

Implementation plan LCRDM 2018 and beyond

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1. Introduction

This *Implementation Plan LCRDM 2018 (and beyond)* describes a new way of working of the National Coordination Point Research Data Management (LCRDM) in 2018. This is a result of the evaluation of the first phase of the LCRDM. The new method ensures that the strength of the existing LCRDM network will be optimally used, strengthened and enhanced. It facilitates cross-thematic cooperation very well. At the same time, it will be possible to use the network of experts more flexible and in a more efficient manner, and both the themes and the network itself can be easily expanded, where necessary or desirable.

The *Implementation Plan* was drafted after extensive consultation of current LCRDM workgroup members.¹ and also contains a summary of the evaluation process.

2018 is seen as an experimental year and serves as a preparation year for the second phase of the LCRDM (2019-2022). This matches with SURF's strategic plan cycle.²

At the end of 2018, the experiment with the new work form will be evaluated and a new Roadmap will be drawn up for the period 2019-2022. This will be done on the basis of a plan with prioritized activities to take up in a national approach to RDM. Also a proposal will be drafted for a suitable governmental embedding for the LCRDM.

2. Evaluation LCRDM 2015-2017

2.1 Approach

The first phase of the LCRDM ran from 2015-2017.³ At the end of this period an internal evaluation took place on the basis of a SWOT analysis.⁴ For the SWOT analysis, seven LCRDM-related sources were approached to give their input and feedback.⁵

The SWOT is applied to three components: the LCRDM concept, the LCRDM workgroups and the LCRDM output. See Appendix I for the full elaboration of the SWOT on the various components.

2.2 Results SWOT analysis

The mission of the LCRDM is to prepare, facilitate and monitor the development and implementation of Research Data Management policy for scientific research in the Netherlands, in close consultation with the professional field, and at the same time to facilitate exchange of knowledge and knowledge sharing at a national level, so that the research community in the Netherlands is able to achieve efficient and effective development and execution of Research Data Management.

The National Coordination Point's vision is as follows: In 2020, research data management will be a

¹ Earlier versions of this Implementation Plan were discussed in the LCRDM Trekkers Consultation on 14 March 2018, the Brainstorming session on 27 March 2018 (30+ participants), follow-up meetings on 11 April 2018 and 26 April 2018 and with the program manager of the SURF Open Science innovation program on 17 May 2018. The LCRDM Advisory Group advised on 26 June 2018 to approve the underlying version.

² The LCRDM is a project that is financed from the SURF innovation program Open Science, formerly Sustainable Data, which runs from 2015-2018. In the new SURF policy strategy for 2019-2022, SURF is trying to create another financial space for (continuation of) the LCRDM as part of community management open science within the SURF organization. See also §4.3 of this plan.

³ The activities of the first phase of the LCRDM are based on a Roadmap for the period 2015-2017: https://www.lcrdm.nl/binaries/content/assets/surf/nl/2016/roadmap-landelijk-coördinatiepunt-research-data-management_revised-version-November-2015_final.pdf

⁴ The evaluation took place in a number of meetings and SKYPE meetings, on 14/12/2017; 17/1/2018 (2x); 1/2/2018 and 5/2/2018. A total of approximately 35 working group members participated (= about half of the LCRDM community).

⁵ (1) SURF Mid Term Review Innovation Programs (April 2017); (2) RDM monitor LCRDM Workgroup chairpersons (4) (May 2017); (3) Input Mentimeter Network Day (June 2017); (4) Discussion LCRDM Working Groups (4) (Sep-Nov 2017); (5) Discussion of Trekkers Consultation (June / September 2017); (6) Discussion of the UKB Research Data Working Group (October 2017); (7) SURF Controlling Documents (2015, 2016,2017);

natural integrated part of the way of performing research and education in Dutch universities and research institutions. This will be implemented in such a way that:

- there is synergy between policy, ICT and research support that allows researchers to employ sound research data management;
- there is a connection between (the experts from) organisations conducting research, general and technical services organisations and research funding organisations;
- administrative embedding of the Research Data Management Policy is achieved.

In this vision, the LCRDM has successfully facilitated and supported this process, in close consultation with the field, and has set an example for national approach in the international field. Both mission and vision remain unchanged for 2018 but may be revised for the period 2019-2022.

The LCRDM – phase 1 received the highest appreciation for the network of experts in RDM that was built up and for the results achieved by the working groups.

Given the mission and vision of the LCRDM and that what has been achieved so far, continuation of the LCRDM is evident. This is underpinned by the following considerations:

- RDM is an indispensable condition for re-use of data within the broader framework of open science and therefore still topical.
- A number of LCRDM activities have not yet been completed; a number of LCRDM products require further development and / or maintenance; new aspects of RDM have emerged, that ask for national approach / elaboration. Using the existing network for this seems to be very useful.
- The need for knowledge exchange remains as high as ever. See for example the attendance rate at the various meetings that the LCRDM has organized / organizes.
- The national reputation of the LCRDM is growing, which causes continuous demand for connection from various stakeholder groups.

SWOT

<p>Strength:</p> <ul style="list-style-type: none"> • human network of experts • Delivered products (bottom up approach) • engagement-activities (bottom up approach) • Increasing awareness for RDM in the institutions • Increasing interest in cooperation in RDM through the LCRDM 	<p>Weakness:</p> <ul style="list-style-type: none"> • Governing board level support and importance • Project status • Unequal spread stakeholder groups in working groups • Work fatigue working group members (shift to new priorities) • Cross over connection between working groups • Connection between delivered products • Use of the platform
<p>Opportunity: (continue with)</p> <ul style="list-style-type: none"> • cooperation & • Knowledge sharing & • Develop concrete products for general use • Broaden network • Connect with NPOS 	<p>Risk (also called: Issues that need attention)</p> <ul style="list-style-type: none"> • Organisational embedding • Maintenance and continuous development products • Involvement researchers, research communities, governing bodies.

2.3 Working method and results 2015-2017

During the first phase of the LCRDM activities were undertaken with a more or less fixed working group on each selected RDM theme. The working groups were composed in such a way that most of SURF's stakeholder groups were represented in one group.⁶The aim has was to get representation

⁶ The workgroup members are experts in RDM area from their own profession. They know what is going on in the workplace and have a good connection with the administrative layer in their institution. The working groups were

in every working group of people working in ICT, policy (including legal issues) and research support. LCRDM embraces the life cycle thinking: for the implementation of open science in the Netherlands, supporting or 'unburdening' the researcher in implementing proper RDM policy is crucial throughout the full research cycle. The best way to achieve this is to establish collaboration within the research institutions between ICT, policy and research support, and at a national level between the various stakeholders in open science.

The five thematic working groups each drew up a work agenda based on the *Roadmap* and subsequently worked out a number of subjects from this agenda.⁷ The working groups usually met for a full day and met on average 8 times in 2016-2017. Theme-transcending topics were picked up in the chairmen's meetings (Trekkeroverleg).⁸

A total of around 40 products were delivered, ranging from policy advice, reports, inventories, reference maps, decision trees, architectural models and a PoC of a service catalog. A number of products are finalized and should only be kept up-to-date, a number of products require further elaboration and long term maintenance.⁹

During the first three years of LCRDM five national conferences and network meetings were organized, built up around specific RDM themes and aiming at different target groups.¹⁰ A project website was set up, including a platform / wiki, which functions not only as a 'sandbox' for the working group members, but also for knowledge sharing for anyone working in RDM.¹¹ More than 20 presentations were held on RDM and the LCRDM, both nationally and internationally.¹² The LCRDM received press attention in magazines and online media a dozen times.¹³

The LCRDM contributed to the establishment of the National Plan Open Science (NPOS), particularly with regard to the embedding of RDM as an important part of open science. The LCRDM acts as one of the support organizations within the NPOS platform, and contributes to three themes of the NPOS, including their underlying ambitions. These are: optimization of research data for re-use; promotion of open science and support of the researcher; and recognition and rewarding.

The added value of the LCRDM for NPOS can be found in:

- the network of RDM experts from the LCRDM;

composed of experts from universities, UMCs, KNAW research institutes and NWO and HBOs. Due to the practical implementation, the working groups had a size of between 10-17 members. During the course of the project, in particular, strong members of the management board got off. The importance of participating in LCRDM was acknowledged, so that institutions sought replacements. These people often had a more practical background. Given the direct relationship with the VSNU (VSNU requested SURF for the LCRDM organization), the universities were the best represented. Reconnecting workgroup members from KNAW and NWO research institutes was difficult and these also ended relatively quickly. In the higher professional education sector, there was little interest in participating in the LCRDM at the time of the organization of the working groups. This is actually only created after embracing the NPOS by HBO stakeholders. The working groups had already established their work agendas and were full swing - mostly in subgroups - so that expansion of the working groups and / or boarding of new members was practically hardly or not feasible.

⁷ Work agendas:

https://www.edugroep.nl/sites/RDM_platform/LCRDM/_layouts/15/start.aspx#/Wikipages/Werkagenda.aspx

⁸ Meeting reports:

https://www.edugroep.nl/sites/RDM_platform/LCRDM/_layouts/15/start.aspx#/Wikipages/Werkgroepverslagen.aspx

⁹ Product overview: https://www.edugroep.nl/sites/RDM_platform/Bewustwording/Productenoverzicht.aspx

¹⁰ National conferences and meetings: https://www.edugroep.nl/sites/RDM_platform/SitePages/Bijspraken.aspx

¹¹ Website: www.lcrdm.nl; platform: https://www.edugroep.nl/sites/RDM_platform/SitePages/Home.aspx

¹² Presentations: https://www.edugroep.nl/sites/RDM_platform/LCRDM/Wikipages/Presentaties.aspx

¹³ In the Press: https://www.edugroep.nl/sites/RDM_platform/LCRDM/Wikipages/In%20de%20pers.aspx

- the LCRDM knowledge sharing and facilitating of collaboration on various data-related aspects of open science;
- the LCRDM supporting coordinated policy development and implementation of RDM;
- the LCRDM stimulating the debate on the financial implications of data-related aspects of open science;
- the online platform where all products of the LCRDM are available and that offer the possibility for anyone to share knowledge about RDM.

Early 2018 the output of the LCRDM working groups was presented to the larger audience, with a national conference on RDM. This was a festive way to celebrate the good results and the strong networking collaboration we have achieved, and to conclude the first phase of national collaboration on RDM.¹⁴

3. New approach 2018

3.1. Why a new approach?

2018 can be seen as an intermediate year between two phases of the LCRDM and offers room for experimentation and innovation - as a prelude to a new four-year period for LCRDM.

The LCRDM has created a national network of experts in the field of RDM that - not only from the perspective of SURF, but also from the perspective of the experts themselves - must remain being used, also with a view to the current sprint to open science, both in the Netherlands (NPOS) and internationally (EOSC).

Meanwhile, the terms of office of the current workgroup members and chairpersons has expired.¹⁵ Moreover, the five working groups become somewhat “saturated” after two years of active involvement. Therefore it is time for a new impetus.

In order to continue to optimally use the strength of the existing LCRDM, a new work form is proposed. This helps to facilitate cross-thematic collaboration between the experts, to provide a good basis for (more) effective and (more) efficient implementation of current national activities, and to facilitate the expansion of the current group of experts - and work themes. Three aspects that emerged as a point for improvement from the evaluation based on the SWOT analysis.

Together with the evaluation, a small quick scan was done to map relevant topics and themes. There is still a great need for national coordination within the current themes. Not everything has been sorted out and worked out yet. A number of new topics / themes also arise. Evidently, the delivered products form a good basis for, for example, a national RDM “desk”, but the perfect coherence is still lacking. For the quick scan and for the overview of recommendations, see appendices II and III.

3.2. New working model 2018

In 2018 the LCRDM will dismantle the old work group model. We will work according to a new model, inspired by that of *Knowledge Exchange* (KE), which pays off well.¹⁶ The KE model, consisting of a strategy group, expert groups and task-and-finish groups, is translated for the LCRDM as follows:

¹⁴ National conference on RDM (8 February 2018):

https://www.edugroepen.nl/sites/RDM_platform/SitePages/National%20Cooperation%20in%20RDM%20Conference%20-%20terugblik.aspx

¹⁵ The working group members (2015-2017) were asked in 2016 to commit to the working groups for a period of a year, of so much longer as the working agenda needed. The working group chairs were asked to commit for a year, with the possibility of continuation after the 12-month evaluation.

¹⁶ Knowledge exchange: <http://knowledge-exchange.info/about-us>

1. Pool of experts
2. Advisory group
3. Task groups
4. Coordinating bureau
5. [Steering Committee]

In this model, one large group of experts is formed (Pool of Experts). These experts share knowledge and experience in the field of RDM - with each other and with third parties -, will be available for advice and will have time available to participate in short-term task groups.

These task groups will be either developing an advice on a specific theme, or will be working on the preparation of a national meeting. When necessary, task groups will be supported by a scrum master / process supervisor / consultant, who will be hired by the LCRDM coordinating office. In 2018 there will be some financial support for a limited number of task groups.

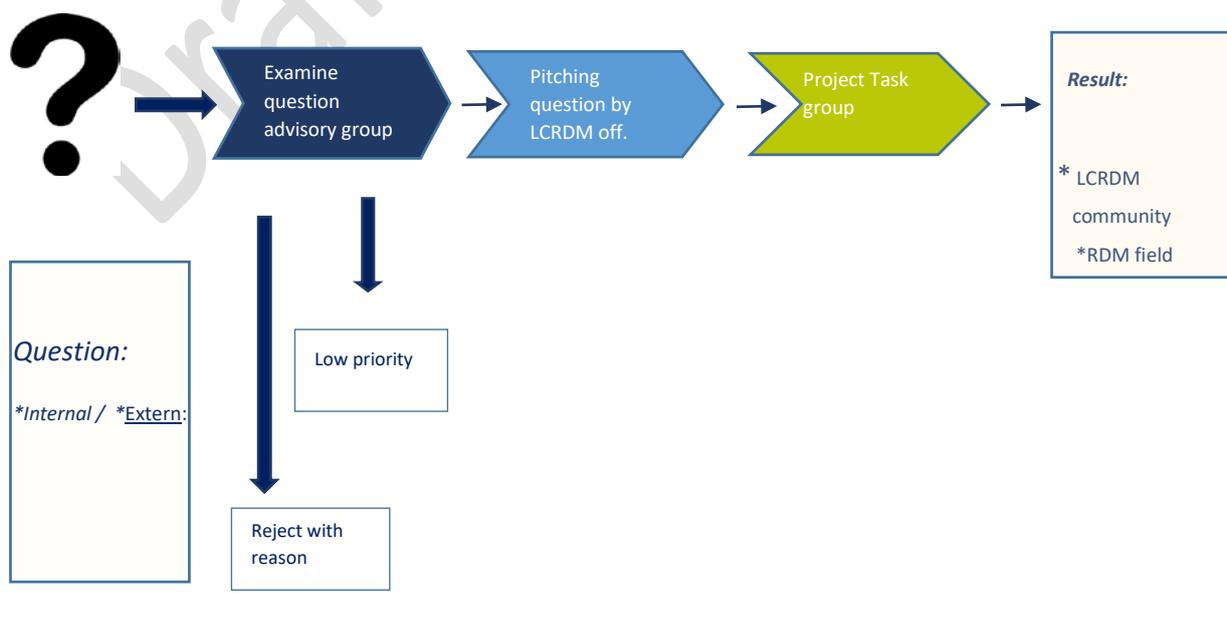
Before forming a task group, a pitch will be set out for each task. The pitch can originate from both the advisory group and the pool of experts, as well as from external parties.

In order to be able to draw up a work agenda for the next four or five years and to be able to form the task groups in 2018, it is desirable that a plan be put forward with prioritized activities for national approach to RDM. To this end, an advisory group is set up from the various LCRDM stakeholder groups. The advisory group acts as a “quartermaster” and commits itself in the first instance for 2018. Experts are invite to provide the advisory group with questions and input.

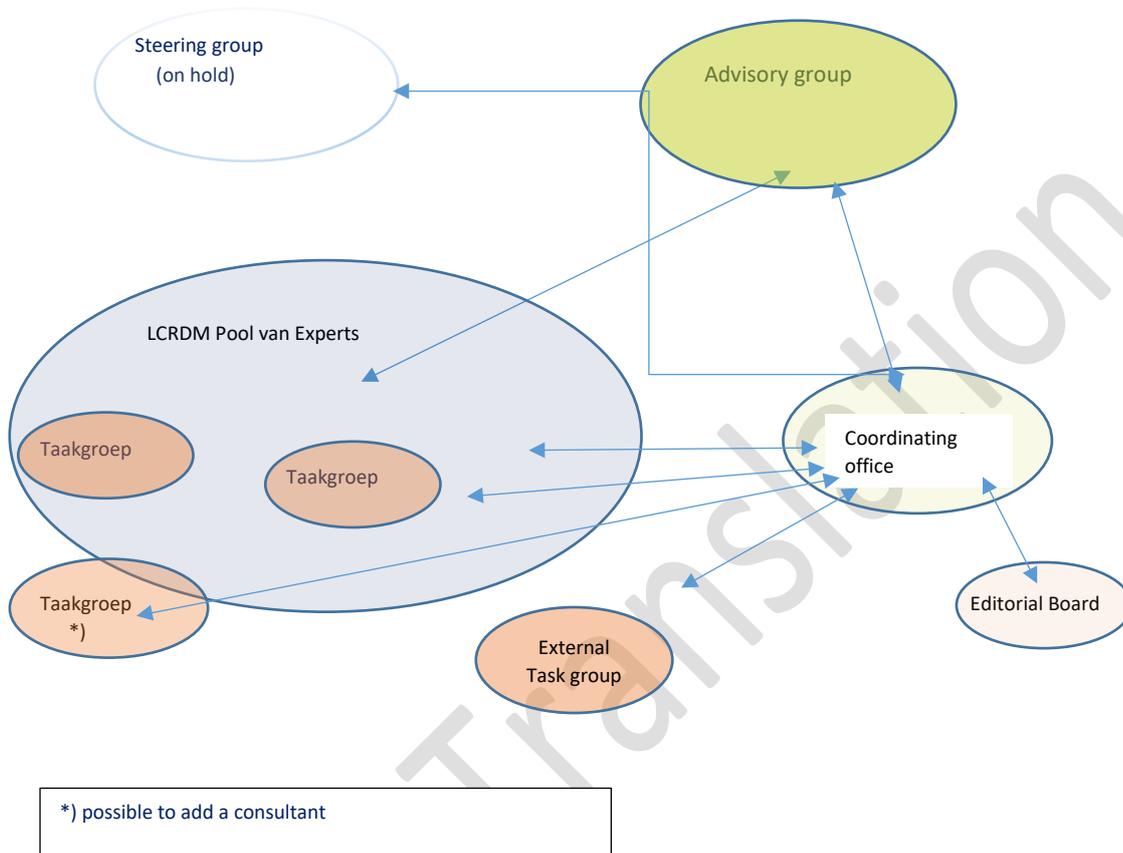
At the end of 2018 an evaluation of the new working model of the LCRDM will take place and a new roadmap will be drawn up on the basis of the prioritization plan for the next phase of the LCRDM (2019-2022). A proposal will also be made for the embedding of the LCRDM (and the implementation of a steering committee).

3.3. Visual draft

Flow



Structure



3.4. Overview of criteria for composition, profile and effort per group

3.4.1: Pool of Experts

Composition:

- All current working group members (2015-2017) participate in the pool of experts - unless they have indicated that they no longer wish to participate in the LCRDM. The coordinator sends out invitations. Suggestions for new experts are welcome
- People who have indicated that they are interested in participating in the LCRDM also take part in the pool of experts. We expect a stronger connection with for instance people working in Schools of Applied Sciences, Biomedical Information Specialists etc. (registration via coordinator)

Profile:

- The experts who want to join the LCRDM Pool of Experts are regularly dealing with RDM in their own institution and are prepared to combine a local focus with a national focus, and to advocate for (the importance of) national cooperation

Effort:

- The experts provide input to the (first) meeting of the advisory group by scoring possible themes and activities
- The experts come up with new subjects from their own daily practice / institution to tackle at a national level
- The experts are available for six months to participate in the ad hoc task groups (see below)
- The pool members are invited to propose experts from outside the pool, to join the task groups (via LCRDM coordinator)
- The experts advocate for the work of the task groups in their own institution, as well as for the importance of national cooperation
- In order to make knowledge sharing possible, the experts attend the quarterly LCRDM expert network meetings whenever possible. (half day - format to be determined)

3.5.2: Advisory Group

Composition:

- The advisory group is drawn from the current group of LCRDM workgroup members, supplemented by external experts where necessary. The coordinating agency invites advisory group members.
- There must be a link with the NPOS theme group data. One can think of one of the two triggers of this ambition.
- The members of the advisory group represent various RDM stakeholders and different working areas (ICT, policy, research support). Wherever possible, attention is also paid to familiarity with the scientific disciplines.
- The advisory group must remain workable in terms of size and must therefore not be too large. You can think of 8 - 15 members

Profile:

- The advisory group members do not represent stakeholders, but act as key figures in their organization. The advisory group members are people who really want to commit and have time to do so.
- The advisory group members have a broad view of the development of RDM in the playing field of open science.
- The advisory group members function on a strategic tactical level. Participation criterium: "I can advise other people about this"
- The advisory group members act as quartermasters for national cooperation in the field of RDM.

Effort:

- The advisory group meets for the first time in June
- The advisory group is set up for a duration of 6 months (= pilot period)
- The advisory group meets every 6 weeks (for half a day) = approx. 4 plenary meetings
- The first task of the advisory group is to draw up a plan with prioritized activities for the national approach of RDM. The group identifies what the first problem is that needs to be addressed and then elaborates on a model of building blocks for further elaboration
- The advisory group monitors the bandwidth of the national approach (meaning: all relevant aspects of RDM included)

- The advisory group determines the priority of the pitches to be set out
- The advisory group supervises the coordination of the various ad hoc task groups (in close cooperation with the coordinating office)
- The advisory group members could, where necessary, bring in additional task group members from their own network
- The advisory group evaluates the pilot year and prepares the Roadmap 2019-2022 (in cooperation with the coordinating office)

3.5.3: Task groups

Composition:

- The task groups will be composed per issue when pitched for
- The task group is composed of volunteers from the pool of experts, supplemented with colleagues from the institutions of the advisory group members or pool members
- The task groups are assisted by a scrum master / process supervisor / consultant (to complete the job description) when necessary
- Link with advisory group members (to be elaborated further)

Profile:

- Task group members are motivated to work on a topic, based on needs / questions from their own institution / work environment and their own daily work. Incentive: with this subject I also need something in my own work environment.

Effort:

- The task groups are composed ad hoc and work on small issues that can be solved in a short time (1-6 weeks; max 2 months)
- Task group members are available for intensive time effort in a short period (model pressure cooker sessions)
- The task groups establish a project plan on the basis of a pitch, which includes: goal of project, composition of task group, desired result, planning and budget.
- The task groups focus on preparing advice on specific tasks or preparing national meetings.

3.5.4: Coordinating office

Composition:

- The coordinating office consists of a national coordinator, secretarial support and social media / platform support, and a process supervisor / scrum master
- The process supervisor prepares the project plans for the task groups and monitors progress and planning. FTE division / job descriptions to be completed
- SURF runs the coordinating office

3.5.5: [Steering group - on hold]

Composition:

- The composition of a steering group is based on the environmental scan of the open science / RDM landscape in the Netherlands

- Based on the environmental scan and the evaluation of the working method 2018, it will be determined whether the focus of the steering committee is appropriate, or whether the formation of a strategy group is better.
- It should be considered whether a separate LCRDM steering group is desirable, or whether it can be connected to existing administrative initiatives: a) at SURF level; b) nationwide: for example, Steering Group NPOS, UKB consultation; steering committee NDE (Network Digital Heritage)
- The composition of the program committee of the NFU program D4LS can serve as a model for involving researchers in a steering committee
- A clear line of policy and support is also desirable for the steering model of the LCRDM. This could include directors, deans and librarians
- An effective steering group has a balanced representation of organizations, roles and scientific disciplines

Effort:

- The steering committee ensures administrative and institutional implementation of the LCRDM's advice, and / or provides financing for larger RDM projects to be elaborated.

4. Working method

4.1. Focus

The focus of the LCRDM is on RDM policy. This not only involves joint and coherent development of that policy, but also the formulation of implementation strategies. The LCRDM connects research supporters, policy makers, IT professionals and research funders. The LCRDM creates the link between policy and solution, but for the development of the solution (services and products that need further elaboration, policy to be implemented) it connects with the other stakeholders such as UKB (support), SURF Tech centers, RDNLpartners, Go FAIR (services), NPOS (policy implementation) etc.

4.2. Prioritization

Researchers must increasingly comply with the rules and requirements of governments, research financiers, publishers and their own university. This means dealing with privacy-sensitive data, ethical issues, integrity and FAIRification of data before, during and after of the research. Support is often provided in a fragmented way by supporters within and outside the organization. In order to provide researchers with efficient and adequate support inRDM it is important that the supporters are aware that they are part of a chain.

In 2018, the LCRDM will provide a plan with prioritized activities based on chain thinking for national cooperation on RDM. This will form the basis for a roadmap for 2019-2022. Working with the principle of chain thinking means facilitating RDM support for the researcher throughout the entire research cycle. So: not only before and after, but also during the research. This means not only dealing with support, but also with facilities, administrative mandate, legal coverage and knowledge sharing. The discipline-specific supporting needs of data stewards and data managers will be the starting point.

The RDM experts will be asked to provide input for prioritizing themes and subjects for national approach, when they register for the Pool of experts, to broaden the input for prioritizing.

Top down reinforcement and commitment from all stakeholders is the next step for national implementation. The Dutch field of open science, in which RDM is an indispensable component, is

complex and in full development. This field will first be mapped, after which the best options for administrative coordination will be weighed. A proposal for this will also be made by the end of 2018.

4.3. Financing new approach

In 2018 the activities of the LCRDM will be financed through the SURF innovation program Open Science (formerly the innovation programme Sustainable Data) from the SURF strategic plan period 2015-2018. This means SURF finances the coordinating agency. All activities of the LCRDM are contributed in kind by the institutions involved. A broad financing model will be examined for the period 2019-2022.

4.4. Communication

To strengthen the internal and external communication, the monthly update by email will return, though the discussion list of for the pool of expert members only. Wikipedia-like writing afternoons will be organized for updating and expanding the wiki / online platform as a source of information. All products of the platform will be translated into English. An editorial board will be set up for the website and the wiki (cf. openaccess.nl model).

4.4. Themes

The Quicksan 2017 has shown that the current themes of the LCRDM are still relevant. Therefore, we will try to represent every existing theme in the advisory group: financial, facilities & data infrastructure, research support & advice, legal aspects, awareness / engagement. In addition, two new topics have been named: data stewardship and governance of RDM.

4.5. Practical

- To keep the LCRDM topical the list of possible issues to deal with, will be send to the pool of experts upon registration, with the request to indicate their own priority, and to complete the list with priorities they meet in their own daily practice. The list of possible issues is based on the quickscan 2017.

Based on the priority scores the advisory group will draft a plan for prioritizing a national approach for RDM (2019-2022). The group will identify the most important problem (e.g. How long do we need to store and keep each type of data?) Then a 'building blocks' model will be used to build up the advice: when we solve this/advice on this, we can subsequently tackle issue X, Y, Z.

- Input for the issues (advices, engagement meetings) could be derived from:
 - The country/ the national RDM field: concrete questions;
 - The advisory group
 - The pool of experts
 - The NPOS group or other national data groups (RDNL/UKB/D4LS/NDE) etc.
- The advisory group will set the agenda.
- The person who brings up the question will be asked if a) he/she can help with formulating the pitch and – in close cooperation with the LCRDM coordinating office and the advisory group, and to participate in a task group b) if not, if there are any colleagues of this person are available to participate.
- As soon as a task is approved and a pitch will be released, the experts from the pool can subscribe, specific experts from outside can be approached and consultants/specialists can be hired (when necessary).

- The way to communicate the pitches needs to be worked out: mail group through LCRDM coordinating office/RDM discussion list?
- Each task group will be supported by a process officer / scrum master to set up a project plan and to realize a project.

4.6 *Time frame:*

February/May: brainstorm
May/June: prioritizing quickscan
June: start advisory group
December: evaluation
December/Q1 – 2019: Roadmap 2019-2022

Draft Translation

Appendix I: SWOT analysis per building block

LCRDM Concept

<p>Strength:</p> <ul style="list-style-type: none"> • Prevents individual solutions through facilitating cooperation (5) • Incentive: coordination and exchange (4) • Efficiency and energizing coordination from the office (2) • Creates the possibility to advocate the added value of cooperation by working group members in their institutions (4) • Has brought many people together (4) 	<p>Weakness:</p> <ul style="list-style-type: none"> • Involvement of researchers (1) • Together we've only got started. Much to be done yet (4)
<p>Opportunity:</p> <ul style="list-style-type: none"> • Creates potentially good connection with researchers through intermediaries (1) • Is of such a structure that transformation from temporary initiative to tool for structural attention/scope is possible (4) 	<p>Risk:</p> <ul style="list-style-type: none"> • Insufficient commitment of cooperation partners (7 - 2015) • Approach doesn't work because of broad perspective and individualism of working field (7 - 2015)

LCRDM Output

<p>Strength:</p> <ul style="list-style-type: none"> • Impressive numbers, given the format in which work has been done (voluntary basis) (1) • Results don't answer all questions but offer incentives, which one can use depending on research question (2) • We've developed products that are useful (4) 	<p>Weakness:</p> <ul style="list-style-type: none"> • It is an open question what the commitment is of the LCRDM participants to support the use and the maintenance of the products (2) • Products are sometimes very basic and need further development (5) • It is sometimes not clear who will use the product (legal) (4)
<p>Opportunity</p> <ul style="list-style-type: none"> • [Feed into NPOS] 	<p>Risk:</p> <ul style="list-style-type: none"> • Portfolio doesn't meet the needs (7 - 2015) • Not enough support through research communities (7-2016; 2017; 2018)

LCRDM Working groups

<p>Strength:</p> <ul style="list-style-type: none"> • Foreseen structural cooperation reached; is of more importance than the deliverables (4) • Provided an agenda setting (5) and identified clear needs per theme (2) • Structural effort to set up a national agenda (knowledge sharing & products) (5) • Offers a network to keep informed on the (legal) development at universities, exchange knowledge and disseminate knowledge in a low profile manner (4) • Are of a composition level that is diverse enough to also tackle new subjects (5) 	<p>Weakness:</p> <ul style="list-style-type: none"> • Concrete development of identified needs difficult because of lack of time of wg members (2) • Priorities switch because of priority setting institutions and (growing) diminishing energy working members (focus elsewhere) (2). • Institutions stress the importance to participate, but for wg members its difficult to find the time to develop or adjust products (esp. Legal products) (4). • Working group members have not been given time to invest (legal) (4) • Because of the switch from originally asked wg members towards new wg members with less experience, the connection to governing people fades : less influential power (4) • Not always aware of each others activities (4)
<p>Opportunity :</p> <ul style="list-style-type: none"> • See LCRDM concept – Strength 	<p>Risk:</p> <ul style="list-style-type: none"> • Communities might organise outside SURF (7 -2015) • Not enough commitment from the working floor towards the themes: too little progress (7-2016; 2017; 2018)

Appendix II: Wishes and recommendations SWOT analysis evaluation 2017

The numbers in () refer to the sources of input - see also note 5. (B) = brainstorming sessions.

General

- Organize plenary WG members meeting for future discussion (4)

LCRDM Concept

- Establish a connection with international initiatives - including RDA (1)
- International: participation in RDA; presentations at international conferences; publications are important (6)
- Remain a connection point to also gather European and international initiatives and implement the Dutch output (4)
- Stronger focus on RDM and data stewardship instead of on RDM and research support (1)
- In addition to open science, open support/open education on the agenda (2)
- LCRDM central role: network organization for knowledge exchange between institutions (3)
- Desired role LCRDM is twofold: national advisory group; inspiration space (5)
- Give a new impulse based on existing results (4)
- Use the human network (4)
- Get a sharp agenda setting / needs overview from the field (5)
- Ensure commitment from both the governing board and from the field (administrative and financial) (5)
- Take care of organizing questions and leadership from the governing layer (5)
- Seek the commitment of directors to setting up working groups (cf. data stewardship TU Delft) (6)
- Implement the Knowledge Exchange working model for the development of new RDM themes (4)
- Find financial reimbursement for experts to work things out (4)
- Organize networking meetings every three months to collect, share and in a few sessions transform products which are being developed in institutions into national products (4)
- Organize advisory board groups / themed groups to involve directors and researchers (6)
- Establish co-ordination with the heritage field (Network Digital Heritage) (B)
- Ensure a strong link between RDM and Open Science. Open Science is primarily in focus at the institutions (B)

LCRDM Working Groups

- Establish structural substantive cooperation between the Working Groups (2)
- Working groups continue with other topics / themes (3)
- Better connect working groups (4)
- Add new blood. The network of experts can be much larger (B)
- Involve people who can translate generic products into tailor-made products for the institutions (B)

LCRDM Products

Existing products:

- Website and platform remain (3)

- Organize maintenance & management of delivered products (5)
- Continue work on legal & policy products and comments (4)
- Continue organization of engagement meetings (4)

One desk model

- options:

a) a joint online one stop shop for discipline-specific questions (or, a one stop shop for special (often discipline-specific) data formats) where questions are passed on to the right discipline or data format expert

b) national one stop shop / expertise network for supporters is interesting. For researchers, a local central entry point at the institution is for most subjects a better solution. The national information point / network can, of course, bundle information and make it available what is relevant to all NL parties. It would be interesting to look at the example of Open Access: how does it work, do they reach the target groups, how is collaboration with local 'counters'? In line with this: how does OpenAire, the office at the European level, function? (6)

c) The national one stop shop must be complementary to the expertise already available in the institutions itself (E)

- Provide target group-oriented implementation of RDM products (5)
- Deposit further development of architecture; implementation of service catalog in institutes; harmonization repository infrastructure for the long tail (4)
- Connecting products internationally by discipline (4)
- Integration of the services catalog with DMP tooling (4)
- Investigate whether the front office / back office model can mean something for the design of the one stop shop (B)
- In the project proposals for updating / maintenance / further development of the products, also include how the researcher can be approached (B)

General approach to new products:

- Pitch new products. Model Zalando (E)
- Ensure the administrative agenda of a solution for synergy of architecture and infrastructure between institutions (including software archiving and digital research environments & good infrastructure for privacy handling) (5)
- Follow agenda items 2018 from SURF and NPOS / EOSC (5)
- Address national issues that require attention at the governmental level (5)
- RDM practice must connect with the research communities (5)
- More attention for application at institution level: shift from RDM to open science (5)
- Use the existing network to centrally arrange training / training (B)

Appendix III: Quickscan of subjects

Consists of topicDs to be completed in part a) 2015-2017; b) suggestions to address issues. Based on this appendix, a prioritization list will be compiled for the pool of experts.

A. Overview of topics to be completed for 2015-2017 / already planned activities for 2018

Meetings:

- April 2018: Round table financing VSNU / LCRDM - and follow-up
- N / A .: Bootcamp for lawyers on GDPR / open science Support4Research / LCRDM
- 24 April 2018: Workshop on legal aspects of RDM HBO / NAI and LCRDM (+ 06/11)
- N / A .: SURF academy architecture - services catalog - glossary
- November 2018 .: Third Data Stewardship Network Day (in combination with RDNL Dutch Data Prize)
- N / A: Seminar services for the AAVG
- N / a .: Train the trainer program Code of Conduct for Personal Data

To be completed / maintained / to be developed: (+ translation in project plans)

- Training
- DMP - DMP online implementation?
- FAIR
- Secure Data
- Incentives
- Shades or Open
- Requirements
- Comm model use cases
- Glossary
- Services catalog
- Reference architecture - HORA project
- AVG guide
- Privacy by Design / PIAs
- Personal code of conduct code + e-module
- Control + associated products: inventory; risk analysis & explanatory documentation; Diner Pensant; model paragraph (consortium agreement); model instruction for collective labor agreement; model license for end-user.

B. Quick scan possible new topics

[italic = already on agenda 2015 -2017; marked = new themes cf. with Quickscan 2015-2016]

For the input of the conference on 8 February 2018, see:

https://www.edugroepen.nl/sites/RDM_platform/SitePages/LCRDM%20conferentie%20werkcafé-kaartjes.aspx

Facilities & Data infrastructure:

- digital preservation & curation (workflow tools), including sustainable software

- repository advice
- standardize cooperation; national uniformity
- open RDM resources
- use BSN TTP - SIG WG VDK
- global authorization
- text and data mining
- bringing together and making even more searchable / linkable data from different institutes, through portals such as NLBIF
- deselection of research data
- reproducible research
- efficient workflows
- orchestration on the different layers of architecture
- the applicability of tools
- project implementation with Network Digital Heritage on the themes: sustainable, usable, visible
- FAIR assessment, certification and quality of repositories
- tuning services to the question
- harmonization RDM
- domain protocols data management
- service orchestration in a federated distributed landscape
- blockchain
- sharing economy
- implementation of architecture model in the HORA
- further elaboration and maintenance services catalog
- extension glossary RDM terms

Legal aspects of RDM:

- sensitive data and privacy issues (shades or open inventory)
- ownership; commercial interests
- licenses; Deposit and use licenses for data Which (user) license best represents the interests of researcher, university and society with regard to the exploitation of research data?
- AVG
- DMP planning, tool and relation with ethics (goes beyond AVG)
- Implementation code of conduct on personal data and integrity code of conduct

Funding of RDM:

- cost models for RDM
- cost models for RDM infrastructure

Research support:

- RDM roles and new functions; UFO profiles
- FAIR: metadata; metadata synergy
- managing metadata and the choice of tooling for this
- disciplinary differences in administrative burdens
- data science
- more attention to data management during the research. RDM is concentrating mainly on DMPs (for research) and data archiving (after the research)
- elaboration advice DMP-tooling
- Also pay attention to the first steps in data management for institutions that are still in the entry phase. In this, the usefulness and necessity of cooperation can be emphasized
- Measuring the reuse of data

Engagement:

- RDM portal researchers
- do not know, ask researchers / financiers
- ensuring data quality
- booking site for meetings for the researcher with a booking calendar
- SURFacademy-like series around the reference architecture
- Use cases for every aspect of RDM, also in the context of the new concept of 'data scenarios'
- Organization of network and awareness meetings, to the different themes, possibly. as a road show along the institutions to involve researchers more; or develop format for such meetings with list of speakers
- Incentives, with research into the role of all stakeholders (eg libraries: registering)
- input; HRM at institutions: RDM / Open Science role in unification consultations; VSNU: SEP etc ...)
- data impact factor
- rewarding the researcher for FAIR data, and open data where possible
- data citation
- Attunement ethics - AVG and RDM theme-wide (ethics> privacy cf. ERC / H2020 requirements)
- Ethical implications OS for researchers (undesired use data, 'harrassment' of researchers, always accountable in detail)
 - Linking international parties such as RDA and the like for subject 'awareness', invite experts for exchange of views
 - Marketing products / how can we help the researchers to get familiar with the jumble of rules and tools?
 - Where do you stand as an organization and how can you become a real RDM organization? Produce - categorize - feedback about connection
 - Where are the common interests and challenges?
- Organization SURFacademy products architecture services catalog glossary (September 2018)
- Data Stewardship:

- Organization Data stewardship Engagement day - (September / October 2018) -in combination with awarding biennial Data Price RDNL (November 2018 and connection with NPOS)
- shaping the function of data stewardship and what to learn from each other, plotting the role of the data steward in the reference architecture is desirable. Tool to show what comes with this role
- Support curriculum data stewards: Training plan with 3 to 4 meetings per year: Starting point for networking + in-depth meeting (s) + intervision + FAIR / IT training courses for non-technical datastewards
- The data manager in the data host role:
 - ✓ meetings for the data steward from operational to tactical
 - ✓ RDM grants - plans / funding application / legal; how to organize the organization so that the researcher can optimally do RDM?
- Research IT side: tooling, knowledge exchange, no service delivery (= expertise center SURF IT). LCRDM ensures awareness of the services (service catalog?). No seller of the product. To make clear to RDM landscape what the pros and cons are.
- Eliminate gaps in knowledge among institutions and individuals. Bring people together.

Governance of RDM:

- coordination of various national initiatives (brainstorming)