an obligation to invest into clean technologies.

No extra E-PRTR-demanded measurement needed.

- Only calculation and estimation.
- Therefore no extra laboratory costs.

Maximum 6000 eligible E-PRTR facilities.

- This is a small fraction of all industrial facilities.



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# Further factors limiting E-PRTR compliance costs

Most E-PRTR facilities will report only a few parameters.

- Typical firms in EU EPRTR database report only zero to 10 pollutants, with a median of 2.

E-PRTR reporting is much easier and simpler than reporting obligations under other environmental legislations.

- E-PRTR report consists only of a set of numbers, no text included.
- E-PRTR reporting will be facilitated by user friendly IT interface.



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# E-PRTR compliance cost: limiting factors by firm size

### Compliance cost estimation by firm size:

- Big firms have large administrative capacity to report.
- Medium sized forms will integrate this obligation into their existing contracts with environmental consultants.
- Small firms are not covered by E-PRTR.



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### **E-PRTR compliance cost: Conclusions**

- Information related work, attributable to E-PRTR, additional to other environmental regulations will be limited.
- The extra, E-PRTR specific, E-PRTR-attributable information costs will be negligible. No significant administrative burden expected.
- This statement is true in comparison with compliance costs of other environmental regulations.
- E.g. the total costs of adapting to IPPC / IED will be about 1000 times more.



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### Workshop interviews: typical responses to **impacts** from selected representatives of sectors

Representative of	Estimation of impacts
Coal fuel based energy generation plant	No significant extra costs. Relevant pollutants: greenhouse gases.
Textile company	No significant extra costs. Relevant medium: water. Relevant technology: dyeing and washing.
Chemical company (polyester production for the textile sector)	No significant extra costs. Relevant pollutants: Volatile Organic Compounds and Particulate matters.
Steel production company	Some extra costs. Main pollutants are already being measured and registered by continuous measuring instruments. But they are measured on the level of the company, not on the level of the individual facilities. Separate facility-specific measurements will be needed.
Gas production company	No significant extra costs.
Cattle breeders association	Some extra costs. Relevant pollution issues are faeces and odour.
Shipbuilding industry	No significant extra costs.
Paper and pulp industry	Fears of significant extra cost. Relevant pollutants in case of paper mills working from cellulose: heavy metals, nitrogen, dust. Relevant pollutants in case of paper mills working from used paper: dust. Companies will resist to publishing pollutant release and transfer data.





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### Site visits made in the Istanbul Region, November 2017

Day	EPRTTR Annex I Activity	Company	Sector	Location
20.11.2017	5 (f) - Urban waste-water treatment plants	İSKİ Paşaköy WWTP	Waste and wastewater management	Sancaktepe / Istanbul
21.11.2017	1 (a) - Mineral oil and gas refineries	Tüpraş	Energy	Körfez / Kocaeli
22.11.2017	6 (b) - Industrial plants for the production of paper and board and other primary wood products (such as chipboard, fibreboard and plywood)	Dentas Ambalaj	Paper and wood production and processing	Corlu / Tekirdag
22.11.2017	4 (a) (ii) - Chemical installations for the production on an industrial scale of basic organic chemicals	MKS Marmara	Chemical industry	Besiktas / Istanbul
23.11.2017	-	Arıtsan	Environmental Laboratory	Izmit / Kocaeli
23.11.2017	5 (a) - Installations for the disposal or recovery of hazardous waste & 5 (d) - Landfills	İzaydaş	Waste and wastewater management	Izmit / Kocaeli
24.11.2017	-	MoEU Provincial Directorate of Istanbul	Soil Pollution	Besiktas / Istanbul
24.11.2017	-	Eced Cevre	Environmental Consultancy for Metal &Textile	Kartal / Istanbul



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### Site visits made in the Ankara Region, December 2017

Date	EPRTR Annex I Activity	Facility / Institution	Sector	Location
06.12.2017	1 (c) - Thermal power stations and other combustion inst.	GAMA Power Plant	Energy	Ankara
06.12.2017	--	Ankara Organized Industrial Zone	OIZ	Sincan/Ankara
06.12.2017	2 (f) - Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process	Altim Aluminum and MOR Aluminum	Production and processing of metals	Sincan/Ankara
07.12.2017	3 (a) - Underground mining and related operations	Koza Gold Mining	Mineral industry	Ankara
08.12.2017	3 (c) - Installations for the production of cement clinker in rotary kilns, lime in rotary kilns, cement clinker or lime in other furnaces	Turkish Cement Manufacturer's Association	Mineral industry	Ankara
09.12.2017	-	Chamber of Environmental Engineers	NGO	Ankara



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# Implications for Third Parties



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# Implications for Third Parties

### Environmental Consultant Firms.

- Environmental consultancy services are provided on a regulated free market.
- Most middle sized firms have outsourced the work associated with environmental reporting and environmental permit application and to Environmental Consultant Firms.
- It is the Environmental Consultant Firms which enter data into the IT interfaces of MoEU on behalf of its industrial clients.
- E-PRTR reporting will be part of this co-operation.
- Big companies have sufficient knowledge, expertise and staff to perform the above tasks on their own.



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# Implications for Third Parties

### Environmental Laboratories

- Environmental laboratory services are provided on a regulated free market.
- The present version of E-PRTR Bylaw will not require additional measurements from facilities. Therefore laboratories will not benefit directly from E-PRTR.
- However, many laboratories will help their clients to elaborate those calculation and estimation methods that will be needed to produce yearly E-PRTR data.



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### Online IT systems of MoEU for Environmental Management

- Waste Declaration System (TABS)
- Mobile Hazardous Waste Tracking System (MoTAT)
- Mass Balance System (KDS) for waste management
- Contaminated Sites Information System
- Wastewater Information System
- Packaging waste information system
- BEKRA (Prevention of the Risks of Major Industrial Accidents) Declaration System
- Large Combustion Plants Information System
- E-Inspection Application
- Waste Dumping System
- EE and WEEE Information System
- Ship Waste Tracking System (GATS)
- Voluntary Carbon Market Project Registration System
- Safety Information Note Notification
- Chemical Registration System
- Laboratory Authorization
- Ozone Depleting Substances (OTİM)
- End of Life Vehicles
- PCB Inventory
- Greenhouse Gas Monitoring and Reporting System



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# Implications for MoEU Departments and Provincial Directorates



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# Summary of additional efforts for environmental governance due to E-PRTR



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### **Additional activities of environmental governance due to E-PRTR**

#### Additional E-PRTR specific institution building

- Establishing and maintaining E-PRTR Unit in MoEU's Central Laboratory
- Training of staff of MoEU and Provincial Directorates

#### Working with facilities

- Awareness raising among facilities
- Collection and validation of E-PRTR data

#### Using E-PRTR data

- Dissemination of E-PRTR data to the public by electronic and other media
- Reporting to EU
- Preparing regular and occasional publications and reports based on E-PRTR database
- Facilitating the improvement of environmental policies by using information added value of the E-PRTR database.



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### Further activities of environmental governance due to E-PRTR

#### Improving E-PRTR data collection methodology

- Obtaining and using EU benchmarks
- Comparing E-PRTR data with data of other Turkish emission inventories
- Comparing E-PRTR data with ambient air quality data, water quality data.

#### Co-operating with MoEU's other departments

- departments of Environmental Management
- department of Permits and Licenses
- IT Department



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# Questions of representatives of Provincial Directorates to the establishment of EPRTTR



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### Questions of representatives of Provincial Directorates as to the **implementation** of EPRTTR

Question	Answer
How to validate EPRTTR data if implementation capacity of the Provincial Directorate is limited?	EPRTTR affects only approx. 6000 installations. EPRTTR regulation does not require facilities to provide (and PDs to validate) full written reports; instead of written reports they only have to submit a limited number of numbers by entering data into a set of ready-made forms of the electronic registration system provided by our project.
Is it possible to correct submitted numbers after submission of EPRTTR report?	Yes. This will be enabled by the IT system under development.
What kind of additional information will facilities receive in order to facilitate compliance with EPRTTR Regulation?	Sectoral brochures, guidance
What kind of additional information will provincial directorates receive in order to enforce the EPRTTR Regulation?	Sectoral brochures, guidance, sector-specific benchmark EPRTTR data.
There are various strategies in order to gradually introduce the EPRTTR regulation. What facilities first?	The Technical Assistant Project will first co-operate with 18 so called Pilot Facilities (2 facilities of each of the 9 main activity groups of Annex I). Decision has been made to apply a sector-by sector gradual enforcement strategy.



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### Questions of representatives of Provincial Directorates as to the

Question	Answer
Will EPRTR impose extra measurement obligations on facilities?	No, there is no need to make extra measurements only and solely in order to satisfy the data needs of EPRTR system. But the method of calculation and estimation should be used in a responsible way, in order to ensure best available information. The Project Team will in time publish the range of recommended calculation and estimation methods.
Can EPRTR data be used in judging the granting or denial of environmental permit and license?	No: EPRTR cannot be used for justifying punishments for infringing regulations of environmental management. EPRTR will be and will remain an information tool and will not become a tool of the permitting process.
What will motivate companies to report true pollution data?	Environment Protection Law obliges the companies to make true statements in their reports to authorities about pollution levels and concentrations, and the infringement of EPRTR regulation will imply a fine under the respective stipulations of the Environmental Law (No. 2872, 1983).
What is the role of accredited laboratories and licensed environmental consultants in improving data quality?	Third parties (environmental laboratories or consultants) are not mentioned in the regulation. Their involvement is at the discretion of the operators. If they will be involved this does not change in any respect the responsibilities of the facilities regarding the quality of the data.



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### Further questions of representatives of Provincial Directorates to the **legislation** of EPRTR

Question	Answer
Why not to reduce emission thresholds of Annex II to zero and ask for more detailed emission data?	MoEU will adapt this approach. This is how the Spanish EPRTR Office works, and
Why not to extend Annex II and include all Persistent Organic Pollutants (POPs)?	This option is considered for future development. The EPRTR Unit is ready to deepen and widen its cooperation with any other units of MoEU.
Can EPRTR data be used for justifying environmental punishments?	No. EPRTR is not a tool for enforcing environmental management regulations, rather a pure statistical instrument in order to serve decision makers of environment policy, researchers and NGOs in their joint efforts to protect the environment.



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### Questions of representatives of Provincial Directorates to the **policy context** of EPRTR

Question	Answer
Through what impact mechanism will the EPRTR Programme improve environmental behavior of firms?	International experiences show that EPRTR reports are mutually read and interpreted by competitor firms, thereby providing professional control on each other's' data and additionally putting pressure on each other in introducing cleaner production methods and more environmental friendly technological innovations.
What further development of the Turkish EPRTR Bylaw and its implementation is to be expected?	The introduction of the EPRTR regulation is a step in a long evolutionary process. As of now, Turkey's permitting regime is not yet harmonized with that of the European Union. It is expected, that the IED will be implemented in Turkey sometime between 2020 and 2025. Until that time, the main target of this program is to collect data without putting too much administrative burden on companies.
In what way does the EU inspecting or control the implementation of EU regulations?	Assessment of harmonisation measures is continuous, but affects only only high level Government Agencies. Not at the level of Provincial Directorates



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### Annex:

# Opinions of representatives of Provincial Directorates as to the implementability of E-PRTR Regulation in Turkey



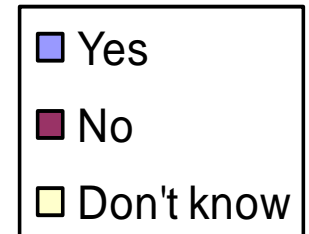
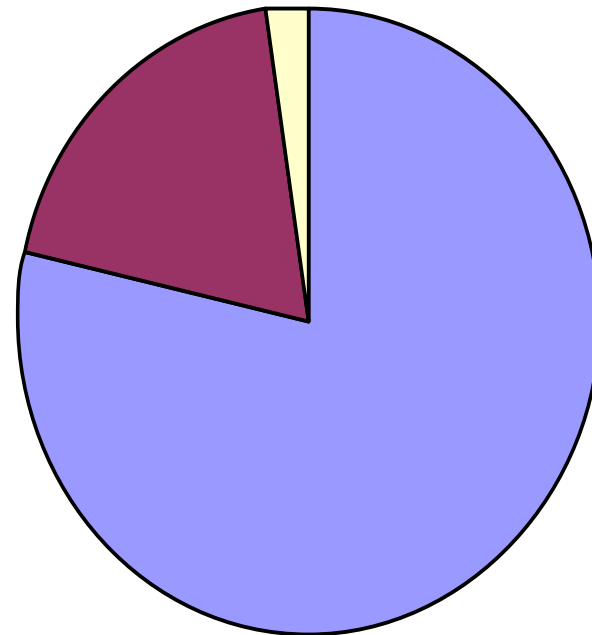


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Are you aware of the E-PRTR Regulation? Yes =1 No =2 . If yes, what is the source of your information?



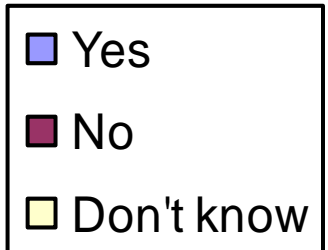
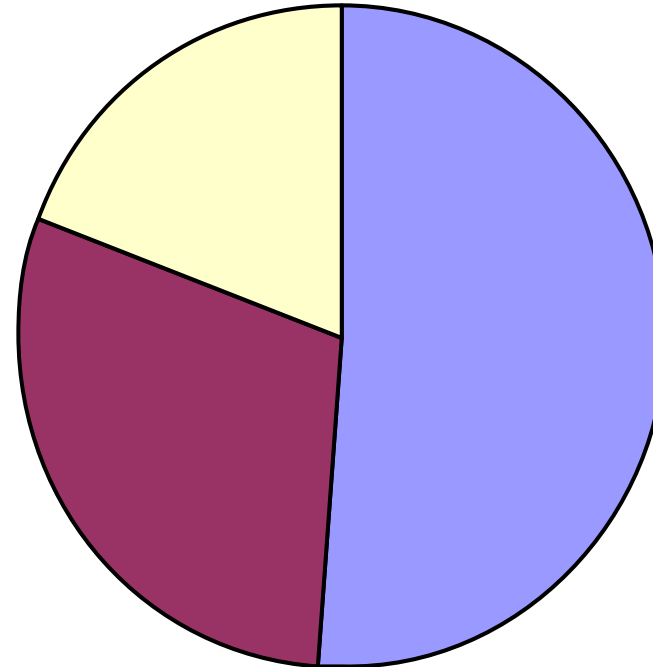


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Do you foresee / do you expect difficulties / delays in having the information publicly accessible on the register? Yes 1 , No = 2.



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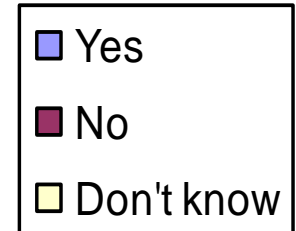
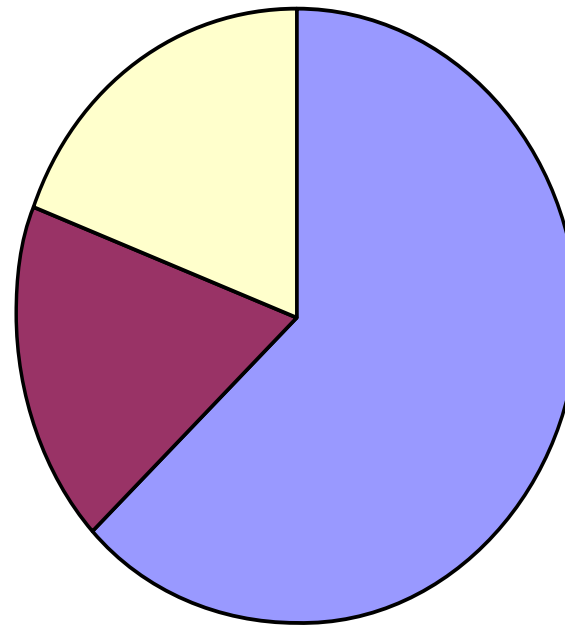


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Do you foresee / do you expect difficulties in meeting the quality requirements of the data to be reported? Yes 1 , No = 2.



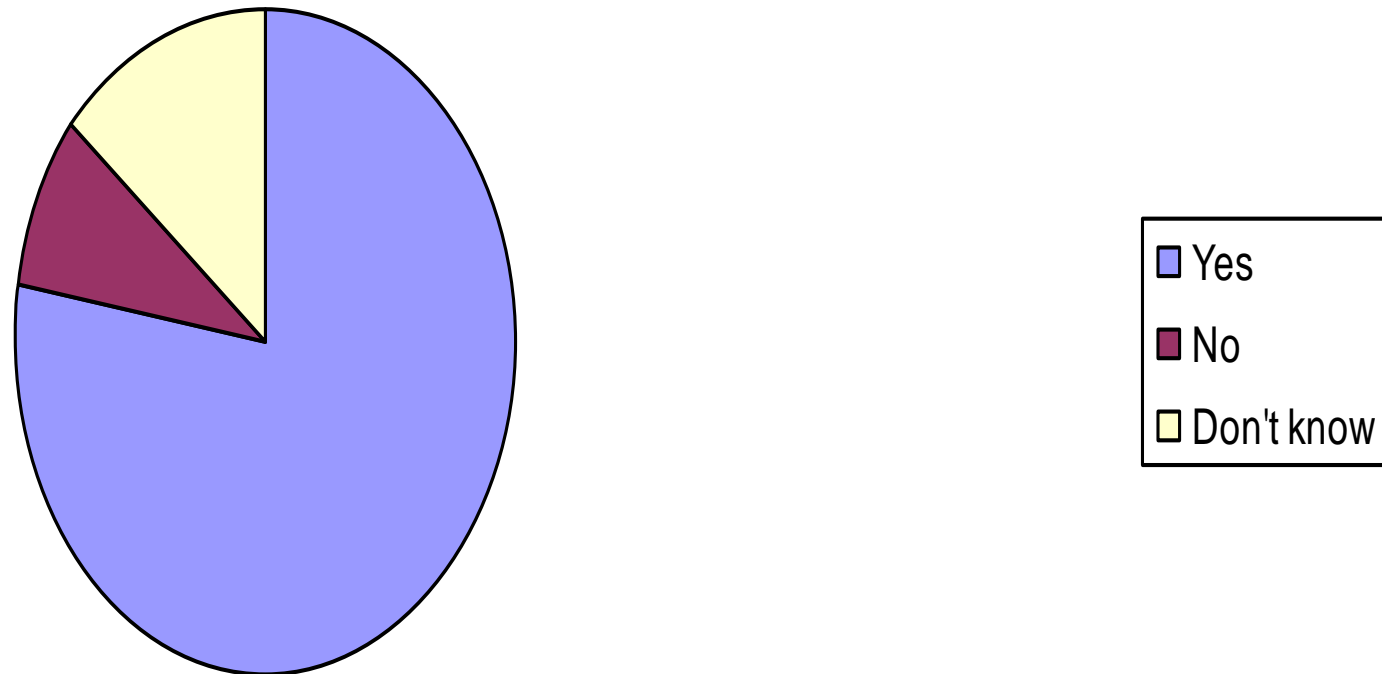


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Do you foresee / do you expect difficulties in meeting the requirements on completeness, consistency and credibility of data to be provided by the operators? Yes 1 , No = 2.



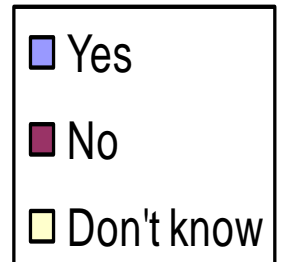
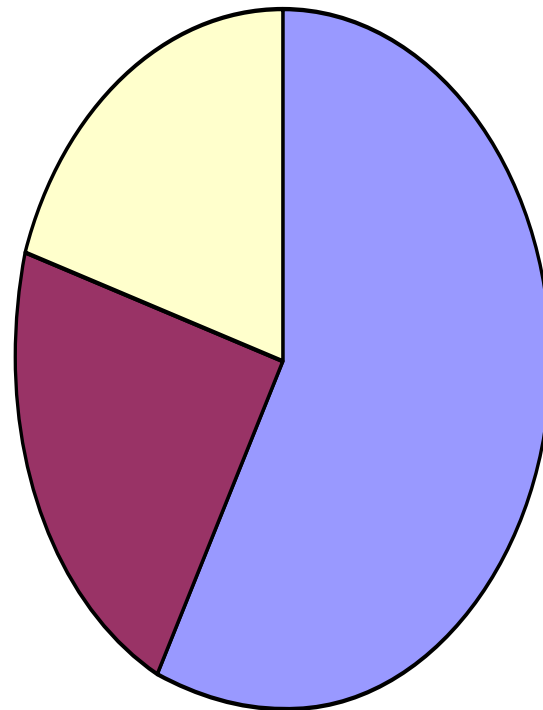


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Do you foresee / do you expect difficulties / challenges in agreeing which type of data should be kept confidential? Yes = 1 No = 2.



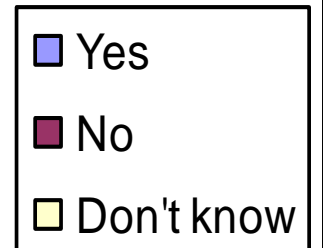
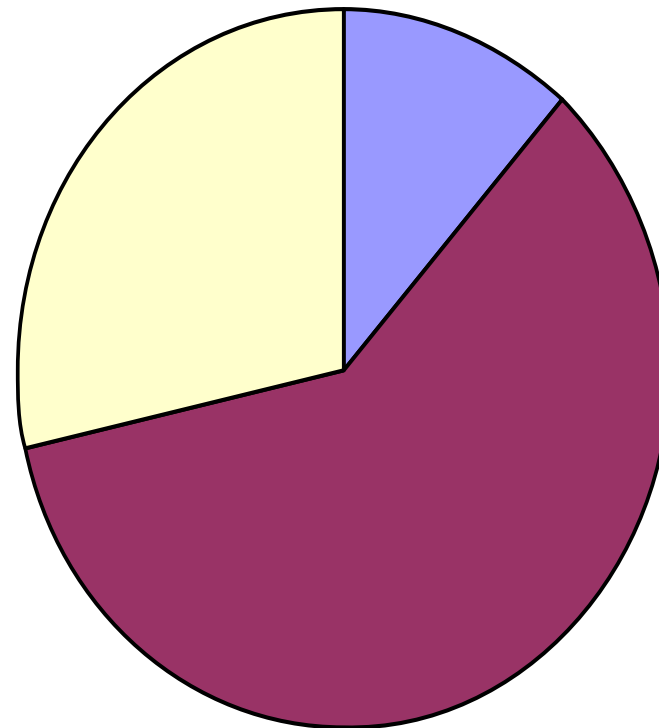


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Introduce E-PRTR Regulation as soon as possible ? Yes=1, No=2.



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Do you recommend to compensate companies for complying with EPRTR? Yes = 1, No = 2.

