

Survey: National EOSC-supporting policies and investments

Introduction

This document contains a short-list of questions for the monitoring of investments and policies and their impact on EOSC readiness. These questions will be asked to the EOSC Steering Board members, i.e. to the representatives of the EU member states and associated countries in the EOSC governance. The survey questions have been developed by the EOSC Steering Board's subgroup-A. The purpose of this document is to show what questions are going to be asked, and what information is intended to be gathered through this survey.

Recalling the objectives of the EOSC Steering Board Subgroup-A

- A.) Benchmarking of activities on international, national, regional, and institutional level
1. developing and implementing policies and supporting EOSC-ready infrastructures and initiatives; and
 2. providing contributions/investments and financing of EOSC relevant policies, infrastructures, and initiatives.
- B.) Monitor the benefits of MS/AC policies to the whole EOSC and the benefits of EOSC to the national research communities.

In this context, **the goals** are to

- Understand what contributions will be made by MS/AC to further develop EOSC, in synergy with the implementation of the SRIA on a European level, and reach a collective understanding on how to assess these contributions, building on the experience acquired by the Member States when communicating ex-ante commitments in response to Commissioner Gabriel's invitation in July 2020;
- Evaluate how MS/AC support their organisations nationally, what are their data-related policies and financing mechanisms? What do MS/AC do on country level to advance FAIR and EOSC?
- Evaluate how national funding (other than from members of the EOSC Association) complements the contributions provided by the Association members; and
- Work together with the EOSC Association, and liaise with the EC, so that the benchmarking and monitoring is strategic, fit for its purpose of an overall coordination of the implementation and operationalisation of the EOSC ecosystem in line with the SRIA priorities, and without duplication.

Annual survey to the EOSC Steering Board

Please refer to the *EOSC Glossary*¹ for an explanation of the terms used in this survey, or to this document in which EOSC-SB specific guidance is available. The glossary will be developed by the EOSC Future project by consulting stakeholders on missing definitions.

SECTION 1 EOSC policies and financial investments

Clarification: Policies provide an important impetus to the implementation of open science practices. The purpose of this section is to understand the prevalence and effective implementation at national level.

1. Are there EOSC-relevant policies in place at national or regional level? (Multiple choice):

- There are one or more policies relevant for the EOSC in place

If this box is checked:

- Policy most relevant for EOSC in place since: dd/mm/yyyy
 - Latest update of the policy most relevant for EOSC: dd/mm/yyyy
 - Link(s) to EOSC-relevant policy/policies: [text field]
-
- Policy in planning
 - One or more of the open science policies explicitly mentions EOSC
 - Policy addresses Open access to data, data management and/or FAIR
 - Policy addresses FAIRisation of data
 - Policy addresses Open access to software
 - Policy addresses Preservation and reuse of scientific information
 - Policy addresses Infrastructures that include aspects of open science
 - Policy addresses Skills and competencies
 - Policy addresses Incentives and rewards
 - Policy addresses Citizen science
 - Other [text field]

Explanation question 1:

1. “Policy” can be understood here in a wider sense, e.g., also recommendations, regulations, laws can be considered as a policy
2. At national / regional level should be understood as being applicable to all RPOs/RFOs at this level.

Examples:

1. Country X has a law that makes it mandatory to have all data from publicly funded research openly available: check the box on “Policy addresses Open access to data”

¹ The EOSC Glossary is available in Zenodo: <https://doi.org/10.5281/zenodo.4472643> (Version December 2020)

2. Country Y has in several of its regions an open science policy: tick the according boxes and mention under “Other” that the policy is only applicable in some regions
3. Country Z does not have open science policies, but its largest RPO has an open science policy: don’t tick any of the boxes

2. Do the EOSC-relevant policies in place include measures to ensure implementation? (Multiple choice)

- Action plan
- Concrete objectives
- Indicators to monitor progress
- Associated financial planning

3. Are the financial contributions to the EOSC at national level linked to the policies and actions mentioned above?

[YES / Partly / NO / In planning]

Examples:

1. If only a part of the financial contributions to EOSC is linked to the policies/regulations/recommendations/laws mentioned above, check the “Partly” answer

4. Total amount of national EOSC contribution [in million €] spent in 2020: (Text)

Explanation question 4:

1. Please report here the contributions *paid* in the calendar/fiscal year prior to the current year (we assume that you fill out this survey at the end of a year; if, however, you provide information, e.g., in January, you might give the answer for the year that ended 13 months ago).
2. Include only public investment, not contributions from the private sector.
3. For multi-year funding schemes, for which you have problems to get the exact number for one year, provide the best estimate (e.g., total amount of funding scheme divided by the number of years this programme is running).
4. In cases where funding addresses EOSC relevant issues among others (non-earmarked funding to EOSC), provide a best estimate as to what amount of money of the funding will be used for EOSC activities.

Examples:

1. Country X invested last year 1 M€ in a programme “Advancing EOSC”. In addition, there is a 5-year programme running, with a total investment to EOSC of 5 M€. And last year, investment of 1 M€ was performed to accelerate research, of which you estimate that 25% are directly beneficial for EOSC. The total amount to report for country X would be $1\text{ M€} + 1\text{ M€} + 0.25\text{ M€} = 2.25\text{ M€}$
2. Country Y has decided last year to invest 5 M€ in the upcoming year, and invested last year 1 M€ in a programme “Advancing EOSC”. The total amount to report for country Y would be $0\text{ M€} + 1\text{ M€} = 1\text{ M€}$.

3. Country Z provided 1M€ to the research performing organisation RPO-Z to advance EOSC. RPO-Z used 0.5 M€ of this money for an open call to research groups to perform EOSC-relevant activities. The former is considered an EOSC investment to be reported here, the latter not.
4. In Country Q, a company provides 1 M€ to advance EOSC. For the time being, we would not include this as national funding.

5. What was the amount of funds allocated in 2020 to current EOSC Association Members (including Mandated Organisations)

Explanation question 5:

1. The amount reported here, is part of the amount reported in question 4. Thus, it has to be \leq than the answer to question 4. Also, the sum of the answers to question 5 and 6 has to be \leq than the answer to question 4.
2. If it is difficult to disentangle investment to members / non-members of the association, provide a best estimate.

Examples:

1. Country X invested 1 M€ to advance EOSC in a research or e-infrastructure, which is equally owned and operated by 3 members of the EOSC association and 1 non-member. The amount to report in question 7 would be 0.75 M€.

6. How much of the funds were allocated in 2020 to organisations which are now not members of the EOSC Association?

Explanation question 6:

1. The amount reported here, is part of the amount reported in question 4. Thus, it has to be \leq than the answer to question 4. Also, the sum of the answers to question 5 and 6 has to be \leq than the answer to question 4.
2. If it is difficult to disentangle investment to members / non-members of the association, provide a best estimate.

Examples:

1. Country X invested 1 M€ to advance EOSC in a research or e-infrastructure, which is equally owned and operated by 3 members of the EOSC association and 1 non-member. The amount to report in question 8 would be 0.25 M€

7. What were the sources for the estimate? Please add links to documents supporting the choice(s) in the “Other”-field. (Multiple choice)

- Input/calculations from ministry.
- Input from RPO.
- Input from RFO.
- Existing documents.
- Other (free text)

Explanation question 7:

The aim here is to find out whether the funding information in response to questions 4-6 was derived directly at the ministry, or whether additional input from RPOs/RFOs was necessary.

8. The estimate includes government contributions from which levels? (Multiple choice response)

- National level
- Regional level
- Direct governmental investment at institutional level
- Other (free text)

Explanation question 8:

1. In some countries the regional level rather than the national government has the authority for investments.
2. With “investment at institutional level” we refer to investments by the government directly to, e.g., RPOs, research infrastructures, etc. See also the examples for question 6 for further clarification.

9. If the national funds included earmarked funding (explicitly for EOSC and open science-related activities), how much was calculated (in million €)?

Explanation question 9:

1. The sum of the answers to question 9 and question 10 should be equal to the amount given as answer to question 4

Examples:

1. Earmarked money such as the German investment in the *Nationale Forschungsdateninfrastruktur* (NFDI)

10. If the national funding included non-earmarked funding (i.e., national funding not explicitly given for EOSC- or Open Science-related activities, but [partly] used for EOSC-relevant activities), how much was calculated? (Text response)

Explanation question 10:

1. In most countries, investment to the EOSC is most likely through non-earmarked funding. This means, the investment is not explicitly labelled and limited to EOSC activities, but includes important aspects.
2. The sum of the answers to question 9 and question 10 should be equal to the amount given as answer to question 4

Examples:

1. Country X invested last year 1 M€ to accelerate research in general, of which you estimate that 25% are directly beneficial for EOSC. This would amount to 0.25 M€ of non-earmarked funding.
2. Country Y provides to its RPOs an annual amount of 100 M€ to conduct research. There is no relation of the funding with respect of the RPOs' participation in the EOSC. This budget would not qualify as EOSC- or Open Science-related funding.

11. Did *European Structural and Investment funds* contribute to the EOSC relevant investment, and if so, how much was calculated (in million €)?

Explanation question 11:

1. See here for a description of this type of funding: https://ec.europa.eu/info/funding-tenders/funding-opportunities/funding-programmes/overview-funding-programmes/european-structural-and-investment-funds_en

12. Were one or more of the following EOSC-relevant activities considered in your funding? (Multiple choice response)

- Provision of making FAIR data searchable with the EOSC.
- FAIRisation of data.
- Open data from government and non-profit organizations (Public Sector Information Directive).
- Further EOSC-relevant activities targeting data.

If a box is checked here, a field opens in which you can indicate million euros spent for each activity in 2020

Explanation question 12:

Here you can provide more granularity to overall funding information given in response to questions 4-6. For example, if a funding programme in your country mentions explicitly one of the options given here, you can tick that box.

13. Were one or more of the following service-related activities considered in your funding? (Multiple choice response)

- Services provided by computing- and data centres.
- Services provided by National network (NREN).
- Support for the private sector to participate in EOSC-relevant activities.
- Further EOSC-relevant activities targeting services.

If a box is checked here, a field opens in which you can indicate million euros spent for each activity in 2020

14. Were one or more of the following infrastructure-related activities considered in your funding? (Multiple choice response)

- E-infrastructures like computing and data centres.
- National Research infrastructures.
- National contributions to international organisations contributing to the EOSC development, incl. European Research Infrastructures.
- Further EOSC-relevant activities targeting infrastructures.
- Other (free text)

If a box is checked here, a field opens in which you can indicate million euros spent for each activity in 2020

SECTION 3 EOSC practices

Clarification: Besides the extent to which policies are in place and implemented, this section aims to capture progress in open science practices that may or may not be a consequence of existing policies.

15. Has your country appointed a Mandated Organisation to the EOSC Association? (Y/N/in planning)

- Yes
- No
- In planning

16. Is there any official national monitoring or mapping exercise of one or several of the following open science elements? (Multiple choice)

- Open Access to data, data management and/or FAIR
- FAIRisation of data
- Open Access to software
- Preservation and reuse of scientific information
- Infrastructures that include aspects of open science
- Skills and competencies
- Incentives and rewards
- Citizen science
- Monitoring or Mapping exercise in planning
- No monitoring takes place
- Other [text field]

17. If there is a monitoring indicated in the previous question, how is it reported? If possible, please add link to the monitoring exercise or national dashboard in the last field.

- Periodic reports
- Mapping exercise
- Dashboard
- Please provide a link/links to the national monitoring/mapping [text field]

18. In which open science dimensions do you have use cases and best practices to present? (Multiple choice):

- Open Access to data, Research data management, and FAIR
- FAIRisation of data
- Open access to software
- Preservation and reuse of scientific information
- Infrastructures that include aspects of open science
- Skills and competencies
- Incentives and rewards
- Citizen science
- None
- Other (text box)

19. If you indicated occurrence of an open science use case in the previous question, please provide a description.

[Text box]