Plan
LCRDM 2021–2022

LCRDM the data
support collective

National Coordination Point Research Data Management

LCRDM

The National Coordination Point Research Data Management (LCRDM) is a national network of experts on research data management (RDM) in the Netherlands. The LCRDM connects policy and daily practice. Within the LCRDM experts work together to put RDM topics on the agenda that ask for mutual national cooperation.

more information: www.lcrdm.nl

Content

Introduction

The National Coordination Point Research Data Management (LCRDM) was founded five years ago, and has since established a reputation in the dynamic RDM landscape in the Netherlands. The LCRDM brings together professionals who offer Research Data Management (RDM) support to researchers. This plan, the follow-up to the LCRDM Position Paper ((doi)), seeks to clarify the LCRDM's priorities for the next few years:

1. Support the implementation of local Digital Competence Centres (DCC's)
2. Support the adoption and implementation of recommendations, tools and guidelines issued by the LCRDM task groups
3. Provide opportunities to address issues arising within the RDM community (Appendix 1: Task groups' working method)

The LCRDM is a network of experts who provide RDM support to researchers. The LCRDM pool of experts comprises more than 200 data professionals from dozens of research organisations (Appendix 2). SURF plays a coordinating role (e.g. Independent Chair of the Advisory Group, coordinator and webmaster). Every year, five to seven task groups conclude their recommendations and tips. Over the past 12 months, 120 unique members have participated in a task group.

The LCRDM forms the link between policy and practice, and identifies issues in the field that need to be addressed by policy (such as recognition and appreciation, data stewardship). The LCRDM is committed to improving data support by giving data professionals within the network the space and structure to acquire and share knowledge. The experts are driven by content, and by working together in task groups, knowledge is shared and accumulated across institutions. The LCRDM is independent and multidisciplinary, and since it does not sell any services itself, it is also neutral.

The mission of the National Coordination Point is to collaborate with the professional field to facilitate Research Data Management policy. By exchanging and acquiring knowledge and experiences nationwide, the LCRDM contributes towards the efficient and effective development and implementation of Research Data Management at the Digital Competence Centres.

An explanations of terms used can be found here: https://www.lcrdm.nl/en/glossary.

LCRDM in 2021–2022

The National Coordination Point's vision is as follows: by 2022 Research Data Management will be an integral part of the approach to research at Dutch universities and research institutes, thanks in part to the:

- synergy between policy, ICT and research support for RDM, supported by the local DCCs
- connections between experts from research organisations, facility service organisations and research financiers;
- administrative embedding within the relevant national bodies responsible for Research Data Management policy.

The LCRDM is the central face of and platform for RDM cross-pollination in the Netherlands. Its strength lies in its bottom-up approach, with clear bridges to policy at national and institutional levels. The LCRDM is recognised as an independent expert group for solicited and unsolicited advice.

Thanks to the bottom-up approach and its connections with international and national networks, the LCRDM is in an excellent position to explore trends and developments within the field. It is also open to broadening its scope to include data science, codes and protocols.

National and international developments

In the Netherlands, the National Open Science Plan (2017) and the Code of Conduct for Academic Integrity (2018) provide the frameworks and policy guidelines for facilitating honest, efficient, transparent, reproducible, independent and innovative research. RDM is explicitly mentioned in both, with particular reference to FAIR data and the duty of care of the institutions, not only for IT infrastructure, but also for personal contact via RDM support.

Research financiers also stipulate that RDM must be incorporated as part of project preparations as a precondition for funding. The NWO has decided to promote the growing importance of local and supralocal support in FAIR Data Stewardship and in May 2020 opened a call through which institutions could receive one-off impulse funding to professionalise their support in Digital Competence Centres (DCCs). The NWO is framing RDM developments within the broader context of digitisation by also incorporating support for software development and Data Infrastructure at the DCCs.

The large international organisation (Research Data Alliance, RDA) focuses on accelerating data-driven innovations. Various stakeholders are striving to eliminate social and technical barriers that are hindering this acceleration. The RDA develops solutions based on initiatives and in collaboration with the community. The results of the RDA groups may serve as a springboard for the LCRDM to expand its support in the Netherlands. This relationships works both ways; if a particular subject is being tackled by the LCRDM but is not yet being addressed within the RDA community, the LCRDM presents it as a suggestion.

The European Commission has many initiatives (ERICs). It is advisable to regularly check whether there are any opportunities for specialists in the Netherlands to connect with and join those initiatives.

Support departments at research institutes (universities, UMCs, universities of applied sciences, research institutes and top clinical hospitals) have rapidly adopted RDM developments and are addressing the entire research chain, from the Data Management Plan (DMP) and data storage during research to the FAIR delivery of data. Professional research support responds to the need for improved quality, integrity and efficiency of scientific research. Within the LCRDM, it is important that the latest methods and technologies for re-usable and usable data are addressed through task forces; data is the raw material for Artificial Intelligence (AI) and Data Science (Big Data).

RDM support and the LCRDM

Today Research Data Management (RDM) is a generally accepted concept. Good research requires good RDM. The LCRDM focuses on RDM support, one aspect of the entire support package offered to researchers.

The LCRDM uses the following definition: *Research data management is an integral part of the research process, which concerns the way you collect, analyse, store, share, archive and publish research data, to satisfy the needs of current and future data users.* (Source: LCRDM glossary)

Figuur 1. The research chain
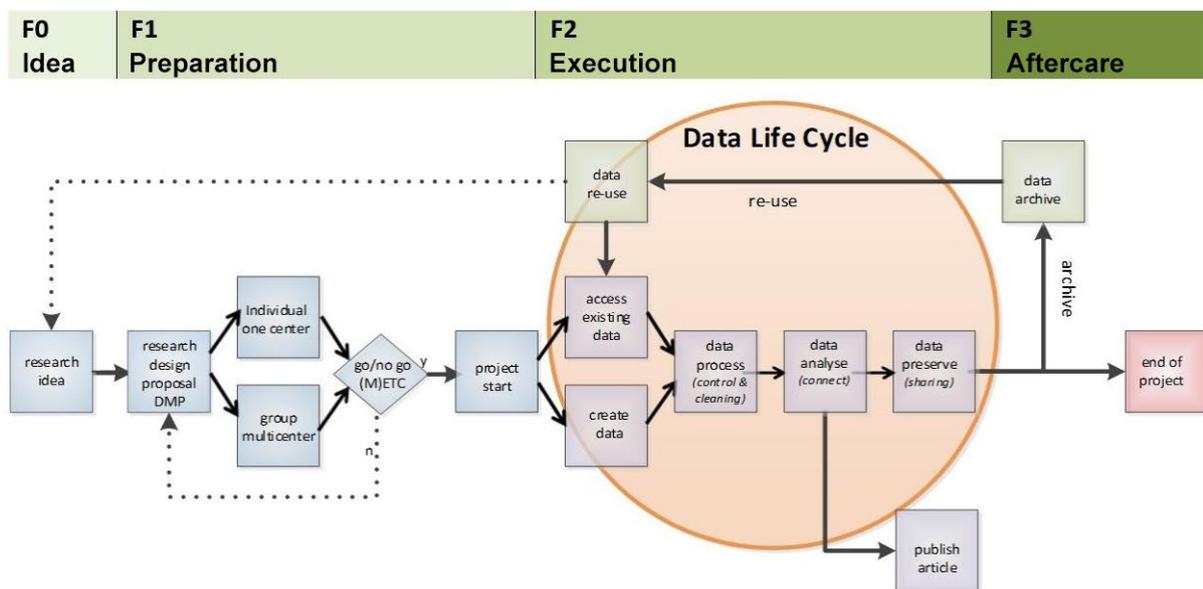
Although research organisations organise their research support differently, the above research chain always applies. The data life cycle mainly occurs in phase two. Right at the very beginning of the research project, researchers and support organisations have to think about the requirements and methods that will come into play later on in the process. The data management plan (DMP) is a dynamic document that describes how the data ultimately progressed through the process. RDM support focuses on the entire research chain. Researchers can only be optimally supported if the various research supporters collaborate effectively throughout the entire chain.

Focus areas

The LCRDM has identified six focus areas within RDM:

1) *Awareness and engagement* – focus on adoption and implementation of the available knowledge and skills;
2) *Services* – available services with professionals in order to provide the necessary RDM support;
3) *Legal* – RDM solutions that comply with laws and regulations (including data ownership);
4) *Financing* – sufficient structural financial resources for professional RDM support;
5) *Governance* – so that RDM support occupies a clear, visible position (will differ per organisation);
6) *IT- and infrastructure* – good IT infrastructure underpins RDM support.

Figuur 2. RDM central in relation to the six focus areas of LCRDM

Through the NWO call, the Dutch government aims to set up a Digital Competence Centre (DCC) at each research organisation. This instrument will act as an impulse to secure research support both at a policy and on a financial level. The resources available for this can be used over the next two years to further develop an existing centralised DCC, or to set up a DCC at a central level within the institution. Local DCCs, where data, software and computing expertise are pooled in one location, act as a support service within research organisations.The three task areas identified here are policy, research and infrastructure. The general data steward, as described in the [LCRDM report](#), is regarded as a bridge builder in the field of RDM between the aforementioned task areas. Professional RDM support is a crucial part of research and is increasingly regarded as separate expertise. RDM professionals are equal partners of scientific researchers. The LCRDM is also committed to ensuring that RDM professionals are duly recognised and appreciated.

The present members of the pool of experts all work at the DCCs (currently being established). It therefore makes sense to focus explicitly on the development of DCCs over the next two years. This has led to the formation of a semi-permanent task group, called Implementation Network (IN) DCC, which supports the local DCCs. (https://www.lcrdm.nl/files/lcrdm/2020-06/IN%20DCC%20NL%20LCRDM%20mei%202020.pdf)

The IN DCC task group stimulates discussion and dialogue between RDM support professionals and RDM users, and will share its conclusions nationally. The relationship between, among others, data stewards and data scientists will also be strengthened through the joint development of connecting processes and procedures.

Dissemination, adoption, impact and evaluation

Dissemination and adoption

Over the past two years, LCRDM task groups have produced concrete and practical results, including recommendations, checklists and guidelines. The LCRDM pays explicit attention to the dissemination and adoption of the work of the task groups.

The dissemination and adoption plan is an integral part of the task groups' activities:
- Identify the right target groups
- Determine the way in which to effectively reach these groups: for example LCRDM networking days, SURF events, SURF newsletters, webinars and workshops, RDM events organised by other organisations (e.g. DANS, Digitaal Erfgoed, DTL, ZonMw), via task group members, the LCRDM office, SURF contact at the institution.
- Update the RDM glossary

If a task group's end product is suitable for a workshop-like presentation, the task group is requested to organise a workshop (e.g. 'train the trainer' concept), which gives the workshop participants an extra opportunity to further disseminate the results in their own institution.

Impact and evaluation

The LCRDM will hold an external review in mid-2022. During this review, it aims to assess the impact of the LCRDM's work, to identify who is inspired and influenced by its work, and to determine who influences the LCRDM.

The LCRDM organises two large networking events a year, during which participants are asked:
A: which specific outputs produced by colleagues in task groups are they aware of
B: whether they know who/which department in their organisation utilises those outputs

Other indicators include:
1. How quickly and how many participants apply to join a new task group
2. Number of pitches a year
3. Number of unique participants in task groups and at networking events in a year
4. Growth of the network

Members of task groups are asked on an ad hoc basis about the task group's working methods and results.

Governance

The LCRDM is an independent organisation; it is a collective of data professionals, and it wants to maintain this independence. The pitches for task groups are assessed by the Advisory Group (Appendix 1).

The LCRDM is supported by SURF and, from the end of 2020, it will be incorporated within SURF's Innovation department (Maurice Bouwhuis, the Independent Chair of the LCRDM Advisory Group, works here).

Two developments influenced this step:
1. NPOS-E (landscape data exploration) with the recommendation to set up a National Data Coordination and Expertise Centre (NDCE) for the next five years, which could include LCRDM.
2. SURF has overhauled its coordination with members and the RDM control group is being replaced by the RDM Expert Group and DCCs.
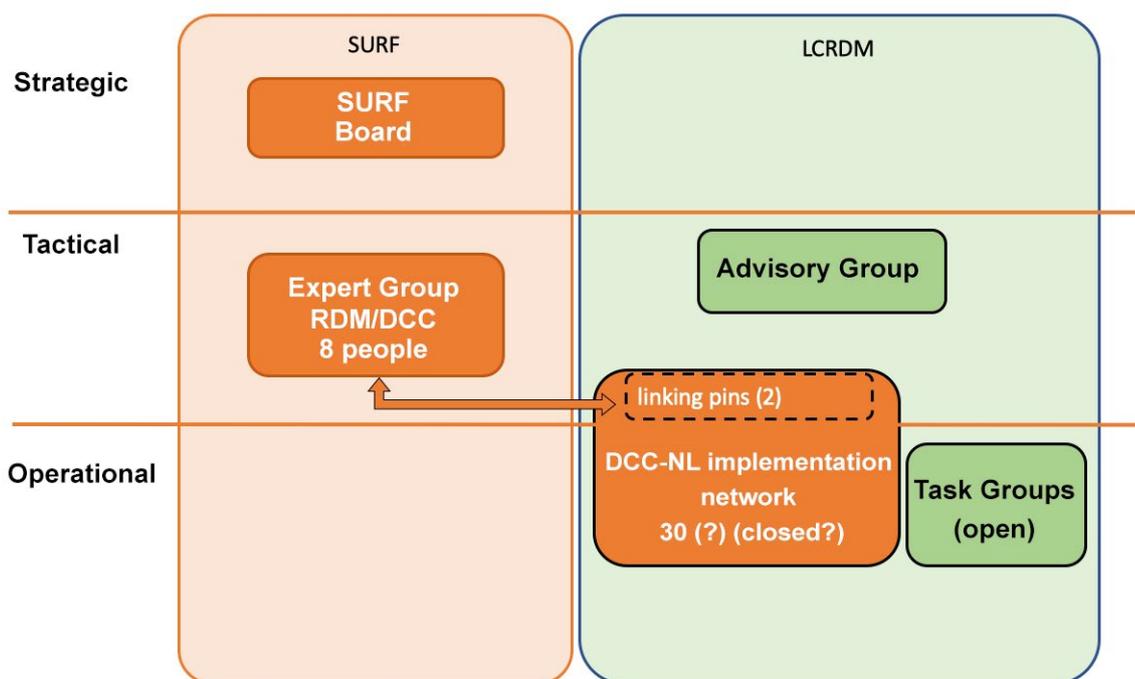
The proposal is to keep the LCRDM at SURF for at least the next two years. Should the NDCE materialise, a decision can always be taken to incorporate the LCRDM, especially if this would result in administrative embedding at the VSNU, VH and NFU.

Conclusion

RDM has become a discipline in its own right. RDM professionals and researchers work side by side. RDM professionals support researchers with their expertise; the researchers are and remain responsible for the execution of the research and the reproducibility thereof.

The LCRDM operates at the forefront of RDM: the challenge is to ensure that the latest insights and opportunities are introduced to research institutions through the task groups in a workable and practical way. SURF's Innovation department is, therefore, the right place for the LCRDM.

The task group approach is particularly flexible. In the coming years, the LCRDM will continue to pay attention to the adoption and implementation of guidelines issued by the task groups. LCRDM's network is growing steadily and it has ties with the professional field.

The new Implementation Network DCC also represents a solid platform for the task groups' results, and it also acts as a source for new issues that can be tackled in task groups.

Appendix 1

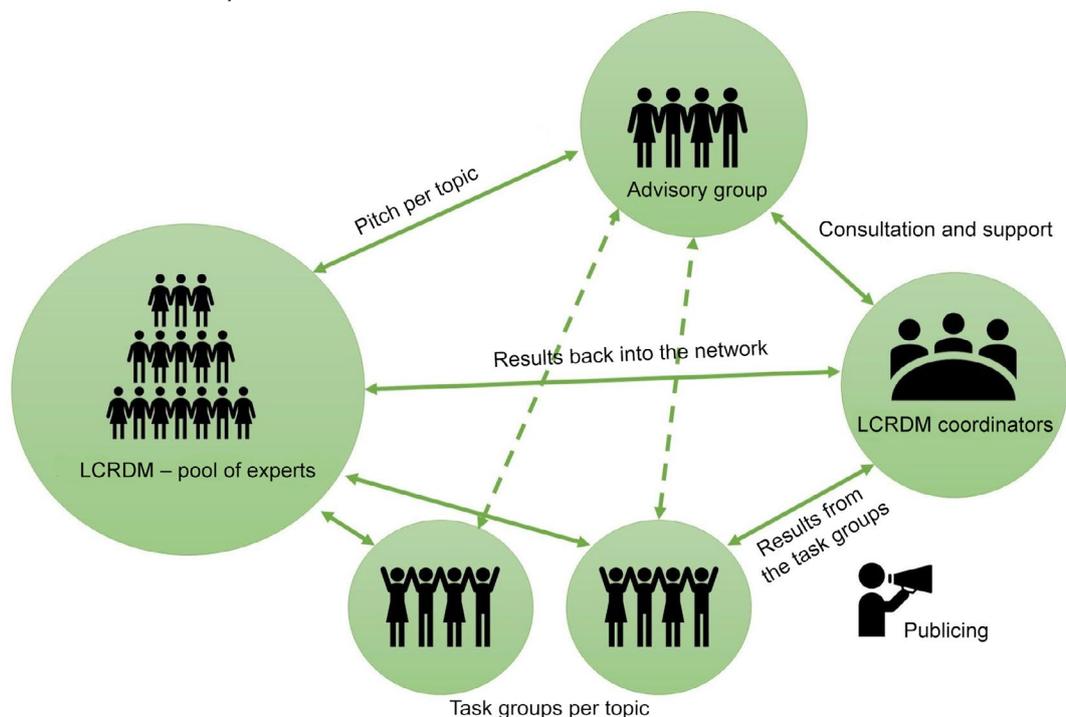# Task Groups and the Advisory Group

The task groups are appointed by the Advisory Group on the basis of the issues submitted. Task group members are selected from the pool of experts via a pitch. Additional experts may also be appointed. When joining a task group for a particular issue, members also have to be committed to making a contribution to their own working environment.

A pitch consists of the following elements:

Pitch proposals (title of issue):
Name of submitter(s):
1. Reason for/background to the pitch
2. Who the result is relevant to
3. Objectives and activities of the task group
4. What the task group will not do
5. Duration and expected effort
6. What the task group will produce
7. Who you would like to recruit for this task group
8. Who is involved in the pitch preparations
9. What is already known or has already been done
   Why is this information inadequate?

The Advisory Group evaluates the pitch, and may request further clarification and/or information. Once approved, the pitch is sent to the pool of experts network and a task group is formed. The results, recommendations and tips are published on this website. Guidelines and recommendations can be used by everyone in their own organisation.

The Advisory Group's main task is to steer national cooperation in research data management by prioritising issues in consultation with the network. The source of inspiration for this working method is the Knowledge Exchange partnership.

The members of the Advisory Group can be found on the LCRDM website (https://www.lcrdm.nl/files/lcrdm/2020-01/adviesgroep%20zww77_1.png). (https://www.lcrdm.nl/files/lcrdm/2020-01/adviesgroep%20zww77_1.png)

Appendix 2 Participating organisations

Organisations where members of the pool of experts work include:

Antoniusziekenhuis	NFU	Hanze Hogeschool
LUMC	UL	PTHU
NLBIF	eScience Center	UVA
AUMC/VUMC	NIKHEF	HU
Lygature	UM	RU
TiU	EUR	VU
CASTOR	NIOO/KNAW	Huijgens ING/
Maastro	UMCG	KNAW
Tresoar	Fontys	RUG
CWI	NIOZ	Windesheim
MEMIC	UMCU	HvA
UM	GGD Hart voor Brabant	Saxion
TU Delft	NKI	WUR
Dans	UT	InHolland
Naturalis	Haagse Hogeschool	SCP
TU Eindhoven	NWO	ZonMW
DTL	UT/CLARIAH	KNAW
NDE	HAN	SGF/Hartstichting
UH	OLVG	LEI
Erasmus MC	UU	Spaarne Ziekenhuis