

StatEO

5-7 May 2026 | ESA-ESRIN | Frascati (Rome), Italy



Earth Observation Support to Nature Policies

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Earth Observation is moving from simply “supporting evidence” to being proposed as a central part of the regulatory infrastructure of EU nature policy.

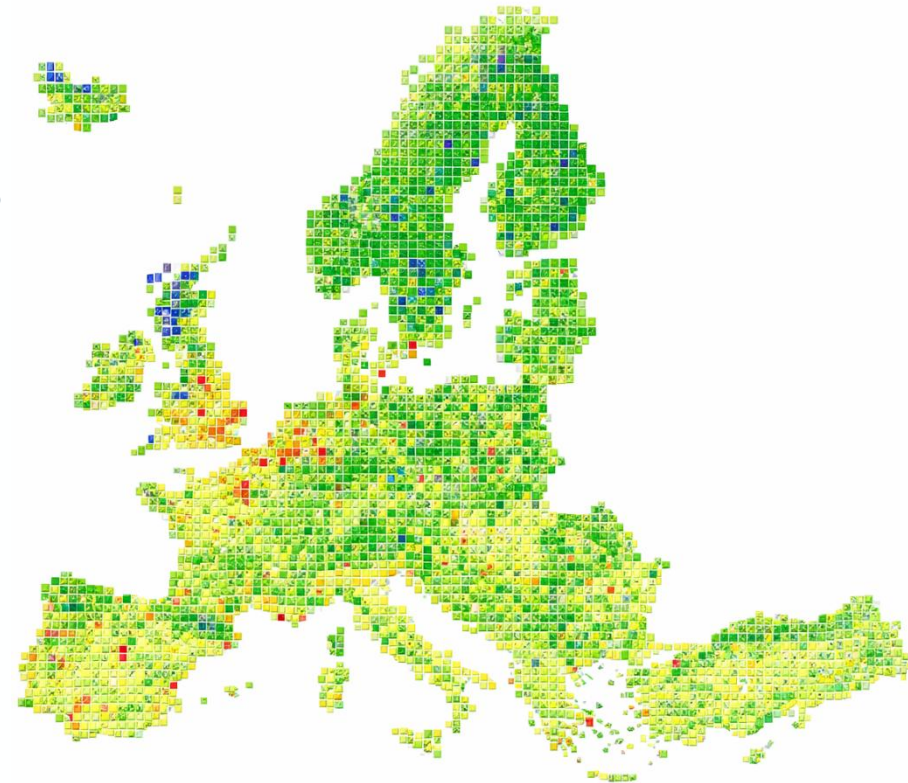
- *What is the status? → Are we on track according to the targets?*

Increased demands on:

- Data quality and consistency over time
- Timeliness – relevant sync with reporting cycles

EO products to achieve role common to official statistics rather than exploratory maps

- Close link between the EO and Statistics community is important
- Establish rigorous processing pipelines and data foundations



Earth Observation is proposed to provide **spatially and temporally consistent monitoring of key metrics**

- More frequently: clearly referenced as key data input
- In some cases (but increasingly): explicitly proposed as the EU-wide baseline and monitoring

Soil Monitoring Law (SML)

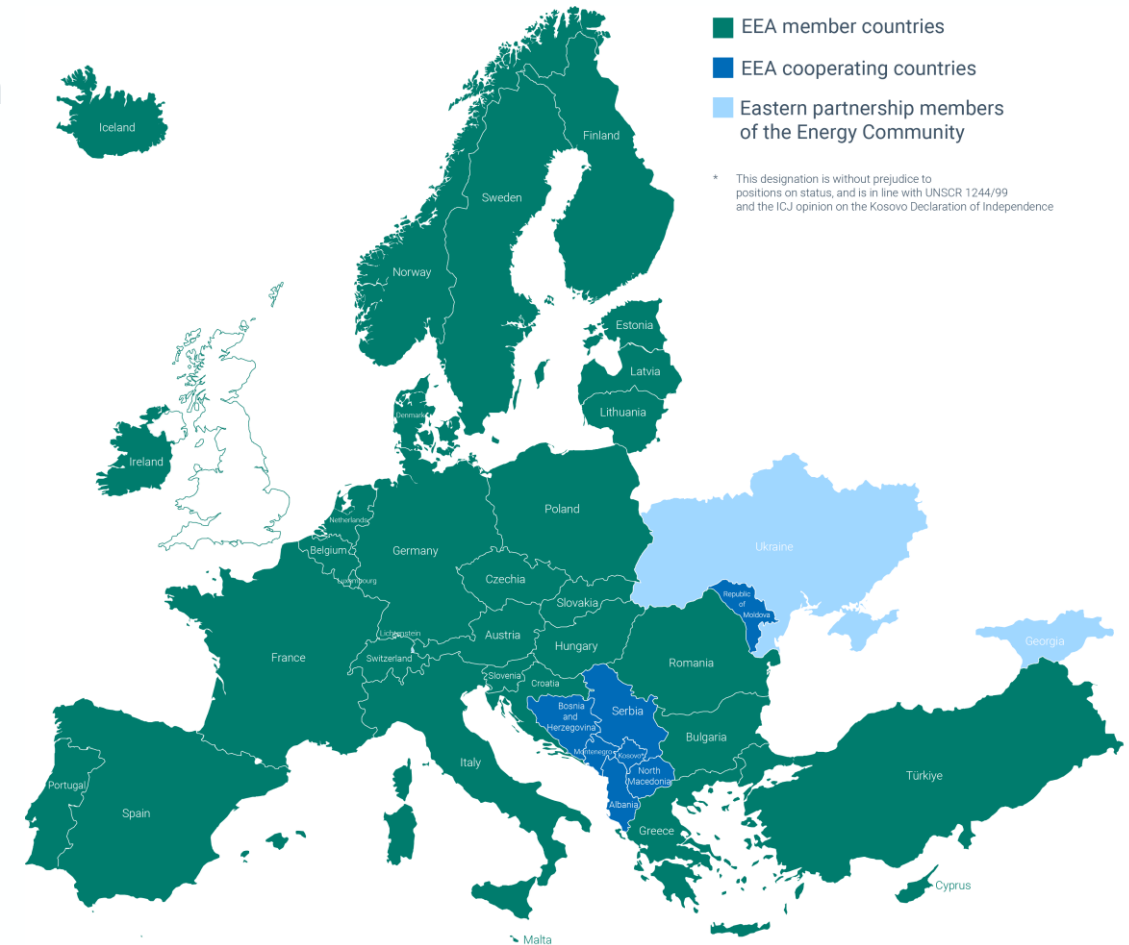
- Leveraging of existing EO datasets
- Develop EU-wide soil remote sensing products
- Provide Member States with necessary data for monitoring soil degradation
- Member States free to complement with supplementary data

Nature Restoration Regulation (NRR)

- Should make use of EO and in-situ for monitoring of habitats and species
 - Filling gaps of currently unknown
- EO referenced for Urban indicators
 - Share of Urban Green Space
 - Share of Tree Canopy Cover
- Member states free to complement with supplementary data

End of the chain: It is the responsibility of Member States to establish monitoring for reporting

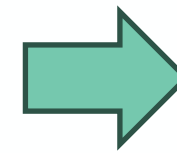
- Incorporate methods and monitoring in combination and addition to EO (e.g. in-situ reference data)
- Legislation provides options for MS to incorporate national/supplementary data
- Ensuring harmonised European monitoring frameworks?
 - Data (EO & in-situ)
 - Methodologies
 - Reference nomenclatures





NRR as example

- Spans over several domains
- Often several other policies per domain (SML, LULUCF, etc.)
 - Different goals but similar information needs
- EO-derived proxies cannot be configured in a vacuum of any policy alone
 - Might lead to contradictory evidence



**Requires a
foundational approach¹**

¹ methods, models, or studies that establish the core, fundamental basis upon which further knowledge, applications, or systems are built

Next Steps

- Continue work on establishing an ecosystem data foundation
- Setting up reporting and monitoring, together with Member States, on EU Nature legislation
- Assessing use of reference nomenclatures (EAGLE) for cross walking LCLU data of different sources
- Assessing the use of more streamlined systems to incorporate MS data
 - “Bringing MS into the foundation”

Recommendations

- We are in implementation phase of Green Deal policies. Ensure that we invest accordingly.
 - R&D with an emphasis on **Development**
 - **Reference data** – both for EO and as the only solution as gap filler in many cases
- My colleague’s **Pavel Milenov’s** presentation tomorrow (Wednesday) in **Thematic session - Environmental accounting**:
 - Giving a more in-depth look into our work on establishing an **ecosystem data foundation**

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Thank you for your attention