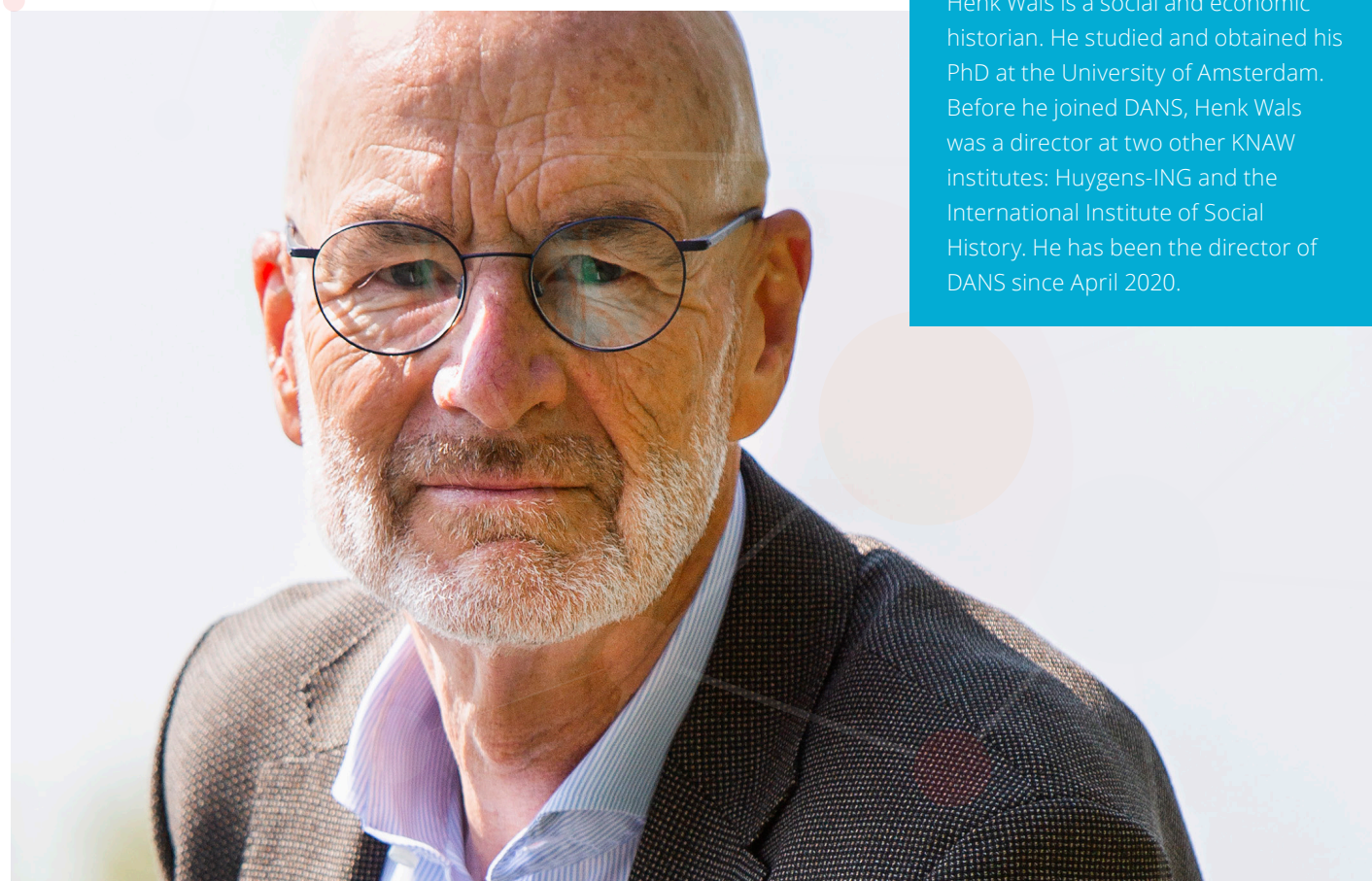


# FAIR in focus

**Facilitating Open Science in the best possible way will be DANS's focus in the coming years. NWO and KNAW also see a major role for DANS as the national centre of expertise and repository for research data. DANS director Henk Wals explains.**



## Henk Wals

Henk Wals is a social and economic historian. He studied and obtained his PhD at the University of Amsterdam. Before he joined DANS, Henk Wals was a director at two other KNAW institutes: Huygens-ING and the International Institute of Social History. He has been the director of DANS since April 2020.

## You have a research background yourself, having been director of two other KNAW institutes. How do you perceive DANS?

“Coming from research, I view the DANS services first and foremost from that perspective. It’s part of the reason why KNAW and NWO invited me to apply as director. They want to ensure that data services are being run for the purposes of research. In the 2018 Portfolio analysis, the question arose whether there is a place for DANS in the portfolio of national research institutes. The answer is no. DANS is simply not a research institute. This does not mean, however, that it cannot be a KNAW/NWO institute. The situation has been a bit confusing in the past two years, but it has been clarified now. KNAW and NWO are convinced that DANS has an important role to play in the Open Science research order.”

“What struck me most about DANS is its wealth of expertise. It is based on dozens of European projects in which DANS participates and on 15 years of hands-on experience as a data repository. The staff are good at what they’re doing, they are motivated and involved. I think that’s important. As in research, it’s the human capital that determines the quality of data services. So that’s a great foundation. Moreover, DANS is large and strong. Most repositories have no more than, say, 10 employees and a few thousand sets of data, whereas DANS has a staff of 60 and over 150,000 datasets.”

## Nothing to worry about, then?

“Well, I did see some challenges too, after I’d spoken to all staff members and a number of outsiders. In the last decade, for example, DANS has taken on many new tasks and launched all kinds of initiatives. Which was wonderful, but also led to a blurring of its mission and profile. It was not clear to everyone exactly what DANS stood for.”

“At the same time, DANS data services were suffering from the handicap of the head start. Worldwide, EASY was the cream of the crop in 2008, but too self-contained at home. As a major player, we could have done more in building and uniting the data landscape.

The Netherlands is still at the top of the international research data world, partly thanks to DANS, but if we want to stay there we will all have to go the extra mile.”

## What was your conclusion?

“DANS has to focus. It needs an unambiguous mission and must decide what to stop doing. Building a new technological environment has absolute priority. We have assigned a team of software engineers to this task, who will be delivering their first releases in a few months’ time. And finally, we have to promote ourselves to help meet the challenge at a national level.”

## What will DANS cease to do in the coming period?

“We are discontinuing our own academic research. Scientific publications will no longer be an output criterion. We will stop funding small data projects, and we are transferring our participation in the Research Data Journal to the publishing house of Brill. There are some similar, smaller non-essential activities we’ll be saying goodbye to. We also assume that NARCIS, our research information service, will become redundant due to new initiatives elsewhere. All this ensures that we can concentrate on creating and maintaining state-of-the-art research data services.”

*“I am convinced that in the Dutch setting a network of parties collaborating on an equal footing has the greatest chance of success”*

## The 2021-2025 programme states that DANS is going to monitor the data landscape. What do you mean by that?

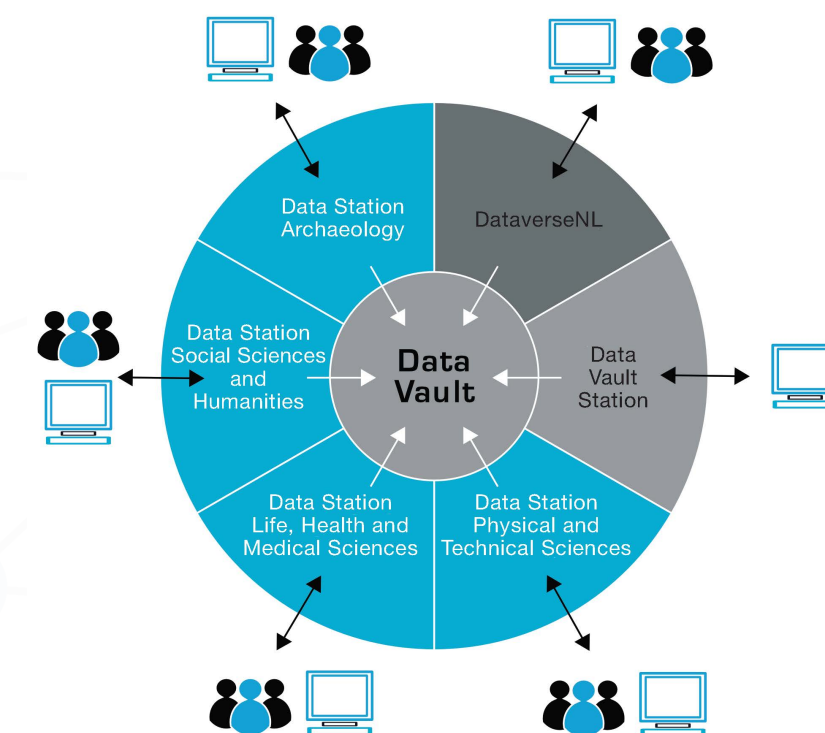
“We need hard data for our own use, for strategic purposes. You don’t want to depend on guesswork, impressions or just another ad hoc report based on a few interviews. In short, I think that DANS needs more business intelligence. We are going to assign a few researchers to that task. This type of information can also be used to develop joint policies for our data landscape, because fundamental data is currently lacking. I notice this in discussions, with most people reasoning from the practice of their own scientific domain. A common foundation of knowledge is lacking. How many datasets from which domain are in which repository? How many bytes are they? What about the quality, have they been curated? Which standards are used

by whom? What percentage of total research data production is available as FAIR? What is the degree of reuse and what are the trends on that score? How securely and permanently is the data stored? We don’t know or we make an educated guess. DANS will make its collected intelligence available to interested parties.”

## The new DANS program is based on the question: ‘What does the Dutch data landscape need in order to be successful?’ What is the answer?

“Researchers need to be trained in data handling, be better supported by data stewards, be appreciated and recognized for creating and depositing FAIR datasets, and be given adequate resources for research data management. What I have not yet mentioned is legal support when it comes to privacy legislation. Many university lawyers and data protection officers seem to be primarily focused on risk exclusion, while they should actually be helping researchers get their research done.”

“The second challenge is bringing together data and computing. Data must be findable and accessible on a permanent basis. Meta dating, standards, structure, and quality should enable links to other datasets, even if they originate from other scientific domains. And the analysing algorithms must be brought to the data rather than the other way around. This may enable distributed analysis, in which subsets of data are processed to be combined later. Turning this into a smoothly functioning system will require collaboration, coordination and fine-tuning.”



## How will we manage this?

“That is the big question. In the analysis made by the National Platform for Open Science (NPOS), the data landscape structure is identified as an obstacle with characterisations like ‘fragmentation’ and ‘disintegration’. I prefer to use the word ‘diversity’ and would like to embrace it. The point is that domains – even disciplines within them – vary enormously in terms of data types, methodologies and needs. Data services originate from research practices and are intricately linked to them. I believe this is good and efficient in principle.”

“What it boils down to is that we create a network structure where agreements can be made to which everyone is committed. Don’t forget that the landscape is not overly complex. It can be divided into three levels: the local Digital

Competence Centres (DCCs), where data stewards provide first-line support; the thematic DCCs, including the discipline-oriented repositories; and finally the large, generic national organizations such as DANS, eScience Center and SURF, which provide complementary services.”

“If the latter three parties align and join forces, they can be initiators, catalysts and facilitators in the network. In those capacities they will then be accountable to the NPOS board. I am convinced that in the Dutch setting a network of parties collaborating on an equal footing has the greatest chance of success, particularly if you agree on the objectives. In that respect there’s no need for too much difference of opinion. I always like to refer to the structure of the Digital Heritage Network, where I was a board member before I came to DANS.

## DANS

DANS is the Dutch national centre of expertise and repository for research data. DANS helps researchers make their data available for reuse. This allows other researchers to use the data for new research and makes published research verifiable and reproducible. With more than 150,000 datasets and a staff of 60, DANS is one of the leading repositories in Europe.

Data Archiving and Networked Services  
**DANS**

Although the heritage world is a lot bigger and even more diverse than the data landscape, their network collaboration is highly successful.”

## What’s the role of DANS in all this?

“The role of DANS is simply to promote the FAIRification of research data. We’ll do so as a centre of expertise, as a repository open to all research domains, and possibly as a network facilitator from the perspective of the researcher. After all, we do have a research background. That’s why we feel at home with KNAW and NWO. Both organisations are one hundred percent managed by university researchers. They argue from the general scientific interest and will keep us sharp.”

[www.dans.knaw.nl](http://www.dans.knaw.nl)