



Skill building & Training in Data stewardship & Data management

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*Workshop Implementation of DMPs and Data Stewardship in Practice,
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Data Stewardship (DS)

Responsible planning and executing of all actions on digital data before, during and after a research project, with the aim of optimizing the usability, reusability and reproducibility of the resulting data



Capacity building needed

From EOSC High Level Expert Group, Oct 2016:

- “There is an alarming shortage of data experts both globally and in the European Union”
- “The lack of core intermediary expertise has created a chasm between e-infrastructure providers and scientific domain specialists”
- “Core data experts need to be trained and their career perspective significantly improved”
- “I3: Fund a concerted effort to develop core data expertise in Europe”
- https://ec.europa.eu/research/openscience/pdf/realising_the_european_open_science_cloud_2016.pdf#view=fit&pagemode=none



DM/DS skills are needed

- Skills in data management (DM) & data stewardship (DS) are crucial to deal properly with the data
- Furthermore DMPs are obligatory for many if not all funding applications
- DS has many many many aspects (nobody can do nor has to do all steps of the DS)
- Who to train? Which target audiences?
- What are the skills needed for a specific target audience?
- How to train in these skills?



Job names & Job profiles

- Data Steward
- Data Manager
- Data Champion
- Information Manager
- Datamanagement consultant
- RDM Officer
- Etc etc



Your Data Management/Data Stewardship competences

- How did you achieve your current DM/DS expertise?

More answers possible [checkbox]

- Learned on the job
- Participated in face-to-face / in person training
- Participated in online training
- Self learning/ reading up

- Do you need/want additional training in DM/DS or DM/DS Planning?

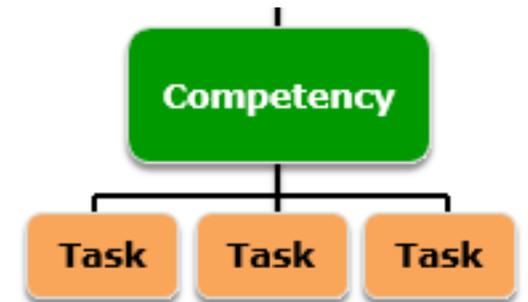
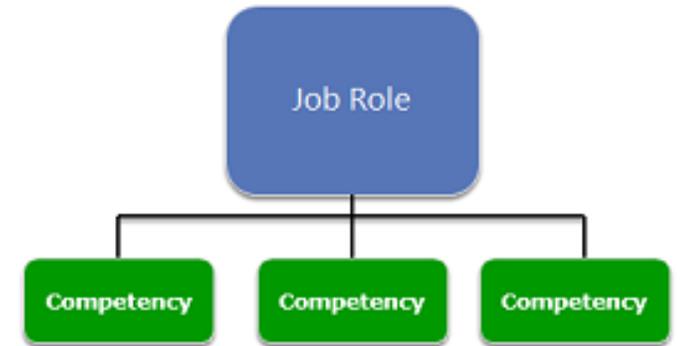
More answers possible [checkbox]

- Yes, I would like an in person workshop
- Yes, I would like online training
- Yes, I would like more pointers for self learning / reading up / online training
- No



Competencies

- **Competency:** something you need to be able to do well in a specific job role.
- To achieve competence in a particular job, a person should be **able to perform various tasks or skills** at a target proficiency level.
- A **competency model** encompasses all the competencies, tasks and skills, behavioral examples, and proficiency requirements for a particular job.



EOSC Pilot D7.3

Table 1 – Scope Of the Skills Groups

Plan and design	Planning and design of data, research software and other outputs, including the associated documentation. This will include all relevant steps including identifying the requirements of research output users, the organisation and research funders, then establishing effective approaches to meet their requirements, and then testing and validating the initial outputs.
Capture and process	Capturing and processing of data or related materials to enable research evidence to be prepared for analysis; provisioning of secure managed access to networked storage, scalable to meet demands, plus resources, tools, standards and workflows for collaboration between research team members, and relevant third parties
Integrate and analyse	Developing and applying appropriate methods to enable lines of enquiry to be formulated and pursued towards the research objectives, by assembling and integrating selected data, software, systems, or other resources, and enabling relevant knowledge and techniques to be applied in their analysis and transformation into research outputs.
Appraise and preserve	Developing and applying appropriate methods to appraise research outputs for their compliance with ethical, FAIR and research integrity principles, their value to the organisation and to research reproducibility, and their potential to serve new purposes or communities; planning and taking action to mitigate risks to long-term access for further appraisal.
Publish and release	Describing research products and their inter-relationships, providing access to meet the needs of their providers, users, and other stakeholders, in order to maintain or enhance their value and comply with ethical, FAIR and research integrity principles and policies.
Expose and discover	Ensure that processes and mechanisms for providing access to research products and their inter-relationships follow technology developments, community standards, and good practices for compliance with ethical, FAIR and research integrity principles.
Govern and assess	Developing and maintaining the organisation's strategies, policies, and processes on FAIR/open research outputs, and associated documents and processes that enable these to be implemented, and relevant laws or regulations to be complied with. Continually reviewing these strategies, policies and processes through stakeholder consultation, communication, and impact monitoring.
Scope and resource	Identifying the scope of research data services and stewardship activities and securing the resources to sustain these. Continually reviewing the business case considering the service value propositions, processes, and relevant costs and benefits, taking into account governance processes and timelines, and the need for cost recovery mechanisms to comply with funder requirements.
Advise and enable	Management of services that enable data stewardship and open research, and the online or face-to-face training and support that service customers need to make effective use of them. This will include interacting with relevant professional service units, managing stakeholder relationships, and making continuous improvements to these.

Data Steward Competencies - Generic vs Life Sciences (LS) Domain

- Generic

- EU:

- **EDISON** (<http://edison-project.eu/>)

- **EOSCPilot** WP7 (<https://eoscpilot.eu/media/deliverables>)

- NL: **LCRDM**

- Working alongside the LS domain work (ZonMw project)



- Life sciences domain

- **ELIXIR:**

- Implementation study DM/DS (Jan 18 – Aug 19): ELIXIR-NL, -CZ, - LU, - SI

- Implementation study Learning Paths (Jan 18 – Aug 19) ; ELIXIR- BE

- **NL:** ZonMw –DTL - UMCG project “Towards FAIR Data Steward as profession for the Life Sciences” (Aug 18 – Aug 19)

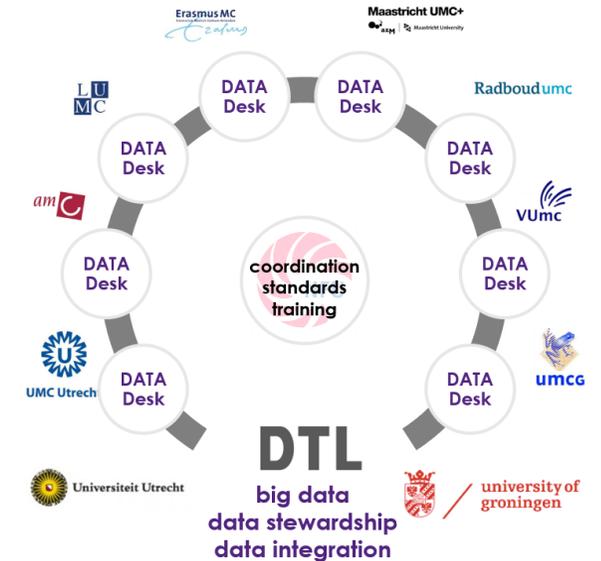


ZonMw project: Towards FAIR Data Steward as profession for the Life Sciences

- A collaborative approach built on existing expertise
- The overall project aim is to professionalise the data steward function within the life-sciences domain, with a special focus on implementation of the FAIR principles.
- In order to increase the quality and capacity of data stewards for life sciences.
- By developing training for existing and new data stewards, creating a standardized job description, formalising the function and creating more visibility of the function.

Data Steward Competencies - Individual or for an organisation

- Individual:
 - Data Steward responsible for data in a research project
- For an organisation:
 - NL examples:
 - Set up **local data support desks** for UMCs; develop training (both for researchers and for data stewards)
 - TUD data stewardship center (Marta Teperek)



Data steward Community in NL and beyond – Join us!

- **Data Steward Interest Group**

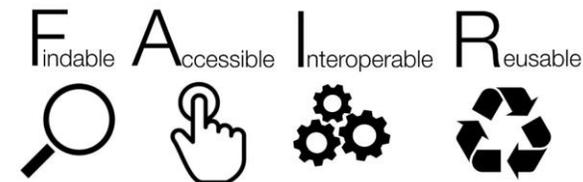
- Exchange and share expertise
- Participants from inside and outside the Netherlands
- Some focussed tasks:
 - Defining skills profile
 - Aggregating information about available trainings

- Contact: Mateusz Kuzak

- <https://www.dtls.nl/community/interest-groups/data-stewards-interest-group/>

- Next meeting Sept 14, 2018 9.00-10.30

- Remote attendance possible



Summary & Outlook

- Much is happening, you are not alone
- Please join the community efforts that are going on
- Let us together build the competency framework and (reusable) training that is endorsed by LS community





Thank you!



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