December 2020 This document is a placeholder for the future publication of the NPOS project F report

[preliminary reference, formal reference will follow once report is published] Jetten et al. (to be published, exp. 2021). Professionalising data stewardship in the Netherlands. Competences, training and education. Dutch roadmap towards national implementation of FAIR data stewardship. https://doi.org/10.5281/zenodo.4320505

About the project

Project F: Professionalising data stewardship: competences, training and education¹

Large amounts of electronic data are generated within various research fields. When shared amongst researchers it generates immense value for research and society. However, researchers themselves are often not sufficiently equipped or knowledgeable, or have the time to handle (large amounts of) data or make data FAIR (findable, accessible, interoperable, reusable).

Data stewards are trained to professionally 'handle data'. They 'responsibly plan and execute all actions on digital data before, during and after a research project, with the aim of optimising the usability, reusability and reproducibility of the resulting data' (<u>definition</u> of data stewardship by DTL).

In the past years it has become clear that there is a large need for and shortage of individuals with data stewardship expertise. Data stewards are needed in all research organisations, in all research domains and all countries.

Due to the complexity of data handling and the specificity of the various research domains, no consensus has yet been reached on the exact responsibilities and tasks of data stewards. Their required knowledge, skills and abilities (KSAs) have also not formally been mapped and defined. This hampers adequate capacity building and complicates efficient data management. Both are a necessity for open science implementation.

Furthermore, in order to achieve coherent education and training, accompanied with a consistent human resource (HR) policy, national alignment and coordination are needed. With support of the Dutch research funder ZonMw, the Association of Universities in the Netherlands (VSNU), the Netherlands Association of Universities of Applied Sciences (VH), the Netherlands Federation of University Medical Centres (NFU), the national PhD candidate Network of the Netherlands (PNN), and the cooperative Dutch educational and research ICT organisation SURF, the NPOS F project focuses on national coordination of the competences

¹ <u>https://www.openscience.nl/en/projects/project-f-professionalising-data-stewardship-competences-training-and-education</u>

and learning outcomes for data stewards and on training in data stewardship in the context of open science.

The project integrates the challenges, efforts and output of various national initiatives and organisations into recommendations for a national approach on professionalising data stewardship in the Netherlands, thus preventing duplication and reinventing the wheel.

The project builds upon the widely supported outcomes and recommendations of two previous projects (2019), i.e. the <u>ZonMw data stewardship project</u> and the <u>LCRDM data stewardship</u> <u>project</u>. It aligns with projects currently taking place, such as the <u>RDA 23 things project</u>, the <u>NPOS E project</u> (Exploring the Dutch data landscape) and the <u>NPOS H project</u> (Accelerate Open Science).

The NPOS F project's (long term) ambition is:

 A. Recommendations for professional profiles for human resource departments of universities, university medical centres, and universities of applied sciences.
B. Recommendations on data stewardship training and education in universities, university medical centres, and universities of applied sciences.

These recommendations are expected to help the aforementioned organisations with professionalising data stewardship, i.e hire, train and educate data stewards, including clear job profiles and career paths. A community-driven, fully endorsed overview of the **competences** of and **learning outcomes** for data stewards will form the basis for such recommendations.

2. A well-annotated and searchable overview of existing training resources for data stewards. This project does the necessary groundwork for such a resource including preparing the layout and strategy of an interactive tool, which explores the knowledge, skills and abilities (KSAs), and learning objectives for data stewards. The future tool should eventually support the data steward's (self-)assessment, identifying gaps and references to existing training resources in order to bridge the existing gaps.

This overview is targeted both at individual data stewards looking for relevant training and at staff members of universities, university medical centres, and universities of applied sciences, who aim to develop a training portfolio for data stewards.



Professionalising data stewardship: competences, training and education



Project details

Project period: september 2019 - January 2021

Project initiator: National Programm Open Science (NPOS).

Project coordinator on behalf of NPOS: Margreet Bloemers (ZonMw), Margriet Miedema (LCRDM).

Project partners: The following organisations participate on an in-kind basis in the project: VSNU, VH, NFU, PNN, SURF, ZonMw.

Daily project lead: Mijke Jetten and Celia van Gelder (DTL).

Communication: Merlijn Bles (ZonMw), Frederike Schmitz (DTL).

Organisations involved in the daily project team: To form the daily project team, the Dutch community of data professionals, including the LCRDM's <u>pool of experts</u>, was engaged. The following organisations participate on an in-kind basis in the daily project team: UMCU, Erasmus MC, UMCG, Radboudumc, UM, RU, VU, LU, TUe, TU Delft, HsLeiden, HAN, Avans, Fontys, Saxion, eScience Center, GFF, DANS, RDNL.

More info

For more information about the project please contact Mijke Jetten (mijke.jetten@dtls.nl).