



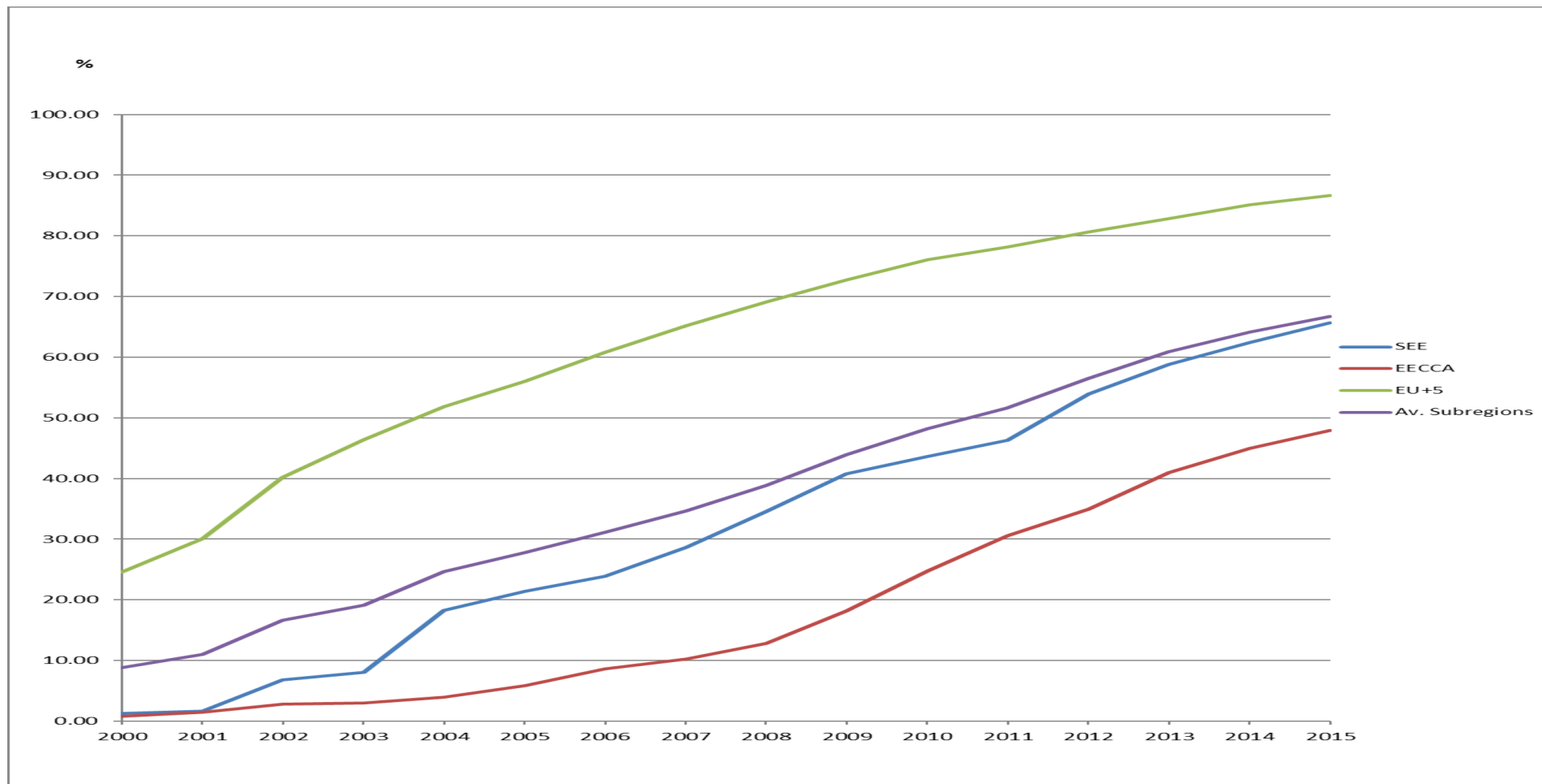
Data, indicators and assessments online – what was done and what is used

Kyiv, Ukraine
5 March 2019



Access to ICTs (based on ITU statistics) -

- Average percentage of individuals using the Internet per subregion for 2000-2015



Is this moorland in good enough condition to effectively capture rain and prevent flooding?

What's the average annual rainfall?

Would we get permission to route a powerline here?

Would this be a good place to grow vines? What is the soil type, how steep is it, which way does it face?

What would the environmental impact of a moto-cross trail here be?

Should I restrict access here due to fire risk?

Who owns this farm? How well connected is it? Could it be the base for a rural technology centre?

Can I canoe here? What's the water flow like?

How many businesses would be flooded if this river broke its banks?

What crop is being grown in this field?

Where are the cattle in this field bred and sold?

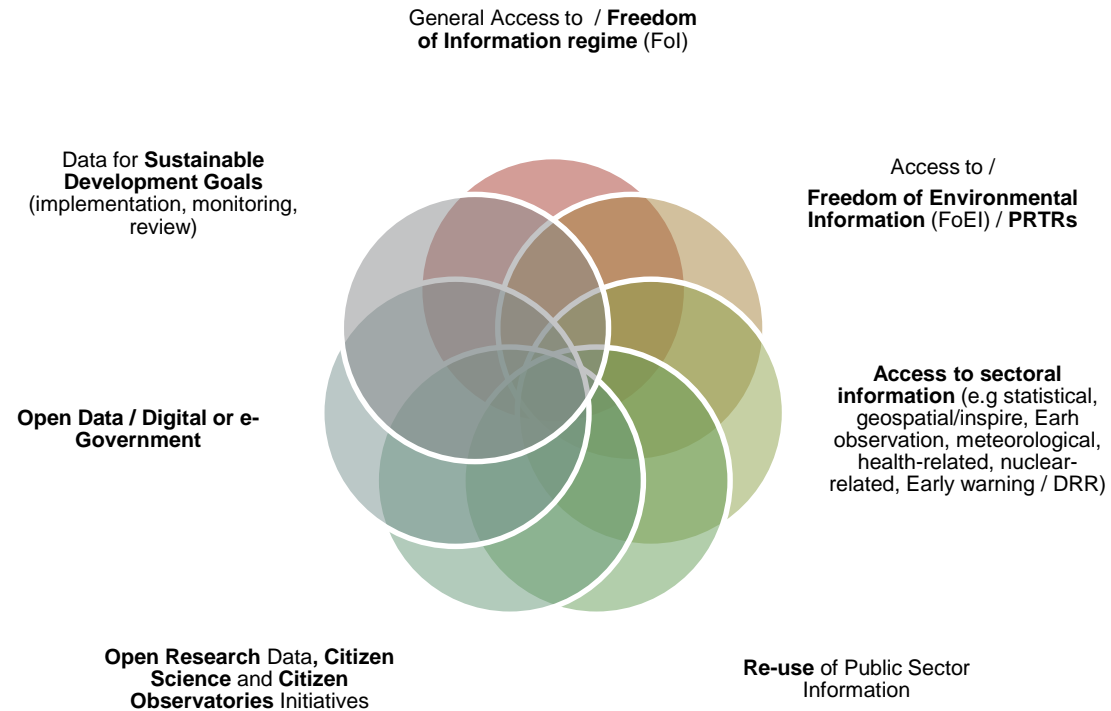
Is this woodland ready to fell? What species are present? What's it worth?

What's the soil and geological make-up of this land?

What can I see standing here? How many visitors come here? Why?

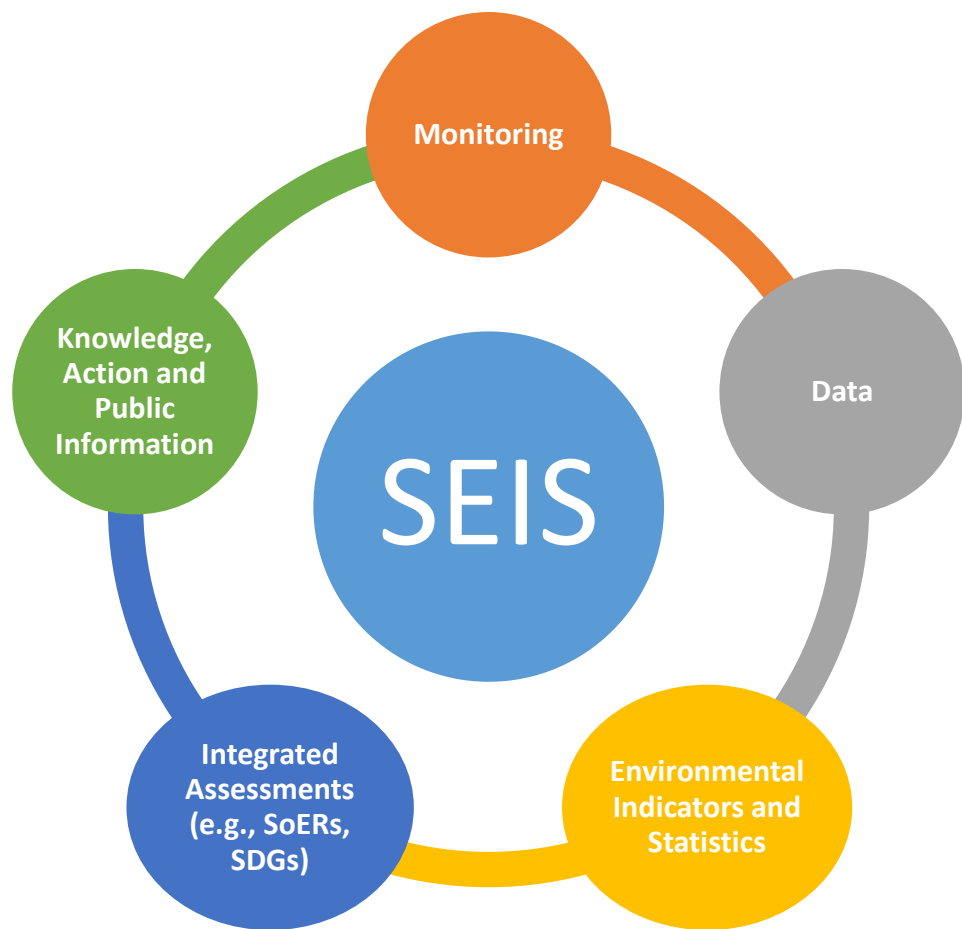
Why unlock our data vaults?

Aarhus Convention and Protocol on PRTRs: potential for promoting integration at the national level





UNECE Shared Environmental Information System in the pan-European region



- SEIS aims to support further improvement of information system(s) and the exchange and use of environmental data and information.
- Focus on **49 ECE indicators**
- 2011 Astana and 2016 Batumi EfE Ministerial Conferences – establishment of a regular process of environmental assessment and development of the SEIS across the region by 2021

The **WGEMA** mid-term review report summarizes responses to a self-assessment questionnaire based on the **SEIS Assessment Framework**.

Limited to **seven data flows**, covering three (out of 49) ECE environmental indicators on air quality, water quality and protected areas.

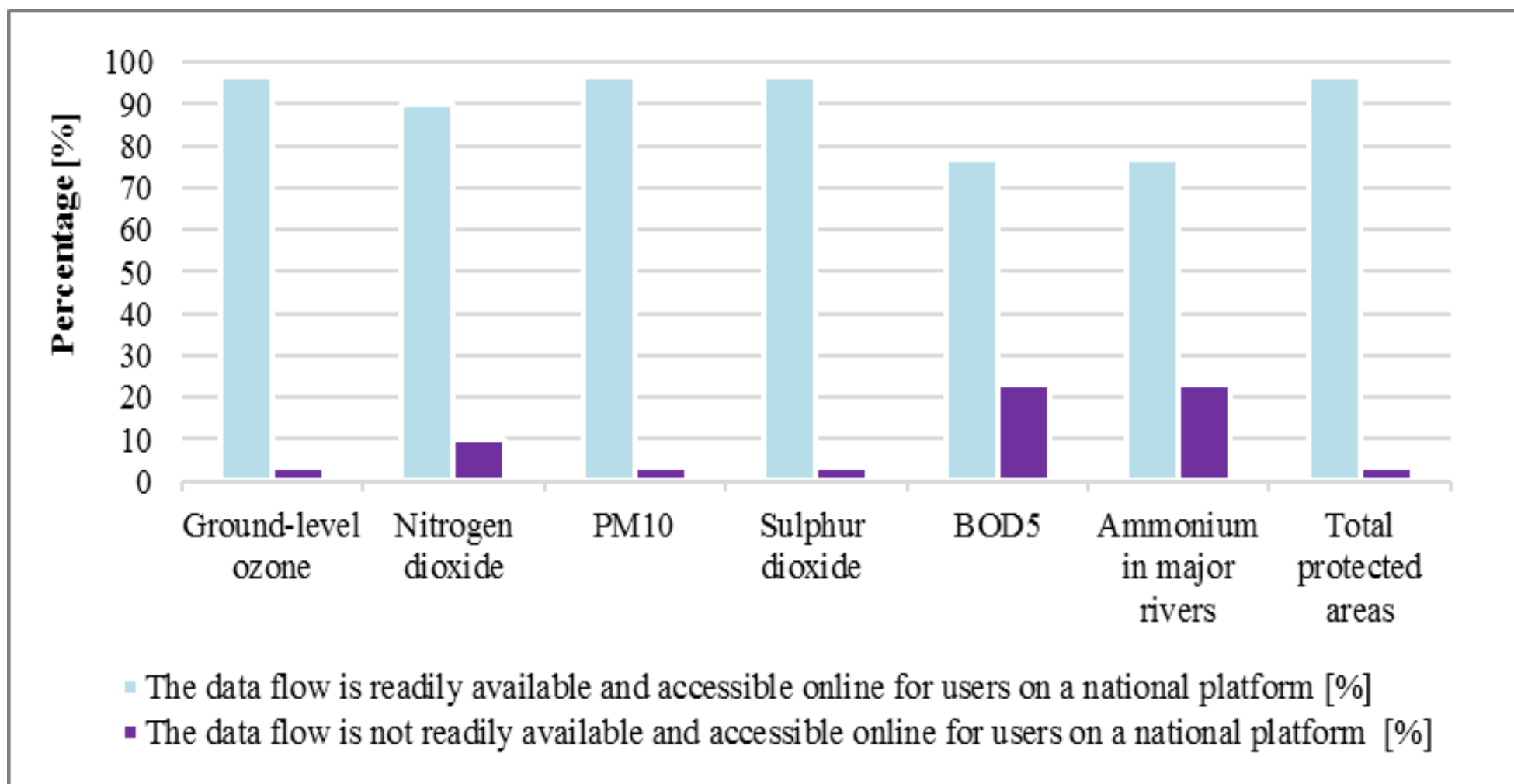
34 (or 64%) out of the 53 ECE member States (not incl. Canada, Israel and the United States of America) submitted a self-assessment.

Clear upward trend in participation. The SEIS progress report in 2016 covered only 22 countries (41%).

The new review addresses the three SEIS pillars — **content, infrastructure and cooperation** — and the seven SEIS principles.



Ready online availability and accessibility of data flows on a national platform



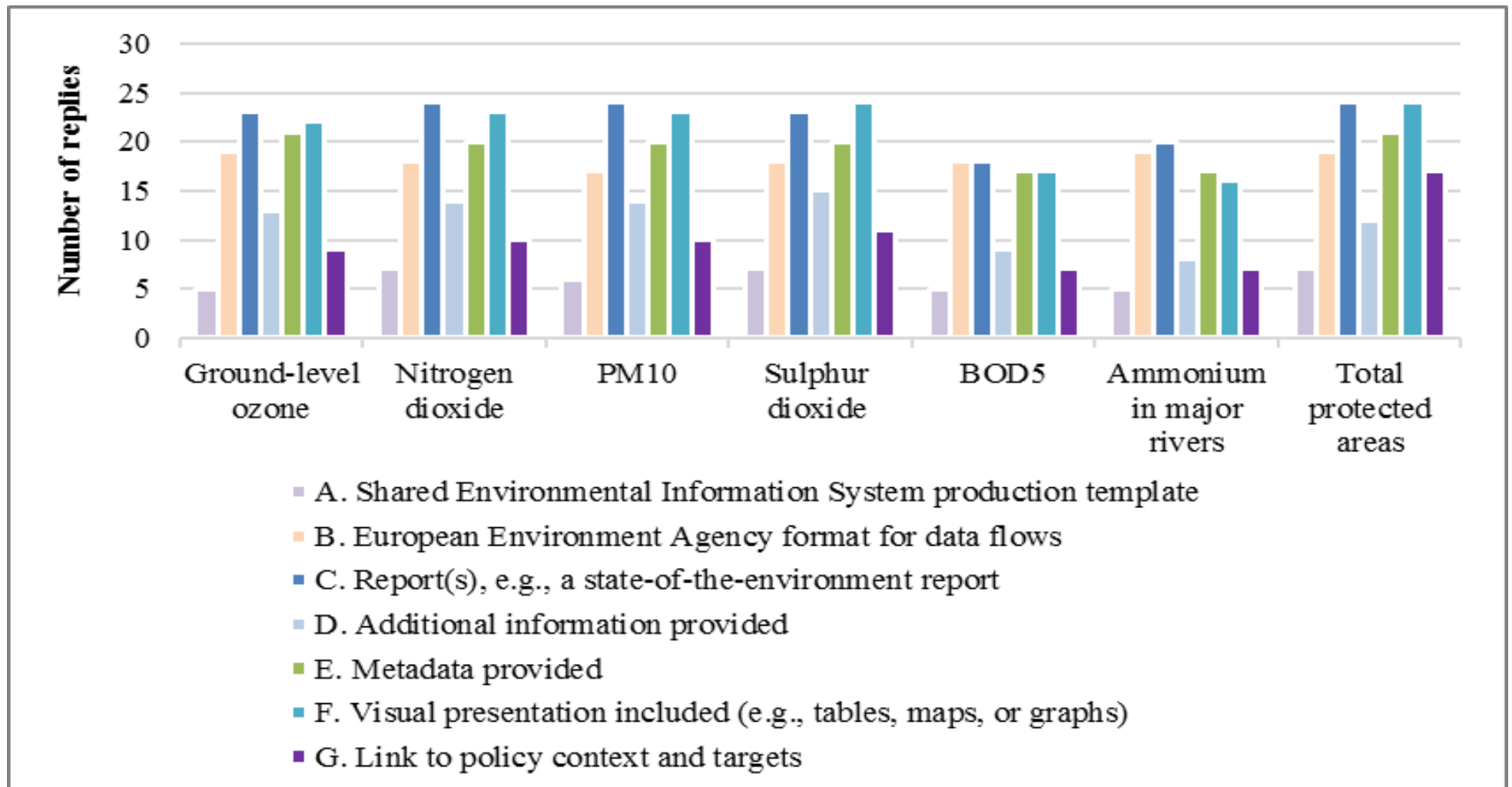
SEIS Mid-term Review Report: Key Findings

- Countries have continued to harmonize relevant data flows and improve the quality of environmental indicators since 2016.
- At the thematic level, the best performance was for **air pollution and ozone depletion**, followed by **biodiversity** and **water**.



- At the data flow level, the best performance was for **air quality** (SO₂, PM₁₀, O₃ and NO₂), followed in descending order by **total protected areas**, **ammonium in major rivers** and **BOD₅ in major rivers**.
- Most of the data flows are used for **different purposes** (e.g., environmental assessments) and converted into **different formats** (e.g., tables and maps).

Formats in which information on the data flows is presented



Aarhus Convention and Protocol on PRTRs: improving data sharing, dissemination and re-use

- Interoperability and data sharing were mainly supported through e-Government, Open Government Data, INSPIRE and SEIS initiatives
- Experience in:
 - Integrating environmental information in the Open (Government) Data portals and establishing domestic interoperability framework - EU as well as Austria, France, Greece, Spain, UK...
 - Integrating information on a centralized specialized web portal with specific operational applications based on a geographic information system (GIS) – France, Serbia, Slovakia...
 - Establishing geospatial portals containing environmental information – EU, its Member States, Switzerland
 - Developing portals/ web-application / registries providing information on environmental decision-making (EIA, SEA) – Czechia, France, Slovakia, Ukraine...
 - Using portals of environmental public authorities – Ireland, Sweden
 - Establishing citizens information websites – Ireland (www.citizeninformation.ie), United Kingdom (WDTK)
- Success lays in establishing comprehensive legal framework, common infrastructure and services (ensuring automated harvesting of data) and cooperation of public authorities – Austria, France, Spain...
- Interoperability influenced by changes in technology (e.g., cloud computing, blockchain, browser systems, and etc.), information policy, language issues and multi-stakeholder involvement
- Updating public data policies (e.g. open by default for non-sensitive data, open to one - open to all) and copyright licences to facilitate re-use (e.g. creative commons)
- Public participation and feedback in design, testing, maintenance and update
- Increasing number of open research data and citizen science and citizen engagement initiatives

Modernizing Environmental Information System(s): keys to success

- **Strategy** scoping environmental information system(s) and linking it with e-Government, Open Government Data, SEIS, geospatial (INSPIRE) and SDGs monitoring initiatives
- **Legislation** update based on the adopted strategy, review of exceptions
- **Institutional cooperation** and review of copyright licences
- **Redistribution of available resources**
- **Infrastructure** update (cloud computing, internet of things, blockchain, artificial intelligence)
- **Data** readiness
- **User (public) participation** and feedback in portals design, testing, maintenance and improvement

Widening public access to environmental information contributes to implementing Sustainable Development Goals, their monitoring (indicators) and review



Aarhus Convention Timeline

