Abstract

This report is an update to deliverable D2.8a - EOSC Observatory of the EOSC Future project and provides confirmation of the public release of the EOSC Observatory at EOSC Symposium 2022 on 16 November 2022.
Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Authors/Contributors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V0.1</td>
<td>30/11/2022</td>
<td>Gareth O’Neill (TGB)</td>
<td>Table of contents finalised</td>
</tr>
<tr>
<td>V0.2</td>
<td>11/06/2023</td>
<td>Gareth O’Neill (TGB) and Stefania Martziou (OpenAIRE)</td>
<td>Initial draft of report composed</td>
</tr>
<tr>
<td>V0.3</td>
<td>12/06/2023</td>
<td>Ron Dekker (TGB), Gareth O’Neill (TGB), and Athanasia Spiliotopoulou (JNP)</td>
<td>Report reviewed and comments incorporated</td>
</tr>
<tr>
<td>V1.0</td>
<td>12/06/2023</td>
<td>Gareth O’Neill (TGB), Mike Chatzopoulos (ARC), and Stefania Martziou (OpenAIRE)</td>
<td>Report finalised and submitted to the EC</td>
</tr>
</tbody>
</table>

Copyright Notice

This work by Parties of the EOSC Future Consortium is licensed under a Creative Commons Attribution 4.0 International License. The EOSC Future project is co-funded by the European Union Horizon Programme call INFRAEOSC-03-2020, Grant Agreement number 101017536.
Table of Contents

Glossary .............................................................................................................................................. 4
List of Abbreviations ............................................................................................................................ 5
1 Introduction ......................................................................................................................................... 6
2 Launch ........................................................................................................................................... 6
3 Release ......................................................................................................................................... 7
4 Software ...................................................................................................................................... 8
5 Documentation ............................................................................................................................... 8
6 Conclusion .................................................................................................................................... 9
References ........................................................................................................................................ 10

Table of Tables

Table 2-1: Agenda of the Session on Launch of the EOSC Observatory at EOSC Symposium 2022 .............. 6

Table of Figures

Figure 2.1: Photo of the Session on Launch of the EOSC Observatory at EOSC Symposium 2022 .............. 6
Figure 3.1: Home Page of the EOSC Observatory ................................................................................. 7
Figure 3.2: Data on Policies from Survey on National Contribution to EOSC 2021 ............................... 7
Figure 3.3: Data on Practices from Survey on National Contribution to EOSC 2021 ............................... 8
Glossary

EOSC Future project Glossary is incorporated by reference: https://wiki.eoscfuture.eu/x/JQCK
## List of Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC</td>
<td>Athena Research Centre</td>
</tr>
<tr>
<td>EOSC</td>
<td>European Open Science Cloud</td>
</tr>
<tr>
<td>EOSC-A</td>
<td>EOSC Association</td>
</tr>
<tr>
<td>EOSC-SB</td>
<td>EOSC Steering Board</td>
</tr>
<tr>
<td>ERA</td>
<td>European Research Area</td>
</tr>
<tr>
<td>JNP</td>
<td>JNP Strategy and Management Consulting</td>
</tr>
<tr>
<td>MS/AC</td>
<td>Member States and Associated Countries</td>
</tr>
<tr>
<td>NPR</td>
<td>Expert Group on National Points of Reference</td>
</tr>
<tr>
<td>TGB</td>
<td>Technopolis Group Belgium</td>
</tr>
<tr>
<td>WP</td>
<td>Work Package</td>
</tr>
</tbody>
</table>
1 Introduction

This deliverable is an update to D2.8a - EOSC Observatory [1] and confirms the public release of the EOSC Observatory (henceforth the ‘observatory’) as an interactive policy intelligence tool for monitoring policies, practices, and impacts of the European Open Science Cloud (EOSC) across Member States and Associated Countries (MS/AC). The observatory is being developed by OpenAIRE and Technopolis Group Belgium in Work Package (WP) 2 of the EOSC Future project [2] in collaboration with the EOSC Steering Board (EOSC-SB) [3].

2 Launch

The EOSC Observatory was officially launched in a dedicated session on the Launch of the EOSC Observatory at the EOSC Symposium 2022 in Prague on 16 November 2022 [4]. The session consisted of presentations on the release of the observatory by EOSC Future, monitoring of EOSC readiness in MS/AC by EOSC-SB, pilot survey and data for EOSC-SB by the co-chair of EOSC-SB Subgroup A on National Contributions to EOSC, and use of the observatory for policy alignment and development by the European Commission as well as an open roundtable discussion with the speakers and participating audience as in Table 2-1 and Figure 2.1.

Table 2-1: Agenda of the Session on Launch of the EOSC Observatory at EOSC Symposium 2022

<table>
<thead>
<tr>
<th>Timing</th>
<th>Topic</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.00 - 11.05</td>
<td>Welcome and Introduction</td>
<td>Natalia Manola</td>
</tr>
<tr>
<td>11.05 - 11.15</td>
<td>EOSC Observatory as a Policy Intelligence Tool</td>
<td>Gareth O’Neill</td>
</tr>
<tr>
<td>11.15 - 11.25</td>
<td>Monitoring EOSC Readiness in MS/AC</td>
<td>Volker Beckmann</td>
</tr>
<tr>
<td>11.25 - 11.35</td>
<td>Survey on National Contributions to EOSC 2021</td>
<td>Sofia Abrahamsson</td>
</tr>
<tr>
<td>11.35 - 11.45</td>
<td>EOSC Observatory for Policy Alignment and Development</td>
<td>Thomas Neidenmark</td>
</tr>
<tr>
<td>11.45 - 12.25</td>
<td>Q&amp;A and Roundtable with Speakers and Invited Guests</td>
<td>Natalia Manola</td>
</tr>
<tr>
<td>12.25 - 12.30</td>
<td>Wrap-up and Closing</td>
<td>Natalia Manola</td>
</tr>
</tbody>
</table>

Figure 2.1: Photo of the Session on Launch of the EOSC Observatory at EOSC Symposium 2022
3 Release

The observatory was released into full production on a separate subdomain of the website of the EOSC Portal [5] on 15 November 2022 as in Figure 3.1. The survey tool functionality of the observatory was already in production to allow the representatives of MS/AC in EOSC-SB to fill in their responses to the annual surveys on National Contributions to EOSC and to visualise their survey responses internally in the observatory. The public release of the observatory opened the visualisation of the validated data from the Survey on National Contributions to EOSC 2021 to the general public on the webpage of the observatory for monitoring the EOSC readiness of MS/AC [6]. The validated data from the survey presented the official responses from 34 MS/AC on policies for EOSC and Open Science as in Figure 3.2 and practices for EOSC and Open Science as in Figure 3.3.

![Figure 3.1: Home Page of the EOSC Observatory](image1)

![Figure 3.2: Data on Policies from Survey on National Contribution to EOSC 2021](image2)
4 Software

The software behind the observatory is all open source and is openly available in online software repositories. The observatory software consists of three main components for the back end, front end, and statistics tool:

- **Back end**: responsible for the data management to store and retrieve data from the database and authentication and authorisation to allow users to access and modify surveys and data [7] [8] [9]
- **Front end**: responsible for the user interface where users see all visualisations (including charts and maps of the data) and interact with the surveys, data, and other survey tool functionalities [10] [11]
- **Statistics tool**: responsible for accessing the database and generating aggregations of the data collected from the surveys which are used by the front end to generate data visualisations [12]

All software components of the observatory are licenced under an Apache Licence 2.0 which is a widely-used open source software licence governing how users can utilise the code in their own projects and giving users permission to reuse the code for almost any purpose including using the code in proprietary software [13].

5 Documentation

The observatory has already been highly successful in supporting EOSC-SB and exploiting the data coming from the surveys on National Contributions to EOSC. There is extensive documentation arising from the observatory, whereby all non-confidential documentation is openly shared in the EOSC Observatory Zenodo Community which has been created and is managed by the project [14]. This documentation includes introductions, supporting materials, surveys, survey data, and survey analyses related to the observatory:

- Introduction Video to EOSC Observatory [15]
- Introduction Article to EOSC Observatory [16]
- Survey on National Contributions to EOSC 2021 [17]
- Data of Survey on National Contributions to EOSC 2021 [18]
- Analysis of Survey on National Contributions to EOSC 2021 [19]
- Monitoring Framework for National Contributions to EOSC [21]
- Calculating National Financial Contributions to EOSC [22]
- Survey on National Contributions to EOSC 2022 [23]
6 Conclusion

The EOSC Observatory is in full production and has successfully conducted the pilot survey, collected and validated data from 34 MS/AC, and openly presented the data related to the Survey on National Contributions to EOSC 2021 as well as openly published an analysis and summary of use cases of the pilot survey. The revised Survey on National Contributions to EOSC 2022 is now running in the observatory and it is expected that there will be around 30 validated responses from MS/AC to the survey. An analysis of the survey data will be openly published, and the survey data will be visualised in the observatory and archived in Zenodo. The project is also in discussion with the EOSC Association (EOSC-A) [24] to conduct the survey and collect the data from the members of EOSC-A on the Additional Activities Report 2022 and Additional Activities Plan 2024 in the observatory. The aim is to conduct the survey and collect the data for EOSC-A in the summer of 2023.

The work on supporting EOSC-SB with the monitoring of EOSC and Open Science through the annual surveys and the EOSC Observatory will continue after EOSC Future in a Horizon Europe Coordination and Support Action to continue the implementation of the EOSC monitoring mechanism. This work should feed into the future development of the Monitoring Framework for National Contributions to EOSC, annual collection of data for the Survey on National Contributions to EOSC in the EOSC Observatory, and open publishing and analysis of validated survey data in the EOSC Observatory and EOSC Observatory Zenodo Community. The results of the EOSC-SB surveys conducted in the observatory will lastly feed into the work of the expert group on National Points of Reference on Scientific Information (NPR) [25] and especially the NPR progress report 2023 as well as the new Monitoring Mechanism for the European Research Area (ERA) across the actions.
References


