Monitoring progress towards Open Science as the new norm - National Contributions to the EOSC

First results from the EOSC Observatory

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EOSC Steering Board - subgroup ”National contributions to the EOSC”
National Contributions to the EOSC

Survey on national contributions to the EOSC.

Tasks of the subgroup:

a) benchmarking of activities on international, national, regional, and institutional level, to provide advice to the EOSC-SB on developing and implementing policies and supporting EOSC-ready infrastructures and initiatives; and providing contributions/investments and financing of EOSC relevant policies, infrastructures, and initiatives.

b) monitor the benefits of Member States and Associated Countries policies to the whole EOSC and the benefits of EOSC to the national research communities.

ERA Policy Agenda 2022-24

• **Action 1**: Enable the open sharing of knowledge and the re-use of scientific outputs, including through the development of the EOSC

• **Outcomes** (...) : Establish a monitoring mechanism to collect data and benchmark investments, policies, digital research outputs, open science skills and infrastructure capacities related to EOSC
The Open Science Monitoring Framework

• **Aim:** monitoring progress towards *open science becoming the new normal by 2030.*

• What to monitor?

  1. Policies
  2. Practices
  3. Impact

• Open Access to publications
• RDM, infrastructures and EOSC
• Collaboration with citizens, civil society and end-users
• Incentives, rewards and skills
## Monitoring aspects

### 1. Policies

- N. of countries/regions, RFOs and RPOs where **policies are under discussion/adopted/implemented** and contain specific provisions per policy area

### 2. Practices

- Capture **progress in open science practices** (e.g. for OA: share of OA publications, use of open licenses, etc.)

### 3. Impact

- **Potential impact** produced by the policies and practices:
  1. Increased reproducibility
  2. Increased trust in science
  3. Increased research efficiency
  4. Increased effectiveness
  5. Results taken up by the society

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<thead>
<tr>
<th>Target</th>
<th>Short term (2022-2024)</th>
<th>Medium term (2025-2027)</th>
<th>Long term (2028-2030)</th>
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<tbody>
<tr>
<td>✓ EOSC-SB Members and Observers key for national coordination</td>
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<td>✓ Avoid duplication, ease burden for contributors.</td>
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<td>✓ Measure progress and analyse gaps to facilitate mutual learning.</td>
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EOSC-SB monitoring development

1. Policies
- Open Access to publications: 2022/2023
- RDM, infra & EOSC: 2021/2022
- Citizens, civil society & end users: 2022/2023
- Incentives, rewards & skills: 2022/2023

2. Practices
- Short term (2022-2024)
- Medium term (2025-2027)
- Long term (2028-2030)

3. Impact
- Short term (2022-2024)
- Medium term (2025-2027)
- Long term (2028-2030)
Open science monitoring with the EOSC Observatory

**Monitoring open for 45 countries:**
- 27 EU Member States (MS)
- 12 countries associated to Horizon Europe Framework Programme (AC)
- 5 countries with Observer status in the EOSC Steering Board expert group
- 1 other European country

**Monitoring status April 2022**
- 13 countries are currently contributing with information (in progress)
- 4 countries have validated the full survey already (finalised for now)
Coordination of open science monitoring initiatives: example of measuring institutional practice

**Indicators**

**ERA monitoring mechanism (EMM)**
- Number of RPOs that integrate open science practices in researcher recruitment and career progression

**EOSC Steering Board**
- Number of RPOs having a policy on Incentives and rewards.

**EOSC Association**
- Open science skills are included in job descriptions for researcher profiles.

**2018 Recommendation (NPR)**
- Share of RPOs have a policy or strategy that includes open access in the recruitment and career evaluation system for researchers

**EOSC Observatory**

Number of RPOs (Research Performing Organisations) having a policy in place which includes one or more open science elements:
- EOSC
- Open Access to publications
- Research data management, and/or FAIR
- Open Access to data
- Making data or other research digital objects FAIR;
- Open Access to software;
- Preservation of scientific information;
- Re-use of scientific information;
- Research Infrastructures that include aspects of open science;
- Skills and competencies in Open Science practices;
- Incentives and rewards of the uptake of Open Science practices;
- Citizen science;
- Other [Text field]
Example on first results April 2022 (skills)

Indicator targeting national policies:
Share of countries with national policy on skills and competencies:
  - EU27: 8/27
  - HE (EU27+ACs): 8/39

Awaiting data on policies

Indicator targeting operational practice:
Countries having use cases and best practices on skills and competencies:
  - EU27: 2/27
  - HE: 5/39

Survey not completed yet!
Example on first results April 2022 (infra)

Indicator targeting **national policies**: Share of countries with national policy on research infrastructures that include aspects of open science:
- EU27: 8/27
- HE (EU27+ACs): 9/39

Indicator targeting **operational practice**: Countries having use cases and best practices on research infrastructures that include aspects of open science:
- EU27: 1/27
- HE (EU27+ACs): 3/39

Awaiting data on policies

Share of countries with financial strategies for EOSC-relevant:
(i) e-infra (such as computing and data centres),
(ii) national or
(iii) European research infras:
- EU27: 5/27
- HE (EU27+ACs): 8/39

Survey not completed yet!
Interactive visualisations in EOSC Observatory

Does the country have dedicated financial contributions to the EOSC linked to the policies?

- Total volume of financial contributions for 2020 to the EOSC: **40.39 M**
- Amount of funds allocated to current EOSC Association Members (including Mandated Organisations): **17.94 M**
- Amount of funds allocated to organisations which are now not members of the EOSC Association: **21.08 M**

Survey not completed yet!
Monitoring National Contributions to the EOSC

- Understand to what extent open science policies and practices are progressively implemented
- Assess and deepen understanding of the positive impacts brought by these policies and practices.
- Mutual learning through more data, in-depth discussions and matchmaking of policies, strategies and best practices
- Next iteration: extended survey including all open science elements and content
Thank you!

EOSC SB subgroup "National contributions to the EOSC"

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