ESFRI

European Strategy Forum
on Research Infrastructures

Perspectives for RIs in the next phase of EOSC

European Photon and Neutron Community Symposium

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EOSC - Landscape report / Landscape analysis

- ***Landscape of EOSC Related Infrastructures and Initiatives***
  1th Validation WKS (27/28. 4. 2020) (EC 14. Sept 2020)
- ***Landscape analysis*** (DCC)
  2nd Validation WKS (28/29. 9. 2020) (EC Nov/Dec 2020)
- ***Country sheets*** **-** Survey of the Landscape 2019 and 2020
  47 countries - EU MS (27), AC (16), OC (4) and 50 projects
  - **Current state of affairs**, OS policies, EOSC readiness
  - Infrastructures (roadmaps and funding).
  - Majority of countries planning for Open Science.
  - Fairly high degree of readiness and awareness of EOSC
  - Mumber IS considered : DE (986), UK (909), FR (516), NL (306), PL (172), PT (170), …
  - All Countries reported at **least one infrastructure** that could be made available (federated) through EOSC.

EUROPEAN EOSC LANDSCAPE IS VERY DIVERSE

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Infrastructures as key success factor for EOSC

- **Infrastructures (IS) – data, e-infras, computing, networking, and RIs** (institutional, regional, national, global) serve as major promoters of Open Science, and are as an integrated **IS system at equal level fundamental for the creation of EOSC**.
- IS form **critical part of a coherent research ecosystem** capable of addressing the major, interdisciplinary challenges (e.g. COVID-19 data platform / dedicated ESFRI WEB pages over 100 RI *anti*-COVID-actions)
- Though the IS ecosystem faces huge diversity across the disciplines and countries, it is **horizontally (cross-disciplinary) and vertically interlinked**.
- The **bulk of the EOSC funding** (ISs, data and users) will come from nationally supported funders rather than the EC – **EOSC Sustainability critical depends on national strategies**
- **Changing National priorities** - significant impact on e-Is and RIs – Need for coordination in policies and financial support. **Standards** for policy, processes and procedures
- **Diversification of IS portfolio** to minimize impact on EOSC federation.

RIs as pivotal for EOSC – link to users

Role of RIs in EOSC – 2nd EOSC – ESFRI workshop / ESFRI`s WP "Making science happen"

- producers of huge amount **of high-quality data - Key factor for EOSC`s early stage success**, inclusiveness, small new communities, long tail of science …
- keeping **multidisciplinary community aligned - Building an Open science community**, developing collaborative and co-creation culture
- stimulating **interoperability and collaboration** across domains – Developing and **respecting disciplinary standards**
- **readiness and early response to current crises and challenges** – **developing cross-disciplinary** understanding, metadata framework
- **several service layers are not well defined** – e-services, services directly supporting data driven sciences, software and software archives, but **also science driven services**, and many others.
- definition of a **minimum viable national infrastructure** will help to **ensure that all the relevant IS and components are included** (national and EU)

RIs ARE CRITAL FOR EOSC IMPLEMENTATION

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Establishing a framework for future collaboration

- **MS support the domain specific Is and RIs** to develop their data repositories and encourage their federation – **a backbone EOSC infrastructure** at national level
- **Sharing best practices** (of current projects, clusters and pan European infrastructures) will trigger cooperation of IS's repositories in all areas (data quality, tracking system, metadata standards, technical standards, policy requirements, existing mechanisms and networks, certification mechanisms, etc.)
- **Self-organization / Cluster projects** could provide existing datasets and associated science domain specific data services developed by RIs to EOSC - **Coordination of stakeholders / users**
- **Monitoring of IS** will help EOSC implementation and development => **KPIs** adjusted to the domain, particular IS => assessment of EOSC readiness and participation. Following **RACER** criteria = **R**elevant**, A**ccepted, **C**redible, **E**asy to monitor**, R**obust
- **Monitoring of national OS and data policies development** will help the long terms EOSC development and sustainability
- **Visibility of Open Science and Open Data outputs** => good practice examples

Thank you for your attention.

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