



An NL- Open Knowledge Base Opportunities and challenges

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euroCRIS webinar

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Universiteit
Leiden
The Netherlands

2015

“Over the past decade, we have made real progress to further ensure the availability of data that supports research claims. This work is far from complete. We believe that data about the research process itself deserves exactly the same level of respect and care. The scholarly community does not own or control most of this information.”

Bilder G, Lin J, Neylon C (2015) Principles for Open Scholarly Infrastructure-v1, retrieved 22 Nov. 2020, <http://dx.doi.org/10.6084/m9.figshare.1314859>

2020

→ Scholarly community still doesn't own and control information about research

- NL is leading country in focus on reforming research practice to support open science
- But: *open access wins* are opening the door for an increased monopoly
- Bundling OA with new research data services
- May lead to a scenario where universities remain beholden to commercial publishers for value-added services that replicate the model - and financial unsustainability - of the current subscription system

Leiden Madtrics

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Scientific Director



Elsevier and the Dutch Open Science goals

May 20, 2020 • Science & Society • 1 comment • 6 min read

The VSNU, NFOU, NWO and Elsevier have announced a national deal that bundles Open Access and data services. Is the deal consistent with Dutch Open Science goals, and will undesirable platform effects be avoided?

Also see: Aspesi, Claudio, and Amy Brand. 2020. "In Pursuit of Open Science, Open Access is Not Enough." *Science* 368 (6491): 574-77. [doi:10.1126/science.aba3763](https://doi.org/10.1126/science.aba3763).

What kind of research information infrastructure do we need?

Community-owned

Transparent

Open

What kind of research information infrastructure do we need?

This requires:

Openly available research information,
preferably in an **Open Knowledge Base** for the Netherlands

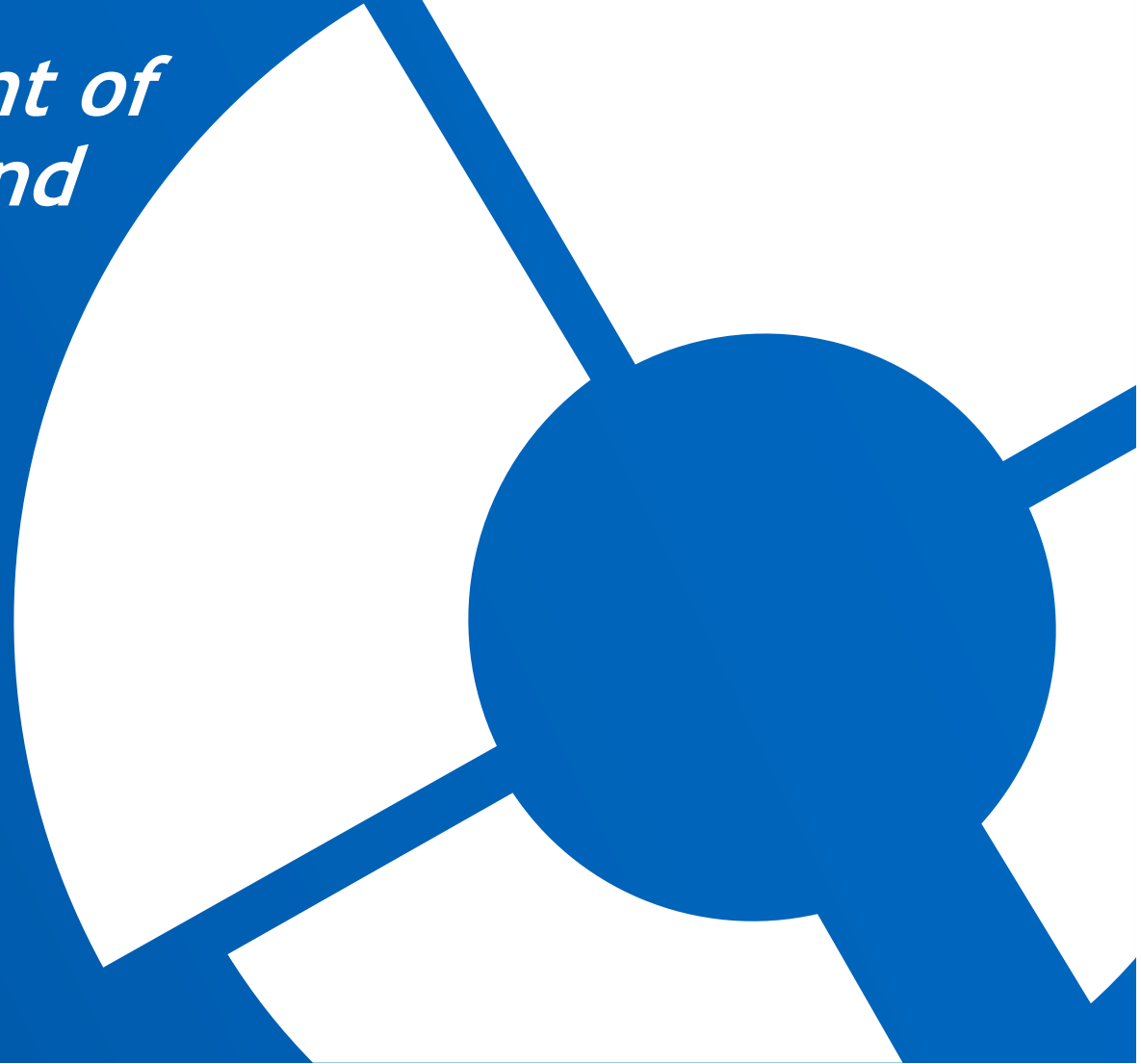
Open metadata on scholarly outputs

Change needed on many levels

Already embedded in a range of NL initiatives



*Dutch Taskforce on
Responsible Management of
Research Information and
Data*



Members Taskforce

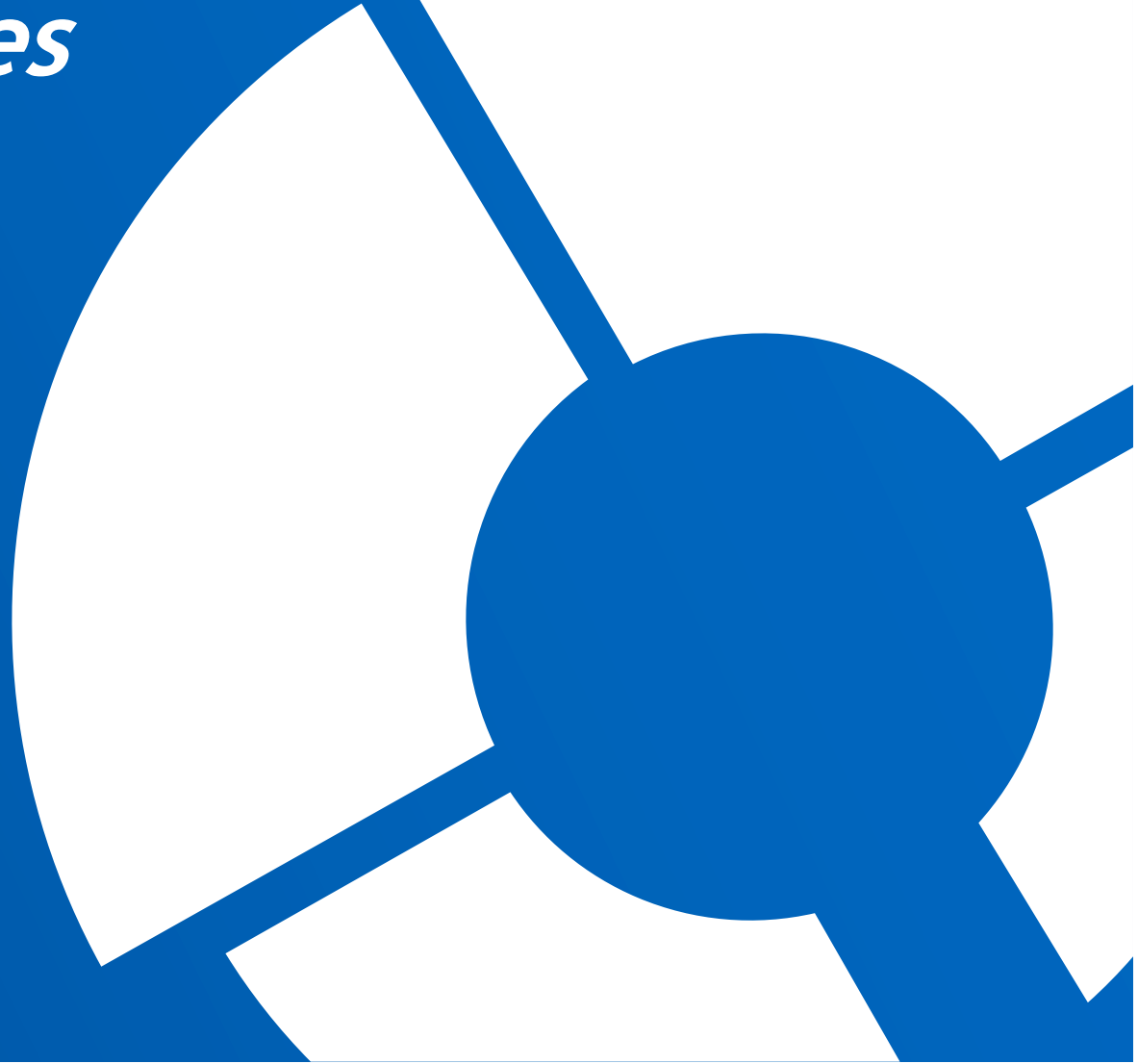
- **Karen Maex**, Rector Magnificus University of Amsterdam (chair)
- **Wilco Hazeleger**, Dean Geosciences, University Utrecht (co-chair)
- **Sarah de Rijcke**, Scientific Director at Centre for Science and Technology Studies (CWTS)
- **Nanne de Vries**, Member of the Board, Maastricht University Medical Center
- **Magchiel Bijsterbosch**, SURF / SURFsara
- **Ronald van Schijndel**, Research Support, Amsterdam UMC/ NFU
- **Hans de Jonge**, Policy officer Open science and Quality, NWO
- **Kurt de Belder**, University Leiden / UKB
- **Alastair Dunning**, Head, Research Data Services at TU Delft Library
- **Maurice Vanderfeesten**, Innovation Manager Research Services at Vrije Universiteit Amsterdam
- **Max Haring**, Head of Education and Research Support, University of Amsterdam / HvA

Core aims Taskforce

- Establish a set of **Guiding Principles** under which metadata of public research output can be (re)used and enriched by public and private organizations
- Metadata (re)use and enrichment must be carried out in accordance with research ethics and **public values** and avoiding undesired network or platform effects
- **Determine the (legal) consequences** for knowledge institutions and market players
- Describe **the concept of an Open Knowledge Base (OKB)**
- Advise about the **governance and funding** for implementation of an OKB

Guiding Principles

V1.0



Guiding principles v1.0



Ownership of (meta)data



Enduring access



Trusted and transparent
provenance

Guiding principles v1.0



Interoperability as part of
community-owned governance



Open collaboration with the
market



Community-owned governance

An Open Knowledge Base for the NL

Open Working

Open Working from 4TU.ResearchData & TU Delft Library (Since 2017)

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MAY 29, 2020

What is an Open Knowledge Base anyway?

The recent contract signed between the Dutch research institutions and the publishers Elsevier mentions the possibility of an Open Knowledge Base (OKB), but the details are vague. This blog post looks some more about definitions of an OKB within the context of scholarly communications and elements that need to be taken into account in building one.

Readers may also be interested in [contributing to the consultation](#) that is being run as part of the [Dutch Taskforce on Responsible Management of Research Information and Data](#). The VSNU will also be commissioning a feasibility study on the topic.

Authors: Alastair Dunning, Maurice Vanderfeesten, Sarah de Rijcke, Magchiel Bijsterbosch, Darco Jansen (all members of above taskforce)

<https://openworking.wordpress.com/2020/05/29/what-is-an-open-knowledge-base-anyway/>

Proof of concept workshop for a community-governed NL-OKB, 19-20 Nov.2020

CWTS in collaboration with the Curtin Open Knowledge Initiative, TU Delft and SURF

- We convened 35 participants representing national and international organisations
- A wide range of expertise in data, technical architecture design, user needs and use cases, sustainability and funding, and community governance
- This included representatives of VSNU, NWO, NFU, SURF, DANS, CWTS and a range of Netherlands institutions
- International stakeholders such as Crossref, OpenAIRE, DataCite, SPARC North America, Jisc, UKRI and others

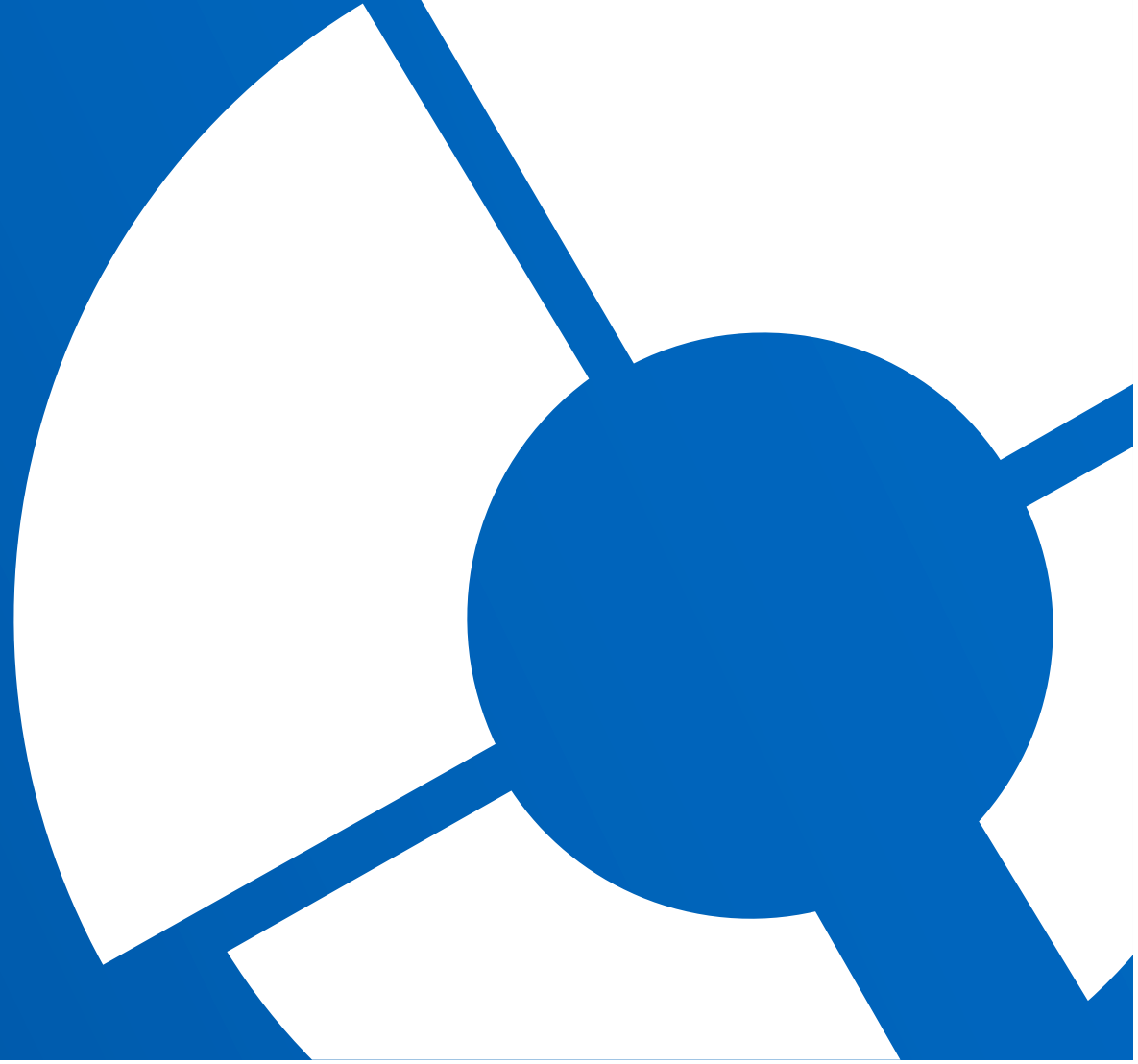
Goals:

- To gather evidence on the feasibility of an NL-OKB
- To test the community interest and appetite for developing an NL-OKB
- To identify a practical pathway forward towards piloting and implementing an NL-OKB

Three main streams:

1. User needs and architectural design
2. Existing data capabilities and future needs alongside technical design
3. Development of community governance and sustainability frameworks

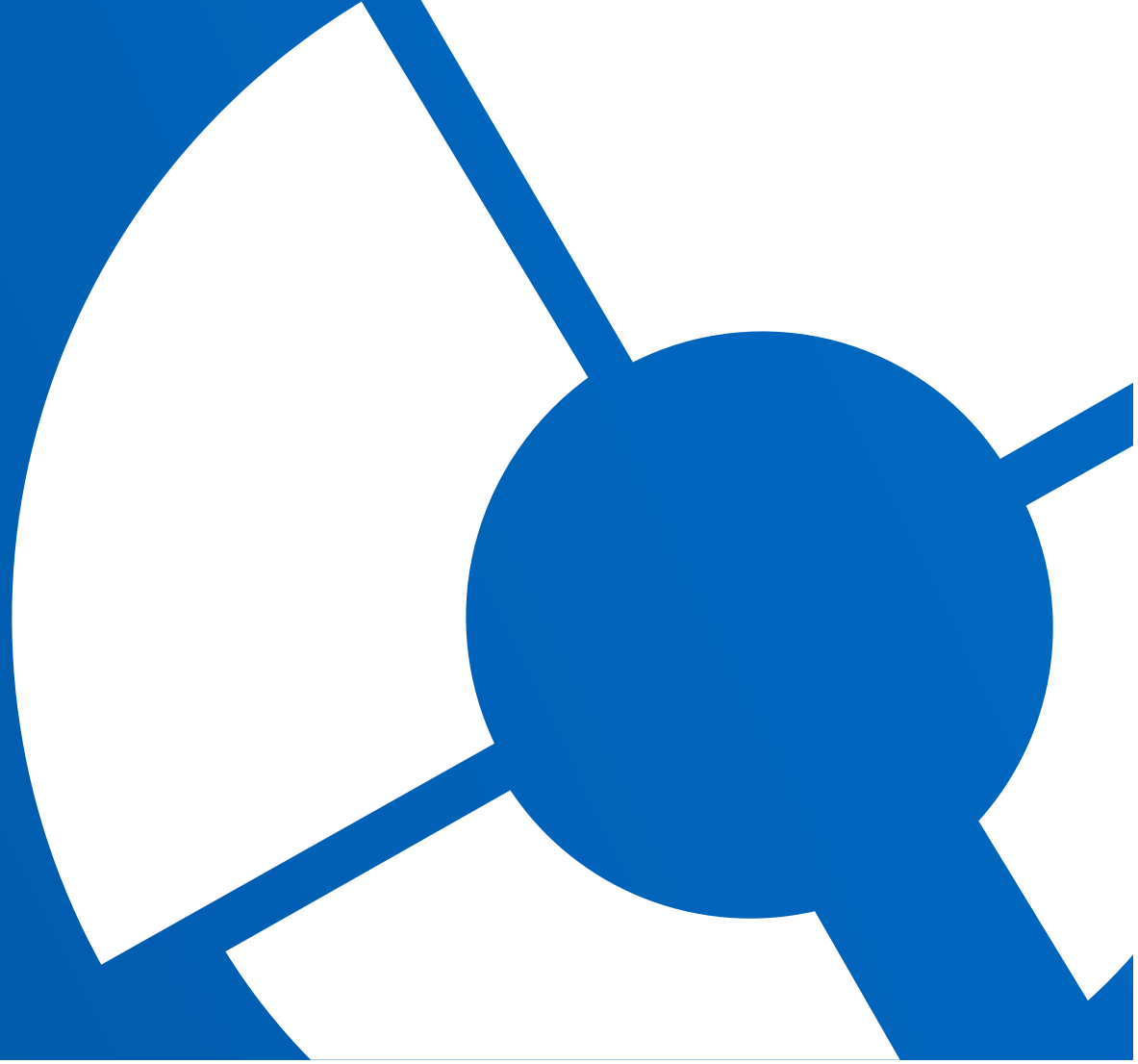
User stream



Aims of the User Stream

- Identify themes and questions that different stakeholder groups would use an OKB for
- Boil these themes down to specific example questions
- Explore the various data sources needed to answer those specific questions, and the effort required to bring those data sources together

Data stream



Questions Data Stream

- How could different data sources fit into an OKB?
- What are the **strengths of the different data sources**, what distinguishes one from the other, and what are **potential gaps/weaknesses**?
- An important aim of an OKB would be to provide data not only on journal articles (typically with a DOI), but also on **other types of outputs** (e.g., data sets, software, policy reports, books, articles in national journals, etc.). To what extent do different data sources facilitate this?

Towards an Open Knowledge Base

Open Working

Open Working from 4TU.ResearchData & TU Delft Library (Since 2017)

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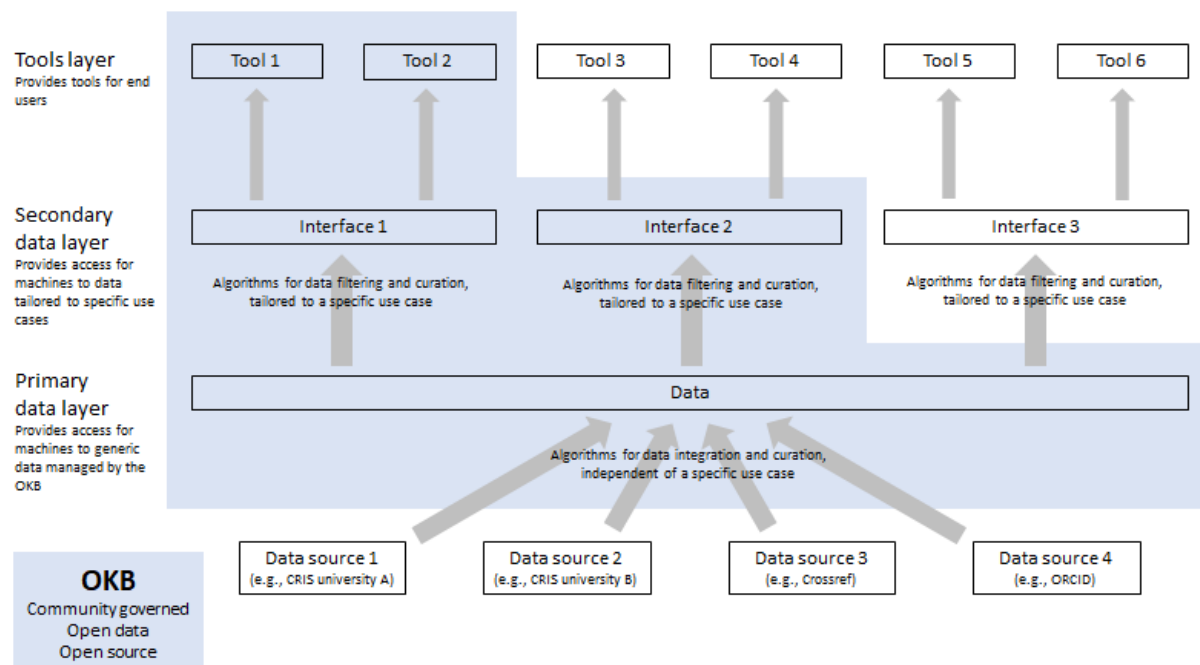
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Dutch research institutions and Elsevier initiate world's first national Open Science partnership

Tuesday 19 May 2020

VSNU, NFU, NWO and Elsevier have agreed publishing, reading and open science services to support Dutch research and innovation ambitions

The Association of Universities in the Netherlands (VSNU), The Netherlands Federation of University Medical Centres (NFU), The Dutch Research Council (NWO) and Elsevier, a global leader in research publishing and information analytics, have formed a novel partnership that includes publishing and reading services as well as the joint development of new open science services for disseminating and evaluating knowledge. The partnership runs until 31 December 2024.

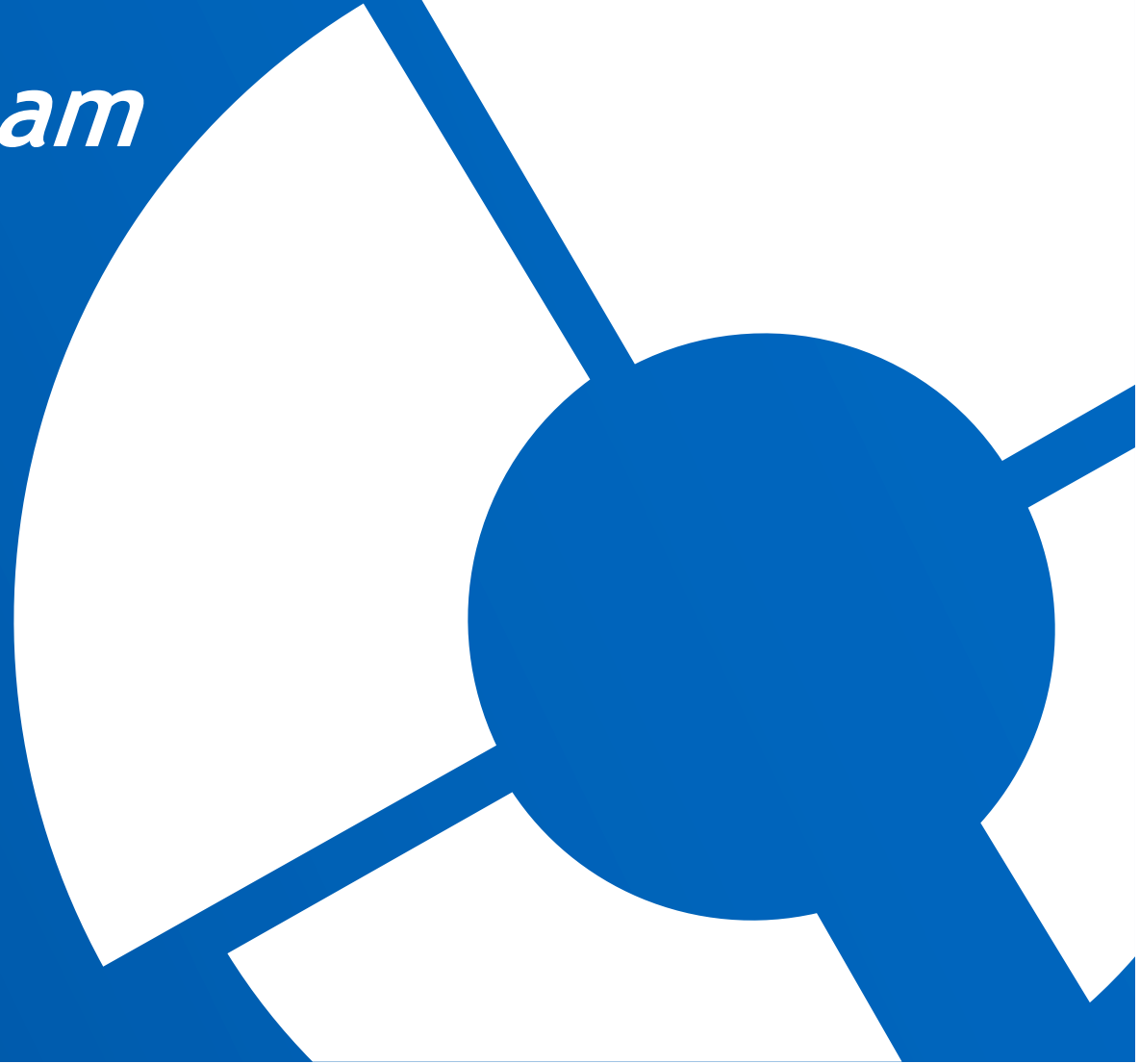
In December 2019, the research institutions and Elsevier signed a framework agreement. During the past four months, both parties carefully developed this into a unique agreement. In parallel the Dutch Research Institutions established an **independent expert Taskforce** on responsible management of research information and data to determine the conditions and rules under which metadata of public research output can be (re)used and enriched by all public and private organizations. Following the advice of the Taskforce, a set of collaboration principles was agreed, including data ownership (researchers and/or institutions own their own research data), enduring access to data and metadata, vendor neutrality, interoperability, and institutional discretion on the use of the services.

This has led to the agreement that VSNU, NFU, NWO and Elsevier are pleased to announce today, and which comprises:

1. **Open Access Publishing and Reading services.** This is a national deal that covers reading rights to quality, peer-reviewed content across Elsevier's extensive portfolio of journals and supports the aim of 100% open access publishing for all members of the consortium. From today, 95% of Dutch articles published in Elsevier journals can be made immediately open access through this agreement. The vast majority of Elsevier's journals already offer an immediate open access option and, as part of this agreement, the company has committed to work towards immediate open access options across all remaining titles.
2. **Open Science Services for Research Intelligence and Scholarly communication.** Elsevier will work with the Dutch partners to co-develop new services that help disseminate and evaluate knowledge. The parties will undertake a number of pilot projects to refine and adapt these services to meet the needs of the Dutch Research Institutions and to support the broader ambition of public engagement with science. These pilots will be conducted according to the collaboration principles as mentioned above.

- Most Dutch Elsevier publications will be open access
- However, metadata of these publications, in particular reference lists and abstracts, won't be open!
- How do the services contribute to a common open infrastructure without open metadata?

Governance stream



What do we mean with governance

- “Governance” means many things to different people. In the context of the current discussion we take governance to mean *the concrete set of arrangements: including legal form, community representation, financial sustainability and management, processes for setting priorities, and for decision making; that creates trust and engagement in the community of stakeholders.*
- Important to note is that this definition encompasses how revenue is raised (and who from) and how decisions are made to spend it, as well as questions of legal form and representation.
- Also crucial is that trust and engagement is a goal beyond those directly represented in governance structures or that contribute financially

Questions Governance Stream

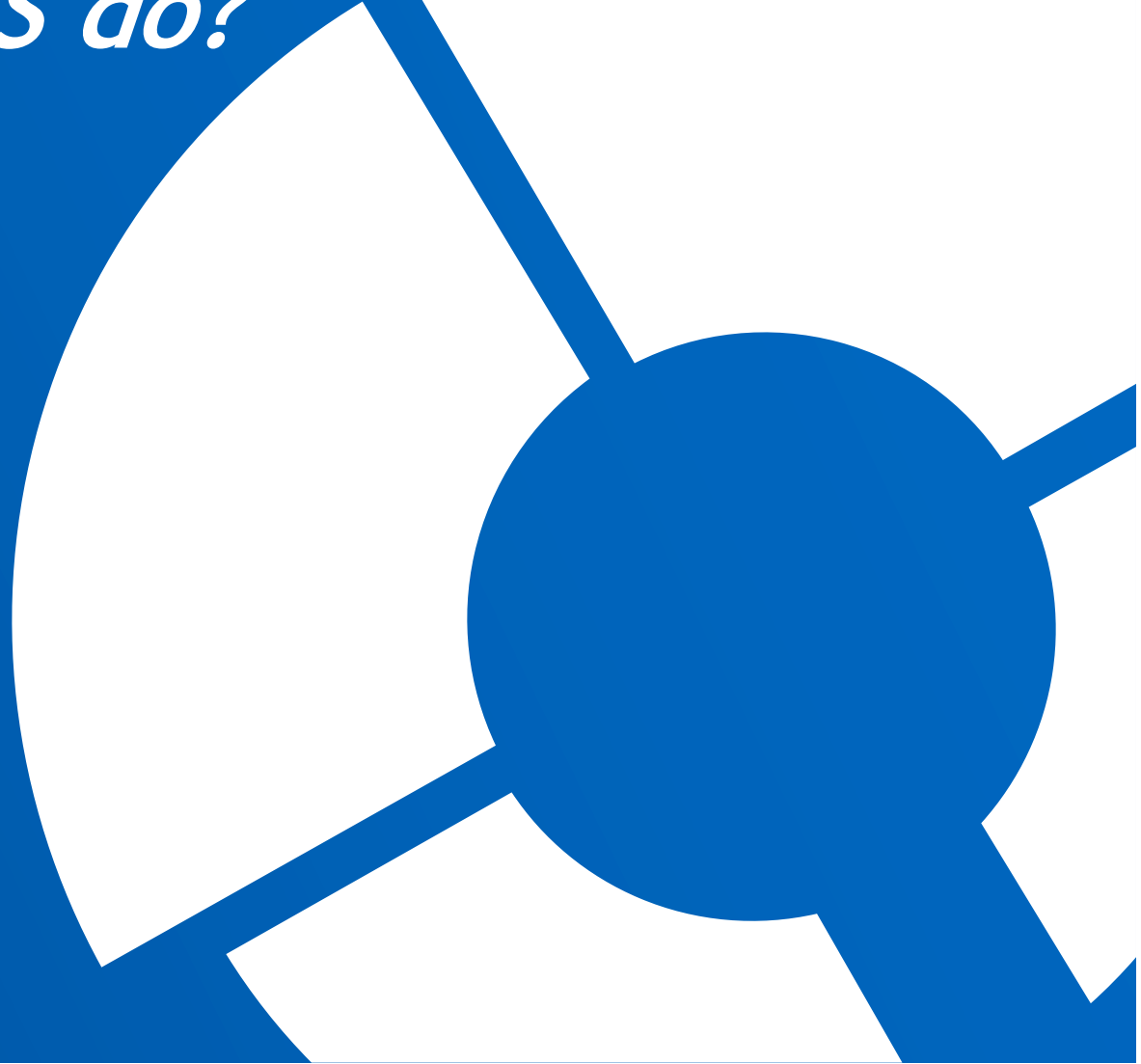
- *WHO* needs to be at the table? (and why / not?)
- *WHICH* existing organisations/frameworks in NL are relevant/could act as hosts?
- *WHAT* legal form should a new organisation take in the long term?
- *WHICH* organisations could act as trusted intermediate hosts
- *HOW* should an OKB be financially supported both as a) a project to progress the agenda and b) as a fully functioning system?
- *WHAT* arrangements are needed for oversight (short-medium term; fully functioning)?
- *WHERE* is the action - things going on in other places and dependencies
- *WHEN?* Principles will evolve over time, process for that needs to be accountable and governed

Some take-aways

- Distinguish between startup and maintainance phases
- Develop agreement on the deliverables and the transition requirements
- A proof of technical feasibility for a set of core use cases (minimal Valuable Product)
- Design a governance framework (including each of the roles identified)
- Design a sustainability and resourcing framework
- OKB as a (central?) data infrastructure/resource needs funding in both phases
- Funding at startup phase **is peanuts** - cf. large research infrastructure investments Dutch government & funders



What can euroCRIS do?



1. Support the development of an Open Knowledge Base in the Netherlands, or national level OKB's more generally.
2. Collaborate on an *aggregating service* use case [e.g. tailored data model(s) or ways in which to lower barriers for new entrants in the market]
3. Provide financial (or in kind) support to open science infrastructures selected by SCOSS (<https://scoss.org/>)



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