

TU Delft Library

4TU.ResearchData

Operational Plan

This operational plan highlights work done within the 4TU.ResearchData team of TU Delft Library.

It focuses on the period from January to December 2024, as well as Innovation ideas.

The plan is divided into four parts.

If the project or service needs help from the Library Communications team, it is marked with a star *. Note that these tasks intentionally emphasise TU Delft-relevant focus.

- 1) **Services (Run)**. Plans for maintaining or modifying and updating services that fall under the team's responsibility.
- 2) **Projects (Change)**. Projects, which fall under the team.
- 3) **Innovation ideas**. New areas that are interesting to explore, which might or might not evolve into new projects or services.
- 4) **Other areas of work**. Other work done by the team, which does not fit under 1, 2 or 3.

Services

Service name	Description of work	Responsible Owner
Learn data management skills (as support staff)	<p>Continue offering (and constantly revise) Essentials4Data Support courses for aspiring data professionals (as part of the RDNL collaboration).</p> <p><i>* (help promote to those interested at TU Delft, e.g. the Open Science Community Delft)</i></p>	Leila Iñigo de la Cruz
Join the 4TU.ResearchData community and connect with peers about data management	<p>Provide and maintain a platform and communication channel to enable members to connect and exchange knowledge about best practices for the creation and reuse of FAIR data within the technical sciences.</p> <p>Run a Roadshow at 4TU.ResearchData member institutions and a Community Day to engage and grow the community.</p> <p><i>* (help promote the community platform and the Slack channel to interested stakeholders at TU Delft, e.g. the Open Science Community Delft)</i></p>	Alessandra Soro
Publish your research data	<p>Provide and maintain a data upload form as well as the API to enable anyone to upload datasets to the repository, and provide guidance on how to do this.</p> <p><i>* (promote the services to researchers at TU Delft)</i></p>	Madeleine de Smaele
Publish your software*	<p>Communicate about the Git integration internally and externally.</p> <p><i>* (promote the service to researchers at TU Delft)</i></p>	Madeleine de Smaele
Publish your NetCDF files (OPeNDAP)	<p>When a user uploads netCDF files, technical staff check the validity of the files for OpenDAP and if valid, moderators contact the uploaders and ask if they agree with moving the files to OpenDAP. If yes, technical staff moves the files.</p> <p><i>* (promote 4TU.ResearchData as the best place to publish netCDF datasets for TU Delft researchers)</i></p>	Roel Janssen, Hyeokjin Kwon
Learn about future and past research data events	<p>Ensure promotion and communication about key 4TU.ResearchData and RDNL events, training, collaborations via the 4TU.ResearchData website and other digital channels at our disposal.</p> <p><i>* (help promote events to TU Delft stakeholders as appropriate)</i></p>	Iulia Popescu
Learn basic computational skills to work reproducibly (Software Carpentries)	<p>Organise (and host online) software carpentry workshops for partner institutions and gold members.</p> <p>Distribute places for instructor certification for partner institutions, gold members and silver members.</p> <p>Discuss with partners, gold members and silver members ways to make The Carpentries community grow.</p>	Leila Iñigo de la Cruz (in collaboration with Paula Martinez Lavanchy, Training Coordinator RDS)

Service name	Description of work	Responsible Owner
Get funding to make research data FAIR	Continue to support and manage the FAIR Data Fund. <i>* (help promote the fund to TU Delft researchers)</i>	Alessandra Soro
Contribute to the development of Djehuty	Facilitate community contribution to the development of Djehuty, including building on existing collaborations (e.g. Nikhef).	Aleksandra Wylczynska

Projects

Project Name	What is the goal of the project?	Principal Driver for Work (upscaling, new policy, quality, innovation, other)	Project Manager
4TU.ResearchData strategy	Develop and launch the 4TU.ResearchData strategy 2024-27 in collaboration with the 4TU.ResearchData Board and 4TU.Federation.	Other (strategic direction)	Daniel Bangert
Djehuty	<p>Continue to develop Djehuty as a sustainable, open source repository for 4TU.ResearchData, offering innovative and trusted services for FAIR data and software and long-term preservation.</p> <p>Develop Djehuty as a FAIR data repository according to EOSC standards and ideas from the 4TU.ResearchData community members.</p>	<p>New policy (open source)</p> <p>Quality (reliability and uptime)</p> <p>Other (maintenance for operability)</p> <p>Innovation (new features)</p>	Lead developer: Roel Janssen
Integrated data submission system	Develop a shared user interface, in collaboration with DANS and SURF, for the submission of research data related to the physical and technical sciences.	Innovation Strategy	PM: Madeleine de Smaele Lead developer: Roel Janssen
Data curation by WUR	Pilot metadata review by WUR staff for datasets uploaded to 4TU.ResearchData by WUR researchers.	<p>New policy (allowing WUR staff to review data deposited by WUR researchers)</p> <p>Upscaling</p>	Madeleine de Smaele
Thematic DCC for Natural and Engineering Sciences	<p>Manage and develop the Thematic DCC for Natural and Engineering Sciences and facilitate the development of community-driven, non-competitively funded projects.</p> <p><i>* (promote the benefits and opportunities to TU Delft researchers and staff)</i></p>	<p>Innovation</p> <p>Other (strategic direction)</p>	Joanne Yeomans, Mira Stanic
Skills4EOSC	<p>Establish a curriculum for aspiring data stewards in Europe.</p> <p>Establish professional networks for researchers (Open Science Communities) and professionals (e.g. data stewards) within Europe.</p> <p>Host Fellows through the Skills4EOSC Fellowship Programme.</p>	Innovation	Curtis Sharma, Saba Sharma, Nida van Leersum

Project Name	What is the goal of the project?	Principal Driver for Work (upscaling, new policy, quality, innovation, other)	Project Manager
RDNL Dutch Data Prize	Support to organise the RDNL Dutch Data Prize 2024 (as part of the RDNL collaboration). <i>* (promote the event to researchers and support staff at TU Delft; help secure nominees for the data prize from TU Delft researchers)</i>	Other (strategic direction and raising the profile of RDNL nationally)	Iulia Popescu (and RDNL Comms WG)
GDPR for Data Support	Pilot the GDPR for Data Support course (as part of the RDNL collaboration).	New policy	Leila Iñigo de la Cruz
ADAPT: A metaData Publication Toolbox	Develop an open-source toolbox that helps both researchers and data managers to easily assign discipline-specific and internationally recognized metadata to their data publications (https://www.nwo.nl/en/projects/203001063).	Innovation	Madeleine de Smaele (project member)
Nexum: Data4Art	Foster exchange between art and data through visualization and other creative responses to data, resulting in a public exhibition. Our goal is to create awareness and use art to explain data.	Innovation	Alessandra Soro
Peer review of software and data	Integrate workflows for reviewing/publishing/archiving. Review criteria for data and software in terms of technical, quality and usability (in collaboration with RDS and TU Delft Open Publishing).	Innovation	Saba Sharma (along with Frederique Belliard, TU Delft Open Publishing)
Data and Software Hub	Establish a Data and Software Hub to offer resources for workshops and collaborative activities, focusing on discipline-specific data and software interoperability and reuse. Train a group of Fellows from disciplines in the Natural and Engineering Sciences who will share their knowledge with others.	Innovation	Alessandra Soro
Community platform development (as part of Skills4EOSC Fellowship Programme)	The 4TU.ResearchData community hosts currently more than 200 researchers, staff and students from different fields all working with research data and software. Our community is growing and it needs an open, flexible and interactive digital platform enabling integration with the newly developed repository system (open-source) to communicate, share information and tips, review each other's work and collaborate on different projects.	Innovation	Alessandra Soro

Innovation Ideas

Area	Description
24h helpdesk support	Pilot to offer 24h chat/helpdesk in 4TU.ResearchData - a new user-friendly and responsive service to our customers

Improve services for netCDF files	Develop a more automated/ self-service mechanism for depositing netCDF files - at the moment the process is manual and involves a lot of back and forth. Develop a user interface for netCDF datasets.
Smart metadata reviewing process	Smart tools for monitoring of data submissions: automatic registering, reviewer assignment, tracking, reminder, completion Smart tools for doing metadata review: Data scraping, importing information from an upload form from the uploader into a spreadsheet/ text editor (suggested by Eric Rumondor)

Other Areas of Work

Area	Description
Training on FAIR data for specific disciplines and data types	Explore opportunities to organise workshops with external partners to present researchers with relevant tools and knowledge that allow them to make their data FAIR and to strengthen their digital skills.
Open Science NL	4TU.ResearchData is a partner organisation and signatory to the Regieorgaan Open Science (Open Science NL). Respond and contribute to relevant elements of the Open Science NL Work Programme 2024-25.
RDNL	4TU.ResearchData is the co-founder of Research Data Netherlands (RDNL), which in recent years saw expansion (Health-RI joined in 2022 as the newest partner), growth (introduction of GDPR for Data Support training) and the continuation of the RDNL Dutch Data Prize.
Participation in national networks	Members of the 4TU.ResearchData team are actively contributing to several national networks: <ul style="list-style-type: none"> - LCRDM (participation and co-chairing of working groups) - TDCCs (4TU.ResearchData is the host organisation for TDCC NES and the Director of 4TU.ResearchData is a member of the TDCC NES Governing Board)
International engagement	Members of the 4TU.ResearchData team are actively involved in numerous international networks, such as the Research Data Alliance, where they participate in several Working and Interest Groups and the Director of 4U.ResearchData is a member of the Technical Advisory Board. Team members also regularly present (including invited presentations) at international conferences and events.