EOSC Executive Board Working Group on Skills & Training

https://www.eoscsecretariat.eu/working-groups/skills-training-working-group

Natalia Manola – OpenAIRE / Athena RRC

Presentation also by

Vinciane Gaillard – EUA (co-chair)

Iryna Kuchma — EIFL (rapporteur)

25 May 2020

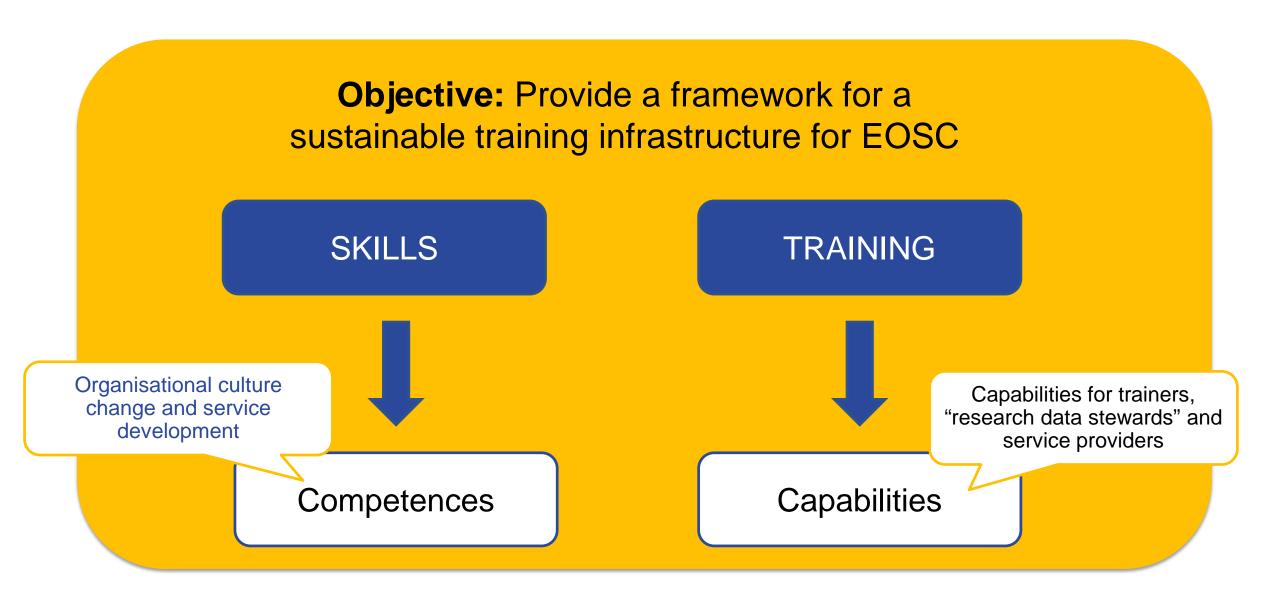
e-IRG Workshop, May 2020



About the Working Group

- Started January 2020
- 38 members from 24 countries
- Representation from universities, data centers, libraries, ministries, infrastructures, policy makers, education/learning
- Members experience in both data and ICT







4 task forces

01



EOSC minimal skills

02



Options for organisational models for competence centers

03



EOSC in national strategies for digital skills

04



Specifications for training catalogue(s)



Our results - Timeline

• Q3 2020

- Minimum skill set for EOSC
- Specifications for training catalogue(s)
- Options for organisational models for competence centers (regional, thematic, EU levels) and their coordination

Q4 2020

- EOSC MVP for training and sustainability model
- Recommendations for EOSC skills/training in national digital skills policies/strategies



01 - EOSC Minimal Skills

01



EOSC minimal skills

Establish a skills development framework

Identify and prioritize open science and digital skill sets in EOSC for

- 1. researchers open science and RDM practices
- 2. service providers providing their services to EOSC
- policy makers how to align with open science and data policies



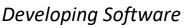
Building blocks

- Improve visibility of the "EOSC user ecosystem", with specific training needs Map existing skills and competences frameworks (e.g. <u>FAIR4S</u>, <u>EDISON</u>, <u>DigComp</u>, <u>ODI</u>)
- 2. Identify and **prioritize** open science and digital skill sets for EOSC for researchers service providers policy makers
- 3. A study to frame digital skills required in EOSC
- 4. Study certification mechanisms fit for EOSC (?)





ICT-Specific





Library & inform. Sci. **Understanding Data**



Discipline Specific Conducting Research



General Public

EOSC Enabler

Consumes EOSC Services & designs and coordinates Discipline-spec. services





Consumes Data and EOSC services and Contributes with Data Analytic Services.



Research Software **Engineer**





Data RI Support Professional

Contributes with EOSC RI Resources and EOSC Core Services



Researcher

EOSC

core

Consumes, processes, deposits & provides data through Disciplinespecific services



Citizen

Consumes, processes or provides data through simplified services



Policy Maker

v.1 credits to Ignacio Blanquer

Consumes, processes & provides data through Discipline-specific services



Data Curator

Contributes with the preparation of data to be FAIR and compliant to EOSC principles.



Data Steward

Contributes with FAIR data to EOSC through EOSC services



ICT-Specific

Developing Software



Library & inform. Sci. *Understanding Data*



Discipline Specific

Conducting Research



General Public

EOSC Enabler

Consumes EOSC Services & designs and coordinates



Discipline-spec. services



Consumes Data and EOSC services and Contributes with Data Analytic Services.



Research Software Engineer





Data RI Support Professional

Contributes with EOSC RI
Resources and EOSC Core Services



Researcher

EOSC

core

Consumes, processes, deposits & provides data through Disciplinespecific services



Citizen

Consumes, processes or provides data through simplified services



Policy Maker

v.1 credits to Ignacio Blanquer

Consumes, processes & provides data through Discipline-specific services



Data Curator

Contributes with the preparation of data to be FAIR and compliant to EOSC principles.



Data Steward

Contributes with FAIR data to EOSC through EOSC services

4 W



ICT-Specific Developing Software



Library & inform. Sci. **Understanding Data**



Discipline Specific Conducting Research



General Public

EOSC Enabler Consumes EOSC Services &

designs and coordinates Discipline-spec. services



Data Sci. Data Analytics

Consumes Data and EOSC services and Contributes with Data Analytic Services.



Research Software Engineer

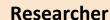
Consumes and contributes with EOSC Core & Exchange Services



Data RI Support Professional

Contributes with EOSC RI Resources and EOSC Core Services





Consumes, processes, deposits & provides data through Disciplinespecific services



Citizen

Consumes, processes or provides data through simplified services

EOSC Discipline Federated

> **EOSC** core

Exchange Data



Policy Maker

v.1 credits to Ignacio Blanquer

Consumes, processes & provides data through Discipline-specific services



Data Curator

Contributes with the preparation of data to be FAIR and compliant to EOSC principles.



Data Steward

Contributes with FAIR data to EOSC through **EOSC** services

02 – Organizational models for competence centers

02



Options for organisational models for competence centers

Competence centers: What are they? What are they key elements (functions/roles)? How can they be organized? Coordinated?

Emphasis on plural

Not a centralized (one) body - coordination, federation
 of competence centers, EOSC compatibility

Target audiences: professional groups that support researchers in stewardship of research outputs, EOSC-service providers, trainers, researchers (EOSC-users)...



Building blocks

- Existing organizational models, what works & what doesn'
- 3 levels: Research Infrastructures, national & institutional
- Provide options for MS/AC to implement training programmes for EOSC (short-term, mid-term, long-term)
- Recommend coordination levels in EOSC



Key functionalities adapted from FAIRsFAIR D6.1 report

- **Training and catalogues of training resources** e.g. ARDC, LIBER, Research Data Netherlands; PARTHENOS, GOBLET, PRACE, ELIXIR TeSS, CESSDA
- **Data Services** e.g. Norway TSD & Nettskjema, DANS, DARIAH, CESSDA, ELIXIR, EOSC Hub, EOSC Marketplace
- **Guidance** resources & advisory services e.g. DCC, DANS, forschungsdaten.info, Research Data Netherlands, OpenAIRE
- **Catalogues** of resources, services or policies e.g. EOSC Hub, JISC RDM Toolkit, PRACE, LIBER, FAIRsharing, DARIAH
- **Standards** e.g. OpenAIRE, ARDC, FAIRplus, FAIRsharing, Enabling FAIR Data, CESSDA, Goblet, CLARIN, DARIAH
- → What we have now and what we should have



03 - National Strategy

03



EOSC in national strategies for digital skills

How skills EOSC development and training fits in wider national policies and strategies

- EOSC skills: fair data & data intensive science
- EU Digital Skills Agenda integral component of digital workforce

High level strategic report:

- 1. Develop the **scope** who we target, for what
- Commission a study guide, disseminate, communicate
- 3. Deliver **templates** for national strategy



Relevance with

Strategy: EC agenda on Digital Skills and Jobs

https://ec.europa.eu/digital-single-market/en/policies/digital-skills

Funding: Digital Europe programme

https://ec.europa.eu/digital-single-market/en/news/digital-europe-programme-proposed-eu92-billion-funding-2021-2027

Implementation: Digital Skills and Jobs Coalition

... brings together Member States, companies, social partners, non-profit organisations and education providers, who take action to tackle the lack of digital skills in Europe.

https://ec.europa.eu/digital-single-market/en/digital-skills-jobs-coalition



Building blocks

Why – The landscape and connection

What – Skills needed

Who - Actors

What - Career perspectives

How – Structures

How - Costs/ funding How -Learning environments How - Coordination / Governance



Skills and training in SRIA



SRIA - Priorities

Priority 1: Developing the next generation of data/EOSC professionals

Priority 2: Educating students and researchers

Priority 3: EOSC becoming a trusted and long-lasting knowledge hub of learning and training materials

Priority 4: Developing an EOSC leadership programme to foster the right policy environment for skills and training



Thank you. Questions?

