

Skills – the work and recommendations of EOSCPilot

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because good research needs good data

WP7 - Objectives

- High-level:
- To develop common standards and assessment frameworks to ensure that organisations and individuals are motivated to develop the capabilities and competencies that the EOSC will rely on
- to develop an EOSC education and training strategy and coordinate its delivery.

What did we do?

- Produced a skills framework – FAIR4S – with a focus on data stewardship
 - About skills, competencies, capabilities, for people & organisations
 - Consulted widely on this – built on earlier work
- Surveyed current training provision – identified strengths and gaps – see D7.5
- Tested the framework
- Made recommendations on future action
- Important to remember: many routes to acquire skills
 - Training-as-a-service
 - Self-paced learning
 - Mentorship
 - Many other models

The FAIR4S Skills Framework

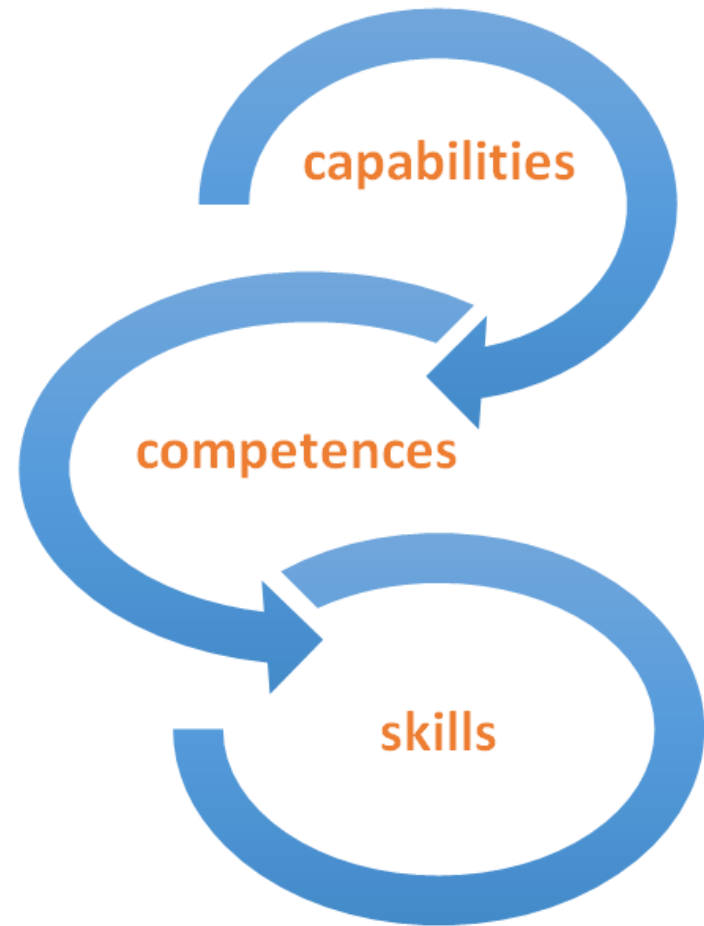
- 70+ competencies needed by researchers and research groups for data stewardship
- Organised around research data lifecycle
- Helps answer:
 - What skills are needed to build, operate, support, use a particular EOSC service?
 - What capabilities should my organisation build, through recruitment, training, staff development?
 - What should our job descriptions contain relating to data stewardship?
- Utilises EDISON, FitSM, CoreTrustSeal, FOSTER+ and other work

Definitions from the framework

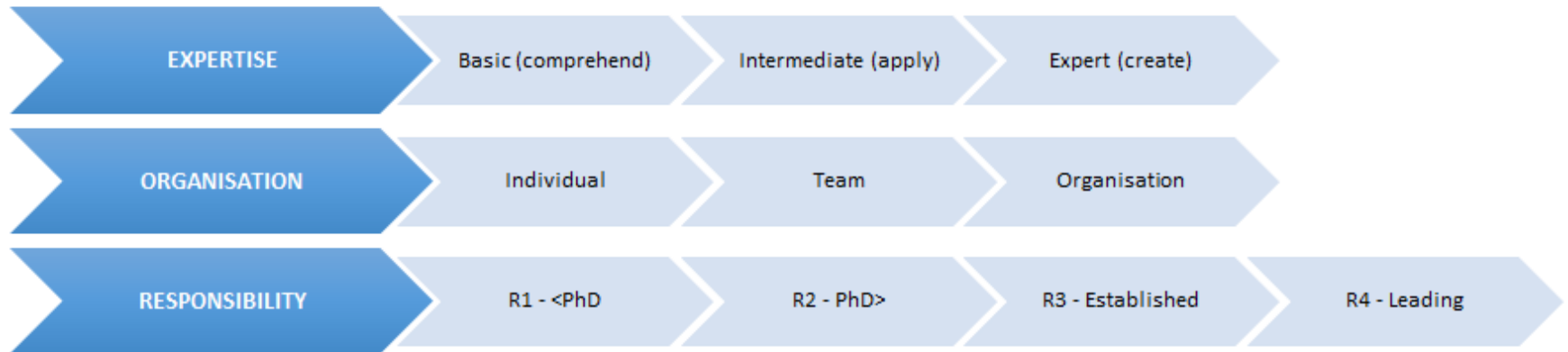
| | |
|---------------------------|---|
| <p>Stewardship</p> | <p>The formalisation of roles and responsibilities and their application to ensure that research objects are managed for long-term reuse, and in accordance with FAIR data principles.</p> |
| <p>Capability</p> | <p>Competence applied at a research team or organisational level, with a defined level of expertise and responsibility, to perform a service role or work in the EOSC environment.</p> |
| <p>Competence</p> | <p>An element (topic) of theory or practice e.g. ‘workflow set-up and management’, combined with an <i>expertise level</i> to indicate whether someone has an awareness of the area, or an ability to do it, or expert knowledge of it.</p> |
| <p>Skill</p> | <p><i>A competence or capability</i> acquired or applied in a specific context, e.g. producing a research output or deploying a service. A skill may be specified in a ‘skills user story’.</p> <p>A badge or certificate may provide evidence that a skill has been acquired, and a publication, personal profile, portfolio or CV may provide evidence that a skill has been applied.</p> |

Applying the framework

Aiming to help organisations and individuals identify skills they should acquire given the capabilities they have and need, and services they will use



Dimensions of the framework



Responsibility levels as defined by European Research Careers Framework

User stories

“As a data manager using a repository service, I need to be able to evaluate repository certification schemes”

Descriptors for competences and levels that a professional group needs to perform a service role for a service

The recommendations - 1

- EOSC should adopt the FAIR4S framework, encouraging its use and development by others, and use it to guide its actions on skills-related issues
 - Learning resources should be described and tagged using framework vocabulary
 - Job descriptions should be informed by skills and competence levels in the vocabulary
 - Further projects and the ‘doers’ should be supported to adapt and apply the framework
- EOSC should monitor skills development and provision and act where appropriate to anticipate and fill gaps
 - Acting centrally for generic skills
 - Action from domain infrastructures on domain-specific skills

The recommendations - 2

- A registry of learning resources and training opportunities should be developed by EOSC, accessible to all players through the rules of engagement
- EOSC should facilitate the interaction amongst stakeholders and resources in a FAIR way, available to all
- Training should be based on the FAIR4S framework
- Training provision should be
 - Implies notion of EOSC compliant & compatible training
 - Recognise FAIR principles and good practice from global OER community
- Skills exchange between infrastructures, and between them and institutions, should be encouraged and brokered by EOSC

In relation to course packaging & course metadata. See e.g. recommendations from Google on how to make courses findable:
<https://developers.google.com/search/docs/data-types/course>

FAIR data expert group recommendations

- Many relevant to skills, but particularly:
 - Implement curriculum frameworks and training
 - Open EOSC to all providers
 - Professionalise data science & data stewardship roles

Life beyond EOSCpilot

- Framework is being used in ‘terms4dataskills’ work – many actors involved
- Informing OECD GSF expert group on digital skills
- Helping design of Australia,...

Important to remember: many routes to acquire skills

- Training-as-a-service
- Self-paced learning
- Mentorship
- Many other models