

Call for proposals: Digital infrastructure in social sciences and humanities

SSH Platform Digital Infrastructure Foundation (PDI-SSH)
Round 2021

1 Introduction

1.1 Background

All sectors of the social sciences and humanities (SSH) face the major challenges of big data, artificial intelligence (AI) and social media. These challenges relate to both social issues and scientific practice itself: how can the SSH respond to these new developments in a responsible manner?

There has been a strong desire in the SSH field to assign part of the resources intended for the SSH Sector Plan¹ of the Ministry of Education, Culture and Science (OCW) to a domain wide digital SSH plan. For this purpose, the SSH Council² - which represents the SSH field - initiated the Platform for Digital Infrastructure for SSH (PDI-SSH)³. The platform is responsible for allocating resources to digital infrastructure facilities within the SSH domain, for coordinating digital infrastructures in the SSH domain and for strategy within that domain.

PDI-SSH launches this call as part of the SSH Sector Plan.

1.2 Available budget

In the second (and the final) round of the Call for Proposals the total budget of € 6,5 million will be allocated. The funds are available for structural projects (for details see section 3.2.1). The funds will be paid annually by the PDI-SSH secretariat, Erasmus University Rotterdam.

1.3 Period of Application Call for proposals

The deadline for submission of applications is **30 June, 2021, at 23:59 CE(S)T**.

¹ See also "Samen sterker, Domeinbeeld", part B, p.32 ff https://www.sectorplan-ssh.nl/sites/sectorplan_ssh/files/media-files/Samen%2BSterker.%2BBeeld%2Bvan%2Bhet%2BSSH-domein%2Bversie%2B2019.05.24%20%282%29.pdf

² <https://sshraad.nl/en/ssh-council/>

³ See also www.pdi-ssh.nl

2 Purpose

The resources of the Ministry of OCW for the SSH Sector Plan are partly targeted at a domain-wide digital infrastructure. The main objective of the domain-wide plan for digital SSH is to strengthen research and infrastructure in the field of digitisation.

The following objectives have been established:

- Increase and strengthen interdisciplinary SSH research into digitisation and the relevant social and scientific developments.
- Strengthen digital infrastructure facilities and their management within the SSH.
- Increase interdisciplinary collaboration between the social sciences and the humanities in the field of digitisation research and infrastructure.
- Ensure continuity of current initiatives within the SSH in the field of digitisation research and infrastructure.
- Increase the strategic capacity and strengthen the organisation of the SSH in the field of digitisation.
- Attract and retain SSH research talents who possess interdisciplinary expertise in the field of digitisation.

Allocating resources to digital infrastructure facilities within the SSH domain can involve both strengthening or scaling up existing initiatives and launching new initiatives. The funds should be used for structural financing of digital infrastructure facilities serving both the social sciences and the humanities.

Proposals should fit within (at least) one of the four PDI-SSH pillars:

1. Data collection
2. Access to materials
3. Data connectivity
4. Expertise hub for data management and stewardship

See appendix B for an overview of SSH field ideas and requirements for new digital infrastructural provisions.

2.1 What is SSH?

The domain of social sciences and humanities (SSH) is very broad. In the Netherlands alone, at least 26 main scientific disciplines can be distinguished. They can be grouped into four sectors of more or less equal size: Law; Business and Economics; Social and Behavioural Sciences; and Humanities. The first two are fairly homogeneous sectors with a limited number of disciplines and sub-disciplines. The Social and Behavioural Sciences include a much wider variety of disciplines, such as behavioural, pedagogical and educational sciences, development studies, psychology, gender studies, public administration, political science, sociology, cultural anthropology, communication science, demography, geography/planning and environmental sciences. The Humanities, too, are a

very heterogeneous sector with disciplines such as historical sciences, linguistics, literary sciences, cultural sciences, religious studies, media studies and philosophy.

Internationally, the overarching concept of Social Sciences and Humanities (SSH) is used. In its framework letter regarding the sector plans, the Ministry of Education, Culture and Science follows suit and refers to an “SSH Sector Plan”. That is why the international abbreviation SSH is also used in this call.

2.2 Preconditions: collaboration and infrastructure

There are two essential preconditions for the SSH domain to be able to conduct excellent research into the social and scientific issues of the digital society: collaboration and adequate digital infrastructure facilities. In particular, more collaboration between researchers from social sciences and humanities is desirable.

Digitisation issues are so complex that they require a multidisciplinary perspective. In its report *Waardevol Digitaliseren* (Valuable Digitisation) (2018), the Rathenau Institute states that collaboration between disciplines is a prerequisite for achieving adequate and innovative solutions to the complex issues that the digital transition entails. The interpretation of digital and technological developments and their successful integration into society require expertise in every field of science, but above all close collaboration between disciplines. Joint development and knowledge exchange are essential preconditions for any contribution towards solutions for social and scientific issues.

The second essential precondition for excellent SSH digitisation research is the availability of accessible, high-quality digital infrastructure facilities. The sustainable availability of advanced facilities has been indispensable for many scientific breakthroughs. Digital infrastructure plays an increasingly important role and in many cases is the foundation of leading research. This not only concerns infrastructure for collecting data, but also infrastructure for storing, publishing, analysing and linking data. Developments such as the Internet of Things, open science and the huge volumes of text, photos and videos from social media and online news sites also place increasingly high demands on infrastructures. In addition, these infrastructures require professional support, for example from data managers and infrastructure specialists. Researchers also have a growing need for digital support and expertise.

2.3 SSH and digitisation

The resources made available by the Ministry of OCW enable the SSH domain to organise a coordinated response to the social and scientific issues of the digital society. The SSH in the Netherlands are in an excellent position to conduct joint research in this area. Coordinated by the VSNU, all Dutch universities are already collaborating on the Digital Society research programme, in which the SSH play a key role. In line with the National Science Agenda (NWA), the aim of this programme is to be a global leader in creating good connections between digital technology and society. The strategic choice for the digitisation theme also enhances the profile and competitiveness of the SSH at the national and international levels. Strengthening research and infrastructure improves the possibilities of successfully participating in international projects and

contributes to various other programmes and agendas, such as the Knowledge and Innovation Agenda 2018–2021 of the top sectors, various NWO and Horizon 2020 programmes, the Dutch Digitisation Strategy, the Dutch Cyber Security Agenda and the Digital Government Agenda (NL DIGIbeter). In addition, this will offer opportunities for education, for example by addressing the challenges of the digital society.

A detailed explanation of SSH and digitisation is given in Appendix A.

3 Guidelines for applicants

3.1 Who can apply

Professors, university associate and assistant professors can submit an application as main or co-applicant if they are employed (i.e. have a paid position) at a social sciences or humanities faculty at universities in the Kingdom of the Netherlands. Organisations or faculties that do not meet this condition may, however, participate as a partner in the consortium.

It also applies within this round that researchers may submit up to one application as main applicant and up to one application as co-applicant.

Researchers who only have a contract at an NWO (Dutch Research Council) or KNAW (Royal Netherlands Academy of Arts and Sciences) institute are precluded from acting as applicant.

3.2 What can be applied for

The total budget available for allocation in the second (and final) round is € 6.5 million.

3.2.1. Structural provisions

Applications can be submitted to finance **structural** digital infrastructural provisions, i.e. infrastructural provisions that offer long-term (beyond the duration of the Sectorplan) enrichment of the infrastructural landscape for social sciences as well as humanities. Following a positive assessment from the SSH Committee (point 3.5), applications for structural provisions will be eligible for structural (continuous) allocation of resources after 2024. Please note that only the cost of running the infrastructure and support personnel are eligible for structural allocation. Personnel costs for academic staff (PhD students and postdocs) do not qualify for structural allocation.

Applicants are encouraged to seek collaboration with existing infrastructures (ODISSEI, CLARIAH or Health-RI) to strengthen the impact and to ensure the sustainability of the initiative after the completion of the PDI-SSH project. Platform PDI-SSH organises an information event to facilitate the alignment of proposed infrastructures with the existing ones. For details please see section 4.3.

3.2.2. Eligible costs

Only project-specific costs (see 3.2.2.1) will be eligible for a subsidy. These can be divided into the following categories:

- i. personnel costs (see 3.2.2.2)
- ii. material costs (see 3.2.2.3)
- iii. investments (see 3.2.2.4)

3.2.2.1 Project-specific costs

Costs will be considered as project specific if:

- these concern direct costs associated with the goal described in the application and that match the objective stated in the call;
- the costs are made during the project and not prior to the date of the subsidy award decision;
- the costs are not or will not be financed from other resources;
- the PDI-SSH considers that the use of public resources is justified for the appointment of personnel in the event that the subsidy is to be used for remuneration of personnel costs and the CLA NU or UMCs do not apply to these personnel.

3.2.2.2 Personnel costs

The Approval of funding for scientific research agreed by VSNU and NWO applies to all applications (www.nwo.nl/contractvsnu). The agreement and the maximum determined rates that can be reimbursed for personnel costs can be found on <http://www.nwo.nl/akkoordbekostiging> and <http://www.nwo.nl/salaristabellen>.

Personnel costs can only be accepted for university faculties of social sciences or humanities in the Kingdom of the Netherlands.

3.2.2.3 Material costs

Material costs are project-specific costs with respect to such things as consumer goods, materials, small devices and research resources that no longer have any economic value after use, including certain software. This also includes national and international travel and accommodation costs.

3.2.2.4 Investments

Investments are all research resources that are used for the project that have economic value or can be reused after the end of the project. This includes equipment, software with residual value, infrastructure etc.

3.2.3 Practical aspects

3.2.3.1 Upper and lower limit

A minimum of € 100,000 applies as a lower limit for the total size of the investment to be realised in the context of this programme. An upper limit of € 1 million applies.

3.2.3.2 Budget Plan

Each application should include a multi-year budget of three calendar years (project running until the end of 2024) for the activities to be carried out during the project and, where applicable, a distinction should be made in each case between the above-mentioned cost items.

3.3 When can an application be made

Proposals must be submitted no later than **30 June, 2021 at 23:59 CE(S)T**.

3.4 Formulating the application

The application comprises the following components:

1. Proposal (according to the template*)
2. Completed Budget Plan*
3. A statement from the institution that, following the unexpected departure of the main applicant, the involved institution shall safeguard the continued infrastructure and a replacement for the main researcher.

*Those forms are available for download from www.pdi-ssh.nl.

The guideline for the length of the application form is 2,100 words, excluding CV, publications and multi-year budget.

All sections of the application must be written in English, including all appendices. With the exception of the Budget Plan, all documentation must be submitted as a PDF document. The Budget Plan should be submitted as an Excel document.

3.5 Subsidy conditions

The annual report regarding how the resources have been spent should be made via the institution's normal audit report.

An evaluation will take place in 2024 involving an assessment of whether the resources have been spent in accordance with the proposal and Budget Plan and whether the infrastructure functions or

is expected to start functioning as a structural enrichment of SSH research in the Netherlands. If the evaluation committee's recommendation on the infrastructure is negative, the Ministry for Education, Culture and Science may decide that resources will no longer be awarded after that point.

3.6 The submission of an application

Applications should be submitted via the [online submission form](#).

Please use the template formats for the proposal and budget which can be found on pdi-ssh.nl

4 Assessment procedure

4.1 Procedure

4.1.1 General

To assess the applications, the PDI-SSH will appoint an assessment committee (AC) per discipline that will be given the task of conducting the assessment within the frameworks set in this Call. Each AC will comprise three people and will be selected by the relevant consultation board: national Consultation Board Social Sciences (DSW), national Consultation Board Law (RDR), national Consultation Body Economics and Business Administration (DEB) and the national Consultation Board Literature and Humanities (DLG). DLG ensures involvement from the Consultation Boards Philosophy (DWB) and Theology (DGO).

The ACs will comprise experienced senior researchers with extensive knowledge of scientific developments and experience with large scientific consortia/institutes.

The KNAW Conflicts of Interests Code applies to all persons involved in the assessment and decision-making and all involved PDI-SSH employees. The code can be found [here](#).

4.1.2 Admissibility

The first step in the assessment procedure is to test whether the application can be processed. For this, the secretariat tests the application against the conditions as described in chapter 3 of this Call for proposals. The secretariat then advises the PDI-SSH Board regarding the admissibility of the received applications. The Board uses this to make a decision on admissibility. Non-admissible applications are excluded from further assessment.

4.1.3 Review and selection

Applicants should submit their application to one of the four disciplines (even if the proposal crosses different disciplines, the choice can be made in the application form). The ACs assess their

own applications based on the four criteria as described in 4.2 and formulate recommendations, including prioritisation and justification for the SSH Council. These pre-recommendations from the ACs will then be presented to the SSH Council for assessment, which will combine these four pre-recommendations into one prioritisation. Following consultation with ODISSEI, CLARIAH and Health-RI, the SSH Council will produce a final prioritisation and award and rejection recommendations. The Board of the PDI-SSH Foundation uses these SSH Council recommendations to decide which application will be honoured.

4.1.4 **Objection and appeals procedure**

It is not possible to object or file an appeal on a PDI-SSH Foundation Board decision.

4.2 **Criteria**

The proposals are assessed on the following criteria:

- **Quality:** initiatives must provide a digital infrastructure to strengthen innovative and interdisciplinary SSH scientific research (weighting 30%).
- **National interest:** initiatives must be accessible and relevant for multiple disciplines and universities (weighting 30%).
- **Long term:** initiatives should be established for the longer term (weighting 30%).
- **Cooperation SS and H:** a preference is given to initiatives involving both social sciences as well as humanities (weighting 10%).

All applications will be assessed per criterion using a 1-9 scale in which '1' stands for outstanding and '9' for poor. The final decision on applications follows the criteria weighting.

Proposals should also fit within (at least) one of the four PDI-SSH pillars (also see appendix B for this):

1. Data collection
2. Access to materials
3. Data connectivity
4. Expertise hub for data management and stewardship

4.3 **More information?**

Platform PDI-SSH organises an information event to offer more information on the PDI-SSH grant, the procedure and to facilitate the alignment between proposed infrastructures and existing ones. The (online) event will take place on 11 May 2021, 16.00-17.15. More information and the registration form for the event can be found [here](#).

An overview of the initiatives funded in the first round the of the Call can be found [here](#).

4.4 Indicative timescale

Information event	11 May 2021
Deadline for application	30 June 2021
Admissibility test	15 July 2021
Prioritisation of proposals within ACs	1 October 2021
Decision in SSH Council following consultation ODISSEI, CLARIAH, Health-RI	mid October 2021
Award of resources by the PDI-SSH Foundation Board	15 November 2021
Start of the projects	First part of 2022

5 Contact and other information

For any queries regarding the PDI-SSH grant please contact:

PDI-SSH Secretariat

Attn. dr. Kasia Karpinska

info@pdi-ssh.nl

Appendix A – Digitisation & SSH

What is digitisation?

Ever-increasing digitisation has a major impact on science and society, not only in the Netherlands but worldwide. Society and the economy have changed rapidly in the past twenty years due to the digital transformation. Various terms have been used for this transformation, including “digital transition” (Rathenau Institute) and “digital society” (VSNU). A number of aspects show up in all of the different terms and definitions. They usually refer to the development and increase of digital technologies - robotization, automated decision-making, AI - on the one hand, and to their impact on science and society on the other. At the same time, scientific practice itself is changing as a result of digitisation. In the domain perspective, the terms “digital transition” and “digital society” therefore refer to the ever-increasing digitisation and all the social and scientific opportunities and challenges that it entails.

SSH and the digital society

Social challenges

The digital society is changing our ways of communicating, working and learning, but also the way in which people participate economically and politically. The SSH are indispensable for the interpretation of these developments and the answers to the new questions raised by a digitising society. The SSH have the important task of surveying and giving direction to these questions and developments. The SSH field collectively holds the key to ensuring good connections between society and technology by linking economic, social, legal, psychological, cultural, philosophical and political insights. The SSH can thus contribute to an optimal alignment of further digitisation with social needs and opportunities. This is illustrated in Table 1 by a number of examples of digitisation-related social challenges. Underlying these challenges are fundamental scientific issues where the expertise of the SSH is critical. Strengthening the SSH domain in the field of digitisation will not only benefit the quality of Dutch society, it also offers great economic opportunities. In the global economy, the Netherlands depends largely on competition by knowledge, talent and innovation.

Table 1. Examples of social challenges

Challenges	Contribution of SSH
Personal and confidential documents, stored in cloud services such as Google Drive, iCloud, OneDrive and Dropbox, which are stolen by hackers.	This form of data theft constitutes a gross violation of individuals’ and companies’ privacy. Such hacks cause feelings of insecurity and mistrust towards the digital society. The digital resilience of citizens and businesses is becoming increasingly important to prevent social problems. It should be given attention from an early age. The lessons learned from hacks about digital security and privacy also offer important points of interest for future legal and political measures and research in this area.

<p>The emergence of electronic voice assistants such as Amazon’s Alexa, Apple’s Siri and the Google Home Assistant, which – by applying AI – enable users to start or perform tasks using speech.</p>	<p>These speech assistants are not yet able to communicate in Dutch or variations of it (Limburgish, Lower Saxon), certainly not in combinations of the standard language and a second language. If large groups in society (e.g. children, the elderly, immigrants) are to benefit from this type of innovation, fundamental and applied research into speech recognition, self-learning speech algorithms and context interpretation will be necessary. This will allow the digital divide to be partially bridged.</p>
<p>The emergence of platforms such as Airbnb and Uber, with major consequences for existing services, competition policy and liability.</p>	<p>Market sectors and business models will change with the rise of the platform economy. New services and innovation policies will be needed, while certain professions and companies may disappear. This development has a significant impact on the nature and scope of employment (future of work) and the risk of digital dichotomy. Future-oriented education will be increasingly important. There are also legal issues, for example concerning market organisation in a situation where the roles of producer and consumer can no longer be sharply distinguished.</p>
<p>The increase in disinformation (fake news) being distributed through websites, social media and traditional media, with the aim of making a profit or influencing public opinion.</p>	<p>As the amount of available information increases, the identification of knowledge and the truth is becoming ever more challenging. Disinformation leads to ethical and philosophical issues because it deliberately influences society in an incorrect way. This has a major impact on society’s confidence in media and politics. It is therefore important to use research to arrive at political and legal measures to prevent and address influencing by disinformation. This also requires continuous development of digital literacy and attention being paid to it in education.</p>
<p>The increase in cyber-attacks aimed at bringing down online services and websites, such as DigiD, the Tax Authorities and banks.</p>	<p>Society requires continuous availability of online services. A cyber-attack that paralyses a bank’s online activity causes considerable economic damage because so much is bought and sold on the internet. With the digitisation of society, the economic importance of cyber security is increasing. With that, the fight against cybercrime is also becoming more important. The huge dependence on the “vulnerable” internet brings about feelings of unrest. Fundamental and applied</p>

	research can contribute to the management of cyber security risks and help control social unrest.
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Scientific challenges

In addition to the many social challenges, there are scientific reasons why the SSH should jointly undertake more digitisation research. The increase in digitisation poses many challenges for science as well. The increasing amount of data not only offers enormous possibilities, it also leads to questions about, for example, the handling of big data and AI in SSH research and related aspects such as privacy and data stewardship. Then there are challenges from the perspective of the theory of science. One important example is whether a transition will be made from theory-driven to data-driven research, and if so, how? The validity implications of this are another important scientific issue for the SSH. Table 2 shows a number of examples of scientific challenges within the SSH domain in the field of digitisation.

Table 2. Examples of scientific challenges

Challenges	SSH focal points
Need for and access to new and old data.	There is a growing need within the SSH field for new types of data, for example about online behaviour. This requires new methods, for example to analyse social media (new data) and archived materials (old data).
Ethical and legal questions concerning big data, data mining and AI.	In the SSH field, the increasing digitisation results in new questions about handling big data (e.g. privacy issues and data stewardship) as well as ethical and legal questions about which data may be collected, stored and processed.
Linking of data files.	The ability to link and/or enrich data files provides the SSH field with new opportunities. At the same time, it increases the challenges in the fields of data management (e.g. with a view to privacy) and open science (with its emphasis on data sharing and verifiability).
Role of theory.	In the SSH field, the "datafication" of the research process leads to classical theory-driven questions being positioned alongside more data-driven research. This raises various questions about the value of different approaches.

Appendix B – Ideas and needs regarding digital infrastructure facilities

This appendix contains an overview of ideas and needs formulated by the SSH field for new digital infrastructure facilities. They have not been prioritized and are described under the four pillars of PDI-SSH: Data collection; Access to materials; Data connectivity; Expertise hub for data management and stewardship in SSH. Note that these are examples only. PDI-SSH will ultimately decide which initiatives are funded.

A. Data collection

- Mobile, integrated research laboratories with VR/3D technology and facilities for visualisation and speaker recognition, for example.
- M3 (*Molecuul, mens en maatschappij* [Molecules, humans and society]), as included in the 2016 KNAW Agenda for large-scale research facilities: an interdisciplinary data infrastructure for population research into the impact of genomics on society and the feedback from culture and society on the expression of the Dutch genome.

B. Access to materials

- Better accessibility of data from Statistics Netherlands (CBS) for universities, including the possibility for them to develop surveys in collaboration with CBS, to make it easier to collect the desired primary data. Another, related desire is to co-develop time series with CBS to be made available to the research community.
- Continuation and strengthening of ODISSEI. Capitalizing on this facility is seen as a positive and logical next step rather than looking at a new service in this area. From ODISSEI, more and more collaboration is initiated with Health RI.
- Storage infrastructure and search interfaces for databases in the fields of heritage, language and speech pathology, and language variation. This includes the need for access to (public) datasets, instruments and methods (algorithms). CLARIAH is active in this area.
- Digitisation of historical series and data within all SSH disciplines.
- A neuropsychological database (e.g. containing data from brain scans or behavioural questionnaires) that is accessible to researchers and clinicians with a view to optimizing diagnosis and treatment.
- An online public database that contains national case law from EU countries that addresses cross-border issues, making international case law accessible.

C. Data connectivity

- Continuation and strengthening of CLARIAH. CLARIAH has recently received funding from NWO, but there are still various needs and possibilities outstanding, for example to expand the number of SSH partners and disciplines.

- Connecting infrastructures, for example ODISSEI and CLARIAH. Examples can be found in historical research (Historical Sample of the Netherlands, HSN), linguistics (speech analysis through interviews) and network analysis.
- Facilities linking similar psychological and pedagogical experiments, which are usually performed separately in local settings, to increase the reliability and validity of results.

D. Expertise hub for data management and stewardship in SSH

- A national facility that offers expert support for the storage, archiving, management and analysis of data (including big data) and the management of infrastructure such as computers and databases. SURF and the Netherlands eScience Center are active in this area.
- An infrastructure or platform that enables analysis of legal texts using natural language processing. This is necessary for the development of computational analysis techniques in the field of law. The Netherlands eScience Center is active in this area.
- Digital infrastructure that allows for more collaboration in education, for example through global sourcing of courses and a joint digital education offering.