Towards EOSC Financial Sustainability 2027+

Discussion meeting - contribute to the Task Force final report!

TF delegation present:
- Dale Robertson (co-chair, EGI Foundation)
- Jan Meijer (co-chair, Sikt)
- Luděk Matyska (Masaryk University)
- Ornela De Giacomo (CERIC-ERIC)
- Patricia Mergen (Meise Botanic Garden)

Agenda

- **This presentation (20 minutes):**
  - Setting the scene
  - Assumptions
  - Summary analysis - federation of data, exchange, core
  - Key messages

- **Discussion (25 minutes)**

- **Steering Board member view (5 minutes)**

- **Wrap-up (5 minutes)**
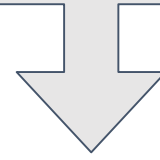
Setting the scene

- EOSC is in a transition phase and developing within a highly dynamic environment
  - EC procurement, 2027+ governance + legal entity + financing, data spaces

- Mandate Task Force: develop financial scenarios for the EOSC-Core, EOSC Exchange and the EOSC Data Federation post 2027
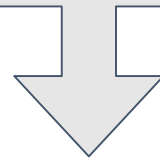
Key moments:

- November 2022:   Task Force interim report published
- September 2023:   Targeted consultation on interim report - report published
- December 2023:   planned publication final report
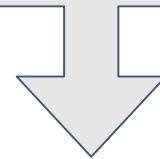
TF view - EOSC in a nutshell

policy choice: enable large scale secondary use of European research data

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sharing FAIR research data - without friction - at scale

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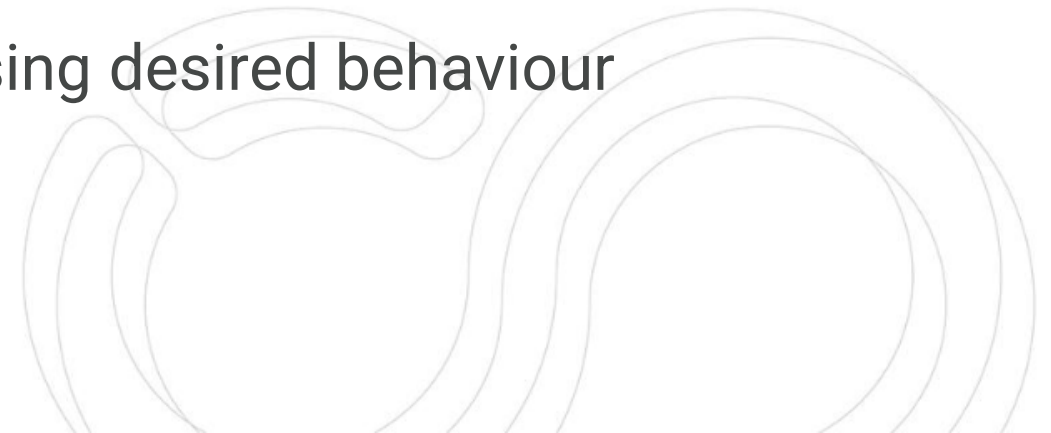EOSC - Federation of FAIR data infrastructures + marketplace of services

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a collective European platform and ecosystem

EOSC - a collective platform

Need for coordination and alignment towards the common vision

- Achieving the collective platform and ecosystem requires collective and coordinated action towards the collective goal
  - at EU, national, institutional and thematic level!
- Requires long-term financial and strategic commitment to platform
  - no-one will spend effort to integrate with a one-day-fly
- Federated approach - building on and linking up existing technical, governance and financial efforts
- Requires healthy dynamic - incentivising desired behaviour

Scope

- **EOSC Federation of Data**
  - Federates existing and future research data infrastructures
  - enables researchers to have direct access (i.e. find, acquire & retrieve) to or process open and/or FAIR data from multiple sources across Europe available at any of the levels of aggregation

- **EOSC Exchange - a pan-European marketplace for EOSC services**
  - Facilitates service findability, service transactions, and cost recovery mechanisms
  - enables the brokering of community services between Federation participants and gives access to a range of services be they commercial or not for profit services following a range of different business models.

- **EOSC Core**
  - provides basic functionalities e.g. AAI, security coordination, etc required to enable the federation of the research data repositories and the EOSC Exchange
  - requires EOSC Interoperability Framework, clear Rules of Participation, usage & access policies.

EOSC Federation of Data

What should be funded, and why?

- Data Federation lies at the heart of the Web of FAIR Data and Services

- The EOSC Data Federation will not store or own any data

- EOSC is the logical evolution of efforts by the European research community

- Federation of data requires significant and coordinated effort at national, institutional, EU and thematic level

- Federation of data requires substantial preparation and adaptation of existing data and services, which carries significant costs

EOSC Exchange

What should be funded, and why?

- **Enabling "free movement of services" necessitates enabling cross-border service delivery and use**
  - brokering of services - enables best-of-breed services to rise to the top (and poor services to die a natural death)
  - funded through cost recovery of service use - invoicing, virtual access, vouchers
  - does not solve lack of funding / cost-share in RIs to sustain services developed with project funding
  - blocking factors: lacking incentives, remuneration mechanisms, mandates, procurement, VAT, culture
  - direct cost: market place mechanisms + transition & incentive cost for existing service providers
  - indirect cost: consumption of services by researchers

- **Collective portfolio of agreements with commercial services**
  - significant economies of scale and reduction of burden - good deals and procurement-compliant agreements
  - challenging legal environment - EOSC not limited to EU
  - subject to appropriate governance structures (i.e. _what_ to procure collectively)
  - direct cost: collective engine for agreement establishment & delivery
  - indirect cost: consumption of services by researchers

- **Collective portfolio of collectively financed services**
  - for the greater good of the collective - somewhat elusive
    - marketing tool to attract data and usage to EOSC
    - bridge 10-year period to well-functioning marketplace
    - ensure service availability for all EOSC users
    - realise economies of scale enabled by EOSC platform
  - subject to appropriate governance structures (how much of which services for what purpose?)
  - direct cost: consumable amount of selected services; from small (current EU node) to extremely large (EuroHPC)
  - indirect cost: governance, procurement, allocation mechanisms, integration with existing delivery channels, marketing

EOSC Core

Financial requirements

- **The Core is the collective good that enables the collective EOSC platform**
  - the technical, organisational, governance and marketing underpinnings of the Federation of Data & the EOSC Marketplace
- **Collective benefits suggest collective governance and collective funding**
- **Task Force recommendation: for the Core to be jointly funded jointly by the EC and the MS**
  - Including continuous incremental improvement aimed at operational relevance of current functionality
  - but not necessarily major investments in new functionality
- **Collective funding ensures longevity and alignment of interests**
  - longevity - a prerequisite for any platform to create gravitational pull
  - alignment of interests - EOSC unites all stakeholders. If you want to co-decide, you need to co-finance
- **The Core should be kept minimal**
  - sensitive governance: who decides which minimum is worthy long term (easy) financing?
  - what is minimal will evolve over time as the platform changes operational realities
- **Important details**
  - EC proportion currently 100%, should decrease
  - Right balance subject to desired dynamic EC/MS and chosen governance model - healthy dynamic requires MS to get skin in the game
  - Financing the Core in cash, not in-kind - cash means joint investment and commitment to common goal
- **Direct cost:**
  - functionality currently being procured in Lot 1 of EOSC-Node procurement (ca. €16 million)
  - governance, marketing, training
- **Indirect cost: community involvement**

Summary

- Collective (EC + MS) long-term commitment towards federated EOSC platform - joint focus and joint financing

- Data federation is most important - policy goal is supporting secondary use of research data at scale

- Use of data requires access to related services – cost recovery needed

- A well-functioning market place requires structural change to remove barriers
  - there is money to build but not to cross-border buy

- Incentives required to stimulate joining the EOSC federation and create the platform

discussion

What financial incentives would encourage data or service providers to join the EOSC federation?

A forest of existing thematic RIs and Data Spaces with European and world wide scope …

For EOSC to achieve desired economies of scale, some research service and data providers will have to merge or be supported by the community, reliant on common EOSC services.

What do you think?

Discussion – 3rd Question

Grants fund development of new services. How should their maintenance and operations thereafter be funded? Because that money won't come through EOSC

Discussion – all questions

- What financial incentives would encourage data or service providers to join the EOSC federation?

- For EOSC to achieve desired economies of scale, some research service and data providers will have to merge or be supported by the community, reliant on common EOSC services.

- Grants fund development of new services. How should their maintenance and operations thereafter be funded? Because that money won't come through EOSC