

Skills 4 eosC

- Skills for the European
- Open Science
- Commons

Supporting

eosc



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the European Union

Skills4EOSC

Skills for the European Open Science commons: creating a training ecosystem for Open and FAIR science

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Supporting an EOSC-ready digitally skilled workforce:

Researchers can transform how they carry out research and exploit research outputs, leading to better quality and contributing to the Horizon Europe EOSC Partnership.

Horizon Europe call INFRA 2021 EOSC01-01

Meeting the stakeholders' needs

 **Open Science** @open_science_ ...

What do you think is the biggest barrier regarding the adoption of open science practices?

[Traduci il Tweet](#)

10:00 PM · 18 set 2022 · Twitter Web App


10 Retweet 4 Tweet di citazione 20 Mi piace

 **Dr. Adam L. Mahood** 🌻 @admOn · 19 set ...

In risposta a @open_science_

Lack of training/know how. It seems like a lot of people know what they need to know to get the analysis done, but not how to have reproducible and legible scripts in their GitHub repo, set up a doi, find a data repository, etc

1 5

 **V. Protonotarios** @vprot · 18 set ...

In risposta a @open_science_

Potential key stakeholders are not adequately informed about the benefits of open science

2 5

 **Marcel Swart** @Marcel_Swart · 18 set ...

In risposta a @open_science_e @AcademicChatter

Money for APCs.
Laziness and ignorance.

2

 **Dr Cody Porter** @Cody_N_Porter · 19 set ...

In risposta a @open_science_e @AcademicChatter

How expensive they are. Academics should not be paying to publish their work

9

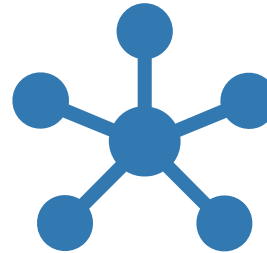
https://twitter.com/_open_science_/status/1571589893595463682?t=dK7ApIFOVp7ACFTXxeBXAA&s=08

How?



● Propose

A FAIR-by-design methodology for open science teaching and learning



● Coordinate

Network of Competence Centers on Open Science and FAIR Data



● Enable

Raise competences for an EOSC-skilled European workforce

Skills4EOSC Main objective

Advance Open Science skills by unifying the current training landscape into a common and trusted pan-European ecosystem, closing the three gaps identified in the EOSC Strategic Research and Innovation Agenda about Open Science competencies:

- lack of Open Science and data expertise,
- lack of a clear definition of data professional profiles and corresponding career paths, and
- fragmentation in training resources.

Key concepts



Developing paths for different targets



Science for policy: honest brokers, civil servants, policymakers



Institutions: undergraduate, PhD, data stewards and professionals, including data librarian and curators, legal and ethical experts



Research Infrastructures and thematic communities: designing training with and for researchers and professionals



Professional networks: lifelong learning through peer networks



Photo by [Majestic Lukas](#) on [Unsplash](#)



Skills
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Supporting

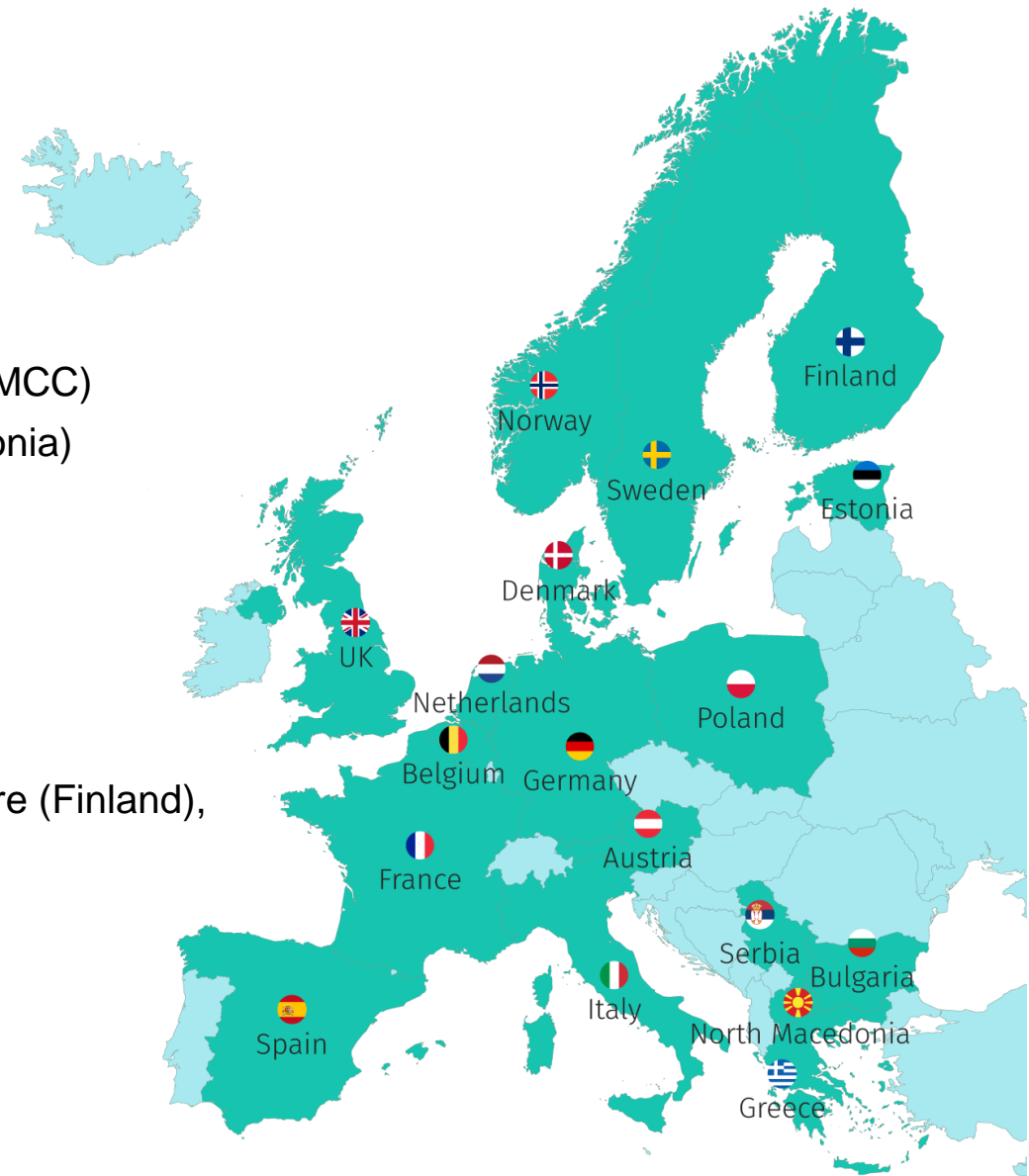
EOSC



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The consortium

- Coordinator, **Italy**: GARR-ICDI (GARR+CNR+INFN+Univ. Torino+Politecnico di Torino Univ. Trento+IIT+Univ. Milano Bicocca+CMCC)
- **South East Europe**: GRNET (Greece, Bulgaria, Serbia, Nord Macedonia)
- **France**: CNRS, Université Aix et Marseille
- **Austria**: TU Wien, Natural History Museum
- **Netherlands**: TU Delft (represents 4TU.ResearchData Network)
- **Spain**: Universidad Carlos III Madrid
- **Belgium**: Katholieke Univ. Leuven
- **Nord Europa**: SND (Sweden), ETAIS (Estonia), CSC+Univ. of Tampere (Finland), DeLC (Denmark), Norwegian Directorate For Higher Education And Skills+Uninett Sigma2 (Norway)
- **United Kingdom**: Univ. Of Edinburgh
- **Poland**: PSNC
- **Germany**: KIT
- **Thematic international organisations**: OPERAS e EPOS-ERIC (EPOS is represented by INGV, Italy and Bergen Univ. Norway).



Points of strenght

- **Familiarity with the context** of applying open science skills development in the Member States,
- **Knowledge of local and regional programmes** and
- **Contacts with key decision makers** which allows influencing the status quo at these levels.



OS career profiles, learning materials, certification

Co-create, promote, broker and ensure the recognition of digital career profiles specifically related to Open Science. This includes the development of quality assurance mechanisms for professional training and qualifications.

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Map career profiles related to Open Science and define a '**Minimum Viable Skillset**' for each of them.



Implement a **FAIR-by-design** methodology for learning materials. ELSI aspects in OS profiles, skillsets and materials.



Definition of a common methodology and a **quality assurance** process of learning materials, enhancing their re-usability.

WP2 Open Science profiles, skillsets and material : landscaping, certification & Q&A
Leads: Digital Curation Centre (UEDIN)

OS training for evidence-based policy and PA

Foster the efficient uptake of relevant scientific data by public administration and encourage its use for evidence-based policy making.

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Design and deliver ‘**Science4Policy**’ **courses** targeting researchers, honest brokers, civil servants and policymakers.



Provide researchers with **key competencies on OS and communication of scientific outputs** with policymakers, funders and public authorities.

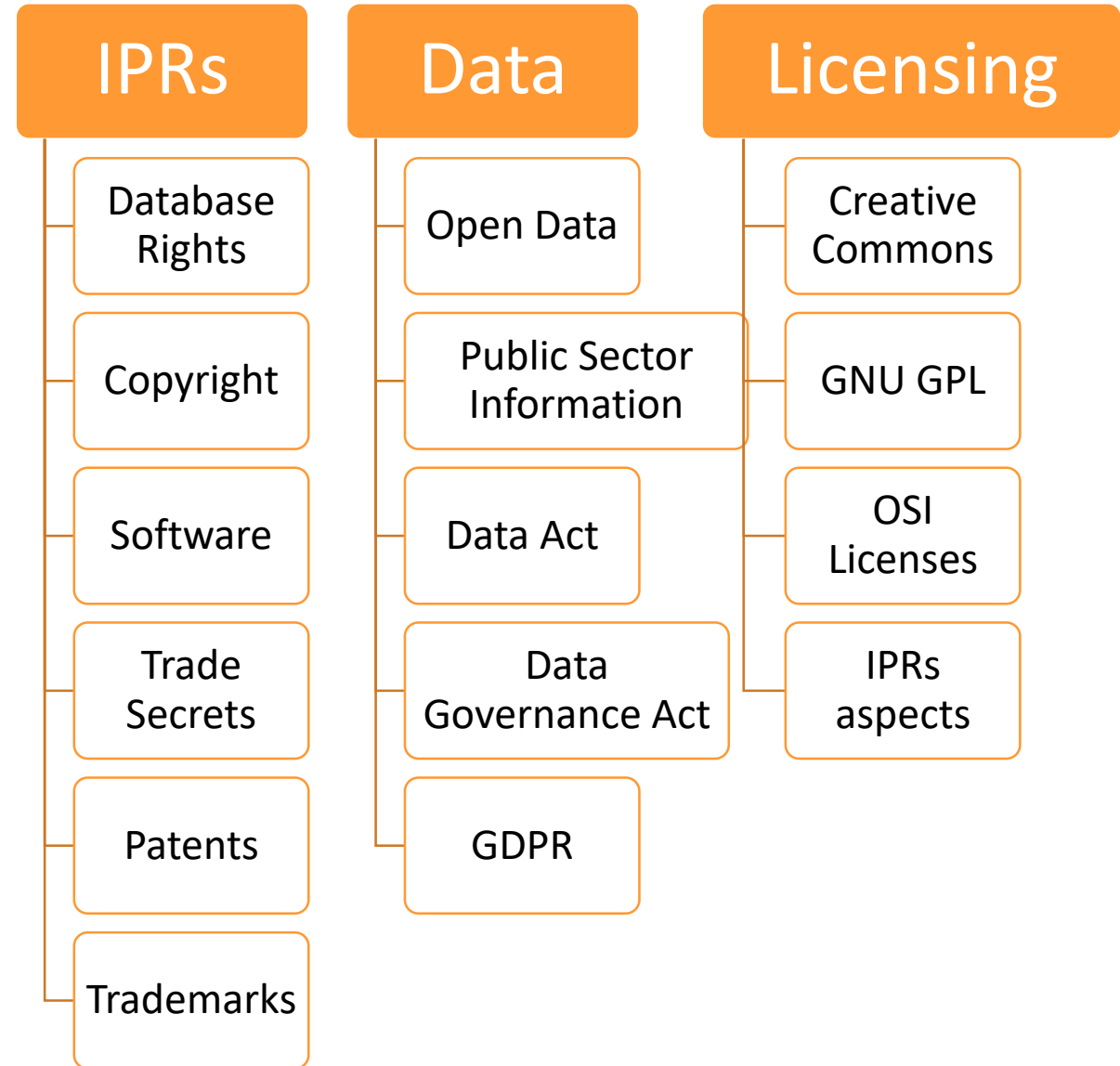


Demonstrate the impact of open science to implement policy goals such as **climate, biodiversity, Covid-research, bioeconomy**.

WP3 Open Science training for evidence-based policy and public administration
Leads: National Infrastructures for Research and Technologies (GRNET, Greece)

ELSI Meta-WP

The **ELSI Meta-WP** provides support to several WPs on Intellectual Property Rights (IPR), Public Sector Information (PSI), Open Data, licensing, database rights, and research integrity.



Curricula and learning paths for OS ready Institutions & thematic RIs

Promote existing and develop new curricula (at undergraduate, PhD and professional level) that meet the demands of open and data-intensive science.

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Design **harmonised curricula and learning paths** for OS professionals profiles across Europe, training curriculum for data stewards.



Define '**OS essentials**' to include in undergraduate and PhD courses and support professionals. Design **tailored courses**.



Deliver **train-the-trainers courses** for staff in Competence Centres.

WP4 Curricula and learning path for Open Science ready institutions *Universitat Carlos III de Madrid*
WP5 Open Science skills for RiS and thematic communities *Operas*

Professionals Networks for lifelong learning

Training is up to date with technology and policy changes, as part of lifelong learning programmes.

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Map existing professional networks.



Development of **starter kits for professional networks** and creation of new ones (eg.: data stewards) networks through national Competence Centres



Open Science communities across Europe and Thematic networks: FAIR Data for **AI, health and technology** and **Museums collections**. Implement a fellowship programme.

WP6 Professional Networks for lifelong learning
Leads: Technische Universiteit Delft

European Competence Centers and user support Network

Foster the development of a distributed user support network, supporting the collaboration of existing networks of competence centres, to provide expertise on the onboarding of EOSC services and the provision of open science resources.

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Map the scope and the competencies of existing CCs. Set up a **sharing platform with selected services** such as workspace, catalogues, virtual labs, repositories, and videoconferencing facilitating the CCs collaboration.



Create a **lightweight mechanism for the coordination**, including governing board and procedures and define a sustainability strategy for the coordination network.



Establish a pan-European user support network for researchers and data professionals .

WP7 European Competence Centres and user support networks
Leads: GARR

Synergies, stakeholder engagement and communication

Collaborate with the resulting project/s from the EOSC topic and establish synergies with national and regional programmes on digital skills.

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Liaise with other relevant **EOSC-related projects** and EOSC Association & Governance.



Identify **National, regional and European programmes** to support the recognition of career profiles and certification schema.



Design an **Advocacy kit** for reaching out to funders and policymakers. Promote the uptake of the proposed curricula, methodologies and quality certification framework.

WP8 Synergies, stakeholder engagement, advocacy and communication

Leads: Goeterborgs Universitet

WP1 - Project Management

MAPPING&METHODOLOGY.....UPSKILLING.....EXPLOITATION

WP2 - OS career profiles, skillsets and material - landscaping, certification and QA

- Mapping skills Vs profiles
- Methodology for FAIR material+lifecycle
- Schemes for the certification/accreditation of acquired competences
- co-creation and monitoring

WP4 Curricula and career paths

- Academic paths (undergraduate, postgraduate, PHD, postdoc specialization)
- Structured training paths for data professionals

WP3 OS training for evidence-based policy & PA

- paths for civil servants, policy makers, and to empower researchers to communicate with them

WP5 Thematic Training for RIs professionals and communities

- RI professionals
- Infrastructure professionals
- Research communities: SSH, Solid Hearth, Climate change, Museums
- Legal & Ethics professionals

WP6 Peer Networks

- Peer Networks for professionals
- Thematic Peer Networks

ACADEMIC
PATHS ...

PROFESSIONAL
TRAINING ...

INFORMAL
LEARNING

WP8 Synergies, Engagement comms advocacy

- Promoting Outputs
- Furthering activities at the national/regional level
- Gaining support
- Creating sustainability for national initiatives

WP7: Competence centres and user support network

coordination and harmonisation - platforms & tools - exchange of competences - sustainability



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Thank you!

Contact me for further info and collaboration

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