**2nd EOSC-ESFRI workshop ON RIs AND EOSC  
Research Infrastructures shaping EOSC**

**Virtual meeting**  
Dates: 6-7 October 2020 **Final agenda - Updated 1-10-2020**

**Background[[1]](#footnote-1)**

***European Research Infrastructures (RIs)*** *foster the definition, implementation and further development of advanced solutions for the effective provisioning and use of high-quality scientific data, with effective metadata descriptors, ease of access, interoperability and reusability, fully implementing the FAIR (‘Findable, Accessible, Interoperable, and Reusable) principles.*

***ESFRI Landmarks and other internationally open RIs, not only produce scientific data*** *that are used by highly competitive international research communities,* ***but also assure a robust quality control*** *of the produced data sets. In addition, the ability of RIs to develop* ***interoperability concepts*** *becomes critical not only for effective data sharing, but also more generally, it will direct the capability of RIs to address the multidisciplinary character of the* ***societal challenges and Sustainable Development Goals*** *(SDGs). These efforts must be recognized, properly analysed and utilized to contribute* ***to shaping the EOSC[[2]](#footnote-2) ecosystem****.*

*EOSC provides a chance to increase data sharing beyond RIs, since it is an infrastructure that includes not only RIs but also data, users and service providers from different national and regional backgrounds. EOSC provides a chance to increase data sharing beyond RIs, since* ***it will provide European researchers with seamless access to a wealth of data[[3]](#footnote-3), along with*** *a wide range of value-added services from different national and regional backgrounds. The experience gathered by ESFRI and ESFRI initiated RIs, should be utilized to the maximum extent in the EOSC implementation[[4]](#footnote-4), including the various alternatives for governance models and fully reflecting the engagement and responsibility of RIs in and for Open Science.*

***EOSC should have clear extra value for its end users.*** *These include primary scientific advantages, such as enhanced data and service connections, better ability to address interdisciplinary and societal challenges, and improved e-infrastructure services and tools for RIs and their data consumers. On top of that EOSC should feature political, social and cultural advantages, for example improved political decision-making capabilities, increased societal awareness and leading a change in culture towards Open Science. Further, qualifying factors such as transparency, high data quality, research acknowledgement/credit, and training are important.*

*EOSC requires* ***a long-term and sustained funding*** *to ensure relevance, uptake and its continued existence. This funding should also* ***reflect the evolving needs of the supported communities****, with necessary periodic updates and related development initiatives.*

*The* ***EOSC cluster projects play an important and multi-faceted role for both EOSC and RIs****, being on one side providers of data and services of all kinds (e.g., data services, research products services) and on the other side as users of services provided by EOSC. The relationship between direct funding for RIs and EOSC-derived funding for the horizontal services and resources provided for the RIs need to be considered, with the precise specification for each facility.*

*EOSC is working on a* ***change of culture towards open research data****, and based on the FAIR data principles. Such a cultural change can be achieved through targeted education and training, incentives and reward mechanisms.*

*Promotion, outreach and training can ensure that the added value of EOSC is clearly visible for its end users, including the many benefits of Open Science, and the ‘added value’ for RIs. Further, an understanding of the costs associated with Open Science is needed. For this, funding models, legal entity concepts and statutes, as well as access models are being defined by EOSC.*

***The RI community should act as a key player*** *in these efforts,* ***leading the change of culture, driving data quality and more open access to data.*** *Together with the scientific community of users,* ***the RIs have a key role to help deploy the EOSC.***

**Objectives**

* *The main objective of the workshop is to bring together ESFRI, ESFRI RIs and EOSC stakeholders, in order to showcase and better comprehend the EOSC concept and value proposition for its users, and ensure an optimal federation of ESFRI clusters / RIs with EOSC.* 
  + *Present the* ***current state of EOSC*** *and see how the thematic RIs/ESFRI clusters fit into the developing landscape, including the tri-party partnership with the new legal entity (EOSC Association) and its Strategic Innovation and Research Agenda (SRIA). Convey ESFRI RIs/Clusters/ and ESFRI Task Force on EOSC positions into shaping EOSC:*
    - *Present the EOSC latest documents and the outcome of their consultations:*
      * *EOSC Partnership agreement and EOSC Association*
      * *EOSC Partnership Strategic Innovation and Research Agenda (SRIA) (including planning for the next cycles of funding)*
      * *EOSC Sustainability WG latest report “Iron Lady”*
  + ***Showcase*** *from ESFRI RIs and Clusters the EOSC concept and added-value for its users with concrete use cases, good practices and approaches for federating thematic resources into EOSC – around 3 main areas:*
    - *Thematic Clusters/RI data and tools*
    - *Horizontal federated e-Infrastructure resources uptake*
    - *Open Science and FAIR data sharing within and across domains*
  + *Present the* ***latest technical developments and outputs*** *of e-Infrastructure/EOSC providers:*
    - *Resources and services/tools for thematic providers and end users (network, computing, data, middleware/other services)*
    - *Developments around incentives and policies on Open and FAIR Data & Services, their sharing and towards a cultural change, and work on skills*
  + *Reflect from* ***the users’ perspective*** *on the status, outputs and discussions in the EOSC WGs, with focus on:*
    - *Architecture*
    - *FAIR data*
    - *Rules of Participation (RoP)*
    - *Other basic findings from other groups will be covered, including:* 
      * *The Minimal Valuable EOSC (MVE) concept. In particular, how the Clusters/RIs data producers/service providers are connected / federated (either integrated or interfaced)*
      * *Skills and training*

**Main concepts:**

1. *Work around the themes of ‘****Present and Future’****, both from the thematic projects (RI/Clusters) and horizontal projects (e-Infrastructures) perspectives.*
   1. ***Present:*** *where are we now both in terms of latest policy and technical developments. Policy with regards to the tri-party partnership, the new legal entity and the SRIA document, along with the EOSC Sustainability WG “Iron Lady” document. Regarding technical developments portray characteristic use cases both from horizontal and thematic projects, reflecting also the ESFRI White Paper related points.*
   2. ***Future:*** *What is expected in the next period, both policy and technically, following up on the current state. On the one hand study the evolving legal landscape of EOSC next phase (post 2020) and envisage the role of the thematic stakeholders, and on the other hand focus on user-related technical aspects and expectations; what services are planned to be available in the Minimum Valuable EOSC (MVE) when EOSC is launched on 1st Jan 2021 compared to what services users are expecting?* 
      1. *EOSC Governance to present the current state of play.*
      2. *Thematic stakeholders/clusters/RIs to reflect on their role in the developing landscape.*
      3. *Clusters to present key services/good practices to be federated in EOSC, showcasing the EOSC potential and added value.*
      4. *Horizontal projects to present also a set of horizontal services, again showcasing the EOSC potential and added value.*
2. ***Main focal and other points****:* 
   1. *Present latest EOSC Governance plans, including the EOSC partnership and extract* ***user expectations on governance****.*
   2. *Present* ***use cases*** *for end users to understand EOSC and to attract them to use it.*
   3. *Go into the details in specific topics in round table discussions and identify key benefits for the users: e.g. unified data formats, service level agreements, MVE services, training/skills, AAI.*
3. ***Provide highlights-“flavours”-good practices:***
   1. *Need to provide highlights and “flavours” (use cases, good practices, etc.) in close cooperation with the clusters showcasing/ demonstrating breadth of issues.*
4. ***Informed by ESFRI White Paper, including:*** 
   1. *ESFRI vision/mission and the strategic orientations for a renewed ERA.*
   2. *Implementation of a healthy RI ecosystem in Europe with high-quality open research data from RIs for EOSC federation.*
5. ***Workshop report***

*A report from the event will be prepared, along with the presented case studies/use cases with the identified benefits for their users, which can possibly act as input into the future developments of EOSC (that can also act as a tool to attract users to join the EOSC, thus supporting uptake/integration within this community).*

**Event type:**

*Virtual event.*

**Participants (limit break-out session participants to ~150)**

* *ESFRI Forum delegates – Around 30*
* *ESFRI RI Projects/Landmarks/Cluster projects –1-2 per project/cluster ~30*
* *EOSC Governance and EOSC project representatives~30*
* *EC representatives, EOSC Secretariat and StR-ESFRI representatives ~30*
* *EOSC end users and other general audience ~30*
* *Expected virtual audience: 150 persons for break-out sessions;*

**Organisation**

* *Co-organised by the ESFRI Task Force on EOSC, EOSC Cluster projects, EOSC Secretariat and StR-ESFRI2, in close cooperation with ESFRI and the EC.*
* *Dates: 6-7 October 2020*
* *Platform: Zoom*
* *Format: The initial invitation has been sent to the White Paper conference audience (~600 persons). New registration to be prepared asap including the selection of the break-out sessions. Registration for break-out sessions will be capped at ~150 (+20 for speakers, moderators/rapporteurs not having registered)*

**Agenda skeleton/concept**

**Day 1**

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| 09:45 – 10:00 | The remote connection will be available 15 minutes before |
| 10.00 – 12:30 | ***Session 1 –Scope, EOSC current state, including EOSC Governance, Chair: Jan Hrusak, ESFRI Chair, 5’ (confirmed)***   1. ***ESFRI infrastructures and the EOSC in the new ERA, Anna Panagopoulou, DG RTD,*** *10’* ***(confirmed)*** 2. ***Introduction- Scope, Mirjam van Daalen, Chair, ESFRI TF on EOSC*** *– 10’* ***(confirmed)*** 3. ***Panel 1- EOSC status update*** *(EB/GB) – 45’*    1. *EOSC Partnership and new legal entity status – 10’, Karel Luyben, EOSC EB* ***(confirmed)***    2. *EOSC Strategic Research and Innovation Agenda – 10’, Sarah Jones, EOSC EB* ***(confirmed)***    3. *The Sustainability WG “Iron Lady” document - 10’, Bob Jones, SUST WG* ***(confirmed)***    4. *Questions & Answers panel – 15’*   *Break out session preparation – Break 11:10-11:30*   1. ***Break out session for feedback on Session 1*** *– 60’*    1. ***Feedback from thematic infrastructures on EOSC Governance – Role and participation in EOSC Governance*** *– 45’*   *The setup will depend on the total number of participants and number of participants per parallel session. It is advised not to go beyond 25-30 persons and not less than 10. Currently it is planned that there will be 6 break-out sessions of 25 participants each (2 for each topic), resulting in a maximum of 150 persons. However, some participants may skip the break-out sessions, which may facilitate better discussions. A set of questions will be prepared and there will be a moderator and a rapporteur for each break out session.*   * + 1. *EOSC Partnership and new legal entity status*     2. *EOSC Strategic Research and Innovation Agenda*     3. *The Sustainability WG “Iron Lady” document*   1. ***Plenary - Summary of key points from each breakout session*** *-15’,Chairs: Jan Hrusak and Mirjam van Daalen*      1. *Break-out sessions’ rapporteurs, 2 min each and closing*   *Break 12:30-14:00* |
| 13:45 – 14:00 | The remote connection will be available 15 minutes before |
| 14:00 – 16:30 | ***Session 2 - Panel 2 - Updates on the latest technical developments – 60’****,* ***Chair:******Yannis Ioannidis, ESFRI Vice-Chair, 5’ (confirmed)***   * 1. *Architecture and Minimal Viable EOSC (MVE) – 10’, Jean-Francois Abramatic, ARCH WG* ***(confirmed)***   2. *FAIR+R Data & Services – Open Science policies – 10, Francoise Genova, FAIR WG* ***(confirmed)***   3. *Rules of participation – 10’, Juan Bicarregui, RoP WG* ***(confirmed)***   4. *Skills and training – 10’, Natalia Manola, Skills WG* ***(confirmed)***   5. *Questions & Answers panel – 15’*   *The areas presentations can be enriched via the SRIA Consultation Action Areas (e.g. to include some Action Areas relevant to the thematic infrastructures such as user Environments, FAIR Metrics and Certification)*  *Break out session preparation – Buffer 15:00-15:15*   1. ***Break out session for feedback on Session 2 – 60’***    1. ***Feedback from thematic infrastructures on EOSC Technical Developments– Role and contribution of thematic infrastructures-45’***   ***Max 2 breakout sessions per topic***   * + 1. *Architecture and Minimal Viable EOSC (MVE)*     2. *FAIR+R Data & Services – Open Science policies*     3. *Rules of participation*     4. *Skills and training*   1. ***Plenary - Summary of key points from each break-out session*** *-15’, Chair: Yannis Ioannidis*      1. *Break-out sessions’ rapporteurs, 2 min each and closing* |
| 16:15-16:30 | ***Wrap up from day 1, Chairs: Mirjam van Daalen, Yannis Ioannidis***   1. *Summary report from Session 1 - 10’, Mirjam van Daalen and Sarah Jones (tbc) acting as Head Rapporteur from Session 1*    1. *Further feedback from audience via on-line tools (e.g. Slido)* 2. *Summary report from feedback Session 2 - 10’, Yannis Ioannidis and Juan Bicarregui (tbc) acting as Head Rapporteur from Session 2*    1. *Further feedback from audience via on-line tools (e.g. Slido),* 3. *Overall Day 1 Summary and Conclusions, co-Chairs* |

**Day 2**

|  |  |
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| 09:45 – 10:00 | The remote connection will be available 15 minutes before |
| 10:00 – 11:00 | ***Session 3 – Present and Future: Panel – Report on horizontal EOSC services, along with future goals; Chair: Per Oster, 5’ - EOSC Secretariat – 60’***  *Present the latest developments and outputs on horizontal, transversal and regional approaches from e-Infrastructure/EOSC thematic providers:*   1. *Resources and services/tools for thematic providers/users from a national perspective – Sverker Holmgren, e-IRG National Nodes paper– 10’* ***(confirmed)*** 2. *Resources and services/tools for thematic providers/users from a regional perspective– Fulvio Galleazi, EOSC Pillar, Presenter from an EOSC 5b regional project – 10’* ***(confirmed)*** 3. *Resources and services/tools for thematic providers/users from a European perspective– Tiziana Ferrari, EOSC-hub, Presenter from an EOSC horizontal project – 10’* ***(confirmed)*** 4. *Transversal services from thematic providers/clouds –digital LEAPS, Helmut Dosch, vice-chair of LEAPS,* *Presenter from a thematic provider offering transversal services – 10’* ***(confirmed)*** 5. *Questions & Answers panel –* ***Summary of key points****– 15’*   *Short break– Buffer 11:00-11:15* |
| 11:15 – 12:45 | ***Session 4 – Present and Future: Panel - What is EOSC for thematic ESFRI RIs and Cluster projects, along with future goals, Chair: Kostas Glinos, 5’ EC, DG RTD – 90’ (confirmed)***  *Showcase from ESFRI RIs and clusters the EOSC concept and added value for its users with concrete use cases, good practices and approaches for federating thematic resources into EOSC around 4 main areas:*   * *Thematic Clusters/RI data and tools* * *Federated e-Infrastructure resources uptake* * *Open Science and FAIR data sharing within and across domains* * *Policies towards a cultural change and work on skills*   1. *Helen M. Glaves, ENVRI-FAIR – 10’* ***(confirmed)***   2. *Giovanni Lamanna, ESCAPE – 10’* ***(confirmed)***   3. *Niklas Blomberg, EOSC-Life – 10’* ***(confirmed)***   4. *Patrick Fuhrmann, PANOSC+ EXPANDS – 10’* ***(confirmed)***   5. *Franciska de Jong, SSHOC – 10’* ***(confirmed)***   6. *Rudolf Dimper, EOSC Cluster projects joint paper – 10’* ***(confirmed)*** * ***Questions and Answers panel -******Summary of key points*** *– 25’*   *Break 12:45-14:00* |
| 13:45 – 14:00 | The remote connection will be available 15 minutes before |
| 14:00 – 15:00 | ***Session 5 –Break out: Cross-fertilisation between thematic and horizontal projects – 60’***   1. ***Feedback from thematic and horizontal infrastructures on cross fertilisation among the two– Role and contributions of each*** *– 45’*   *Moderators from EOSC Secretariat*  *Max 3 breakout sessions per topic*   * 1. *Thematic Clusters/RI data and tools federation and uptake -*   *Federated e-Infrastructure resources uptake*   * 1. *Open Science and FAIR data sharing within and across domains -*   *Policies towards a cultural change and work on skills*   1. ***Plenary - Summary of key points from each break-out session*** *– 15’, co-Chairs, Per Oster and Kostas Glinos*    1. ***Break-out sessions’ rapporteurs****, 2 min each and closing* |
|  | *Short break 15:00-15:15* |
| 15:15 – 16:15 | ***Session 6 – Wrap-up from day 2 Chairs: Johannes Klumpers, Kostas Glinos EC, DG RTD and Per Oster, CSC***  *Report from Sessions and further feedback from audience –Summary and conclusions,*   1. *Summary report from Session 3 - 10’, Per Oster and/or one of the Rapporteurs acting as Head Rapporteur from Session 3 (if needed)*    1. *Further feedback from audience via on-line tools (Slido)* 2. *Summary report from Session 4 - 10’, Kostas Glinosand/or or one of the Rapporteurs acting as Head Rapporteur from Session 4 (if needed)*    1. *Further Feedback from audience via on-line tools (Slido)* 3. *Summary Report from feedback Session 5 - 10’, Per Oster, Kostas Glinos or one of the Rapporteurs acting as Head Rapporteur from Session Rapporteur 5*    1. *Further feedback from audience via on-line tools (Slido)* 4. *Overall Summary and Conclusions, Johannes Klumpers* |

**Key messages from the ESFRI White Paper**

* *ESFRI will continue to support the development of a European Open Science Cloud and the close connection of RIs to EOSC with increased FAIR and open data sharing and availability to stimulate inter-disciplinary and transdisciplinary research to achieve the societal goals. Horizon Europe should continue to support such developments.*
* *The EC, the MS/AC and EOSC are invited to take full advantage of the well performing best practices in data management, storage and curation implemented at RIs at the ESFRI Roadmap that already implement FAIR and Reproducibility criteria for data, which operate them through open access portals and which can contribute to achieving the EOSC`s long-term goal of research data interoperability.*
* *The EC, the MS/AC and the RIs are invited to take account of the vital need for data professionals in their education and innovation activities and to consider supportive measures at an appropriate scale.*

1. <https://www.esfri.eu/esfri-white-paper> [↑](#footnote-ref-1)
2. <http://data.consilium.europa.eu/doc/document/ST-9029-2018-INIT/en/pdf> [↑](#footnote-ref-2)
3. Ursula von der Leyen in Davos: <https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_20_102> [↑](#footnote-ref-3)
4. <https://ec.europa.eu/research/openscience/pdf/swd_2018_83_f1_staff_working_paper_en.pdf> [↑](#footnote-ref-4)