Annual Report

2020

SND
Swedish National Data Service

Contents

Preface

2020 was the year when SND, and its predecessors, turned 40. The celebrations had to become much less festive than we had planned, due to the serious COVID-19 pandemic that swept across the world. Of course, having to cancel SND's 40th anniversary is nothing compared to the suffering that the pandemic has caused, and we can only hope that we can at least learn something from the pandemic that will improve the quality and efficiency of research. There is no doubt that research data and access to research data have been in the spotlight during 2020, and SND has contributed to the COVID-19 research by taking part in the discussions about metadata settings for research data that are collected in the national COVID-19 portal at SciLifeLab.

Other SND activities and arrangements have also been affected by the pandemic, but we are glad to see how new forms of engagement have increased participation in our meetings and created possibilities to have more frequent but shorter meetings and webinars. We feel confident that the network has still been able to keep the discussions going.
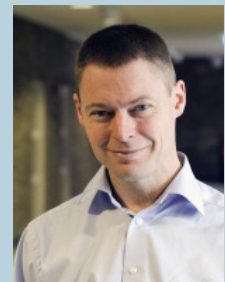
We are now 35 members in the SND network, and we would like to take this opportunity to welcome our latest members, the Swedish School of Sport and Health Sciences (GIH), Sophiahemmet University, and the Swedish National Veterinary Institute (SVA).

One of our major achievements of 2020 is the launch of our online metadata management system DORIS. In this system, researchers in collaboration with their respective DAU can enrich their research data with detailed metadata. This, in combination with the storage solution that SUNET has launched and made accessible to all Swedish higher education institutions, means that we can now manage research data with personal or other sensitive data in a safe and secure manner.

During autumn, we have started the intense process of writing our next application for funding from the Swedish Research Council for the 2023–2026 period. This is a giant task, but also a stimulating one, as many colleagues from the consortium universities and network member HEIs have been involved, as well as our Steering Committee and Grand Annual Meeting, who are the governing bodies of SND. We have had interesting and fruitful discussions and identified many ideas for how to develop the SND operations. We will implement some of them in 2021/2022, rather than to wait until 2023.

In 2020, SND has also become a member of the European Open Science Cloud when the European Union instituted this important initiative to improve access to and usability of European research data.

Max Petzold,
Director of SND

SND Network Activities

The COVID-19 pandemic forced us to make quick rearrangements to hold the SND Network events as virtual meetings and webinars. This gave us an opportunity to host more, but shorter, events. The SND office has been the main host, but some events have been arranged in cooperation with domain specialists and members of the SND Network, and some in SND's capacity as a national node in the Research Data Alliance (RDA).

The following network events have been arranged as webinars:

26 APRIL **DAU activities in the Network**

Presentations from DAU representatives about their activities, and an introduction to the "*Roadmap för DAU-etablering*" (Roadmap to DAU establishment), which has been authored as a collaboration in the network.

7 MAY **Training efforts for researchers and DAU**

Examples of training initiatives at Swedish universities, and a collection of requests for workshops and training material.

18 MAY **EOSC – What is it and how is it going?**

An introduction to the EOSC work at the Swedish Research Council, and examples of activities in the regional EOSC-Nordic project.

26 MAY **DMPs in Sweden – Sharing good practice**

A report from the development efforts around data management plans (DMP) in RDA, and examples of DMP activities in Swedish universities.

11 JUNE **Research data policies – Basic principles and guidelines for open science**

Presentations of examples and experiences from the work with creating research data policies and guidelines in the SND Network.

25 SEPT **Placing research software into open science – Initial results from an RDA Sweden and EOSC-Nordic collaboration**

A report from an RDA Sweden and EOSC-Nordic pilot project to map current thoughts on Open Software and what implications they might have.

30 SEPT **23 things revisited – Practical tips for research data management**

An example from the Netherlands on how an RDA outcome can be used and adapted to local conditions.

8 OCT **Lärarundantaget**

What is *lärarundantaget* – intellectual property rights of academic staff – and what do DAU staff need to know in their contact with researchers?

19/20 OCT **An opportunity to influence the future of SND**

Two half days of group discussions to share opinions and ideas for the SND application for continued funding.

6 NOV **Discussion about SND's application for funding from the Swedish Research Council**

Following up the October meetings about SND's funding application with a more general discussion.

24 NOV **PID – An in-depth introduction**

An introduction to persistent identifiers and to how SND works with them.

26 NOV **Register-based research and open access to research data**

Presentations about how research that uses register data deal with increasing demands on open access to research data.

Apart from these events, which were designated for the entire SND Network, there was a meeting in January about storage solutions for research data, which was primarily aimed at IT staff in the SND Network. To provide more opportunities for discussing IT-related questions in SND activities, an IT forum was constituted and SND hosted monthly IT drop-in sessions.

In 2020, SND also assembled a group for legal officers in the SND network. The purpose with this collaboration is to highlight common legal issues in working with research data. The group had three virtual meetings during the year.

SND has also arranged several drop-in sessions and webinars to provide support in how to review data and metadata, and in how to use DORIS.

Following Up with the SND Network Data Access Units

In spring 2020, Max Petzold (SND Director) and Elisabeth Strandhagen (SND Deputy Director and Collaboration Manager) held meetings with the DAUs in the SND Network, joined by the SND contact for the respective DAU. These meetings were both interesting and informative, and provided the SND office with a useful overview of the active research data support in Sweden. Due to the COVID-19 pandemic, SND had to cancel the plans to visit all of the SND Network members, but on the other hand, it meant that all meetings could be held during spring.

SND to Renew Its Certification as a Trusted Repository

Since 2018, SND CARE (CEntral REpository) has had a Core Trust Seal certification, and started the process of renewing the certification during autumn. At the same time, SND initiated a pilot project with some of the SND Network members in order to make them certified data repositories. SND aims to support all members of the SND Network to eventually become certified.

Members of the SND Network

At the end of 2020, the SND Network consisted of the following members. Consortium members in bold text.

1. Blekinge Institute of Technology
2. **Chalmers University of Technology**
3. Dalarna University
4. Halmstad University
5. Jönköping University
6. Karlstad University
7. **Karolinska Institutet**
8. Kristianstad University Sweden
9. **KTH Royal Institute of Technology**
10. Linköping University
11. Linnaeus University
12. Luleå University of Technology
13. **Lund University**
14. Malmö University
15. Mid Sweden University
16. Mälardalen University
17. National Veterinary Institute
18. RISE Research Institutes of Sweden
19. Sophiahemmet University
20. Stockholm School of Economics
21. **Stockholm University**
22. Swedish Defence University
23. Swedish Polar Research Secretariat
24. **Swedish University of Agricultural Sciences**
25. Södertörn University
26. The Swedish School of Sport and Health Sciences
27. **Umeå University**
28. University College Stockholm
29. University of Borås
30. **University of Gothenburg**
31. University of Gävle
32. University of Skövde
33. University West
34. **Uppsala University**
35. Örebro University

Internal Projects

During the year, SND rolled out some milestone projects. The new data and metadata management system DORIS was put into use, and a long-awaited storage solution that makes it possible to share new types of data through SND's services was finished.

The Launch of DORIS

In May 2020, SND launched a new tool for making research data accessible: DORIS, the SND data organisation and information system. DORIS enables researchers and staff from the DAU and SND to work in the same tool throughout the entire process. In short,

DORIS consists of a data description form and a review section for DAU and SND staff. DORIS also makes research data more FAIR by providing them with metadata from established standards and vocabularies, attaching a DOI, and making them findable and accessible in the SND research data catalogue. Since DORIS was launched, it has received a new user interface and more functionality, as part of a progressive development.

Storage API Creates New Opportunities for Sharing Data

During 2020, SND and SUNET have been working together to develop a technical solution, in the form of an API, which makes it possible to make data accessible through the SND services, even though the data files never leave the research principal's storage area. Instead of submitting a copy of the data files to SND, researchers can point to the files that they want to share from their existing locations. With this solution, it is now possible to share sensitive data through the SND research data catalogue. This project was launched in December, and in the coming year, the API solution is expected to be used by several organisations in the SND Network.

The data and metadata management system DORIS facilitates the process of making data available in the SND research data catalogue.

Expanding Know-How about Audio, Visual, and Text Data

In order to gain a wider knowledge about various types of data, SND initialised a project on audio, visual, and text data, with a particular focus on managing personal information in these data types. The project has started with an overview of the field, interviews with researchers and other experts on these topics, and seminars in some of the Swedish HEIs. The work is expected to continue during 2021.

New Pages on Data Management

In June 2020, SND published new pages about data management on the Swedish website. These pages are created for researchers and intend to provide support throughout the research process, from planning a research project to concluding it. The web pages are divided into five sections: *Plan, Organise, Document, Work with data*, and *Prepare and share*. Each section addresses a particular perspective of data management and gives some ideas about what to consider during the various phases of a research project. The English version of these pages was published in December.

The new educational resources on the SND website provide support in questions concerning research data management throughout a research project.

International Cooperation

SND is part of a global infrastructure, where collaboration plays a central role. SND's collaborations fall into two main areas: Work within initiatives of the European Union, such as EOSC and CESSDA ERIC, and work within various organisations that provide essential services or expertise related to data management and repositories.

EOSC

In 2015, the European Commission initiated the process to create the European Open Science Cloud (EOSC),[1] with the aim to federate existing research data infrastructures in Europe and realise a web of FAIR data and related services for science.

The first phase of building EOSC was completed in 2020. During this phase, SND contributed to the development by taking part in the projects EOSC-Nordic and SSHOC, and during 2020 also by taking part in the Bylaws Working Group and in the Skills & Training Working Group.

In July 2020, the EOSC Association[2] was established as a legal entity. Later in 2020, the membership was expanded to 142 full members and 49 observers. SND, with the

University of Gothenburg as host university, was accepted as a member in the category "service providing organisation". Eight other Swedish organisations, among them five SND consortium universities, were accepted as "research performing organisations".

CESSDA

The Consortium of European Social Science Data Archives (CESSDA)[3] has a mission to provide a full-scale, sustainable research infrastructure that enables the research community to conduct high-quality research in the social sciences, regardless of where the researchers or data are located. The goal is to create a consortium of certified trusted data repositories with full European coverage. CESSDA is part of the creation of EOSC, and actively supports the implementation of the FAIR data principles. The CESSDA strategy rests on four pillars: *Trust, Training, Tools*, and *Widening & Outreach*.

During 2020, two new member countries, Iceland and Ireland, were accepted. The total number of members added up to 21, plus one observer. Each member country has a designated Service Provider (SP) that meets specific demands and requirements of CESSDA. SND is the appointed Swedish SP. The CESSDA work is coordinated from the Main Office in Bergen, Norway, but the large share of the CESSDA operations are based on the decentralised services that are provided by the member countries' SPs.

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[1] https://ec.europa.eu/digital-single-market/en/european-open-science-cloud

[2] https://www.eosc.eu/

[3] https://www.cessda.eu/

SND is active in many of the CESSDA areas. During 2020, SND was involved in the work with certification of repositories, creating a guide to data archiving, the creation of a common technological platform, and support and advice to aspiring and new CESSDA members. SND is also responsible for the Swedish language translations of the multilingual ELSST thesaurus and the common controlled vocabularies in CESSDA.

RDA/RDA Sweden

The Research Data Alliance (RDA)[4] was launched in 2013 and is driven by its more than 10,000 members. A large part of their operations is carried out on the RDA platform, where researchers and other research data experts meet to exchange and develop ideas, technology, and tools for data sharing, data management, certification of data repositories, and education and training.

In June 2019, Sweden was one of six countries selected as new RDA Europe nodes. SND coordinates the Swedish node[5] and leads the RDA work in Sweden. The purpose of the national RDA work is to promote best practices in research data management, and to strive to increase awareness of RDA and research data-related questions in Sweden. In 2020, three well-attended online events were held: the workshop *DMPs in Sweden: Sharing good practice*; the webinar *Placing research software into Open Science – Initial results from an RDA Sweden and EOSC-Nordic collaboration*; and the webinar *23 Things Revisited – Practical Tips for Research Data Management*.

SND staff, researchers, and research data experts in the SND network contribute to the work within RDA as individual members. Several of them are involved in various interest and working groups.

[4] https://www.rd-alliance.org/
[5] https://www.rd-alliance.org/groups/rda-sweden
[6] https://www.icpsr.umich.edu/

Other International Cooperation

The Swedish membership in the Inter-university Consortium for Political and Social Research (ICPSR)[6] is administered by SND. SND awards scholarships for participating in the ICPSR Summer Program in Quantitative Methods of Social Research.[7] The 2020 Summer Program was held online and the scholarship, covering the fee, was awarded to eleven PhD students.

The participation in international organisations within in the areas of metadata standards and persistent identifiers has continued through the memberships in the DDI (Data Documentation Initiative) Alliance[8] and DataCite.[9] SND staff are also represented in the CoreTrustSeal[10] Assembly of Reviewers. Other international memberships are the International Federation of Data Organisations (IFDO)[11] and the World Data System (WDS).[12]

Due to the pandemic, the IASSIST 2020 conference, planned to be hosted by SND in Gothenburg in May, was postponed until June 2021.

[7] https://www.icpsr.umich.edu/icpsrweb/sumprog/
[8] http://www.ddialliance.org/
[9] https://datacite.org/
[10] https://www.coretrustseal.org/
[11] http://ifdo.org/
[12] https://www.icsu-wds.org/

Projects

SND participates in three infrastructure projects funded by the European Commission under the Horizon 2020 Programme. SND also takes part in one Cost Action project.

ARIADNEplus[13] is the extension of the previous ARIADNE project (2013–2017), which successfully brought together and integrated existing archaeological data infrastructures in Europe. The new project builds on the ARIADNE results, extending and supporting the research community and further developing the relationships with key stakeholders.

In both projects, SND has provided expertise and contributed to the creation of the project portal, the development of standards, best practices, controlled vocabularies, and the building of networks of experts, hereby making national and international research data FAIR.

SND participates in ten Work Packages (WP) as a content provider, technical partner, and a national coordinator. SND is also leader of WP 15 (Innovative Services for Users) and a Steering Committee member. The ARIADNEplus project started in January 2019 and runs for 48 months.

EOSC-Nordic[14] aims to facilitate the coordination of initiatives relevant to the EOSC within the Nordic and Baltic countries. The goal is to exploit synergies to achieve greater harmonisation in policy and service provisioning across these countries, in compliance with EOSC agreed standards and practices.

The project started in September 2019 and will end in August 2022. SND participates in two Work Packages: FAIR data (WP4), and Open Research data and services – demonstrators (WP5).

SSHOC[15] (Social Sciences & Humanities Open Cloud) is a cluster project to create an open cloud ecosystem for the social sciences and humanities. The objective is to create a common European platform, where data, tools, and training resources are gathered in one place. SSHOC is one of five EU funded cluster projects that will run from 2019 to 2022. The project is a collaboration between 47 European organisations, coordinated by CESSDA. The results will be integrated into the larger EOSC platform.

SND participates in two tasks, Data and Metadata Interoperability Hub (T3.5), and Certification Plan for SSHOC Repositories (T8.2).

SEADDA[16] (Saving European Archaeology from the Digital Dark Age) is a Cost Action project that brings together an interdisciplinary network of archaeologists and computer scientists. There is a will to make archaeological data open and freely accessible, but the field lacks appropriate, persistent repositories. To avoid losing generations of valuable research data, the project will create publications and materials that will set a state of the art standard for archaeological archiving across Europe.

SEADDA started in April 2019 and runs until March 2023. SND participates as a Steering group member/ Management committee member and as Vice Chair in Working Group 1: Stewardship of Archaeological Data.

[13] https://ariadne-infrastructure.eu/
[14] https://www.eosc-nordic.eu/
[15] https://www.sshopencloud.eu/
[16] https://www.seadda.eu/

Dissemination Statistics

During 2020, 166 new studies were added to the SND catalogue, resulting in a total of 1,644[17] searchable studies from a variety of research areas at the end of the year.

Downloaded Material

Many studies in the SND research data catalogue are freely accessible to download. The number of direct downloads from the SND website was 26,447 in 2020. The series with most downloads in 2020 were:

- *ISSP (International Social Survey Programme)*
- *Institutional Trust*
- *ESS (European Social Survey)*
- *Arctic Ocean 2016*

The most downloaded datasets were:

- *NordChild – The Nordic Study of Children's Health and Wellbeing*
- *Memorialisation in Norrtälje, Mariehamn and Pargas: 1881-1939*
- *The DREAM Dataset: Behavioural data from robot enhanced therapies for children with autism spectrum disorder*

Orders

Studies that are not available to download can be ordered from the SND catalogue. In 2020, SND received 438 orders, resulting in the dissemination of 1,682 datasets.

Studies that form part of a collection or series are among the most popular. The series with the greatest number of orders in 2020 were the National Society Opinion Media (SOM) surveys, the Swedish National Election Studies, and the SVT Exit Poll Surveys.

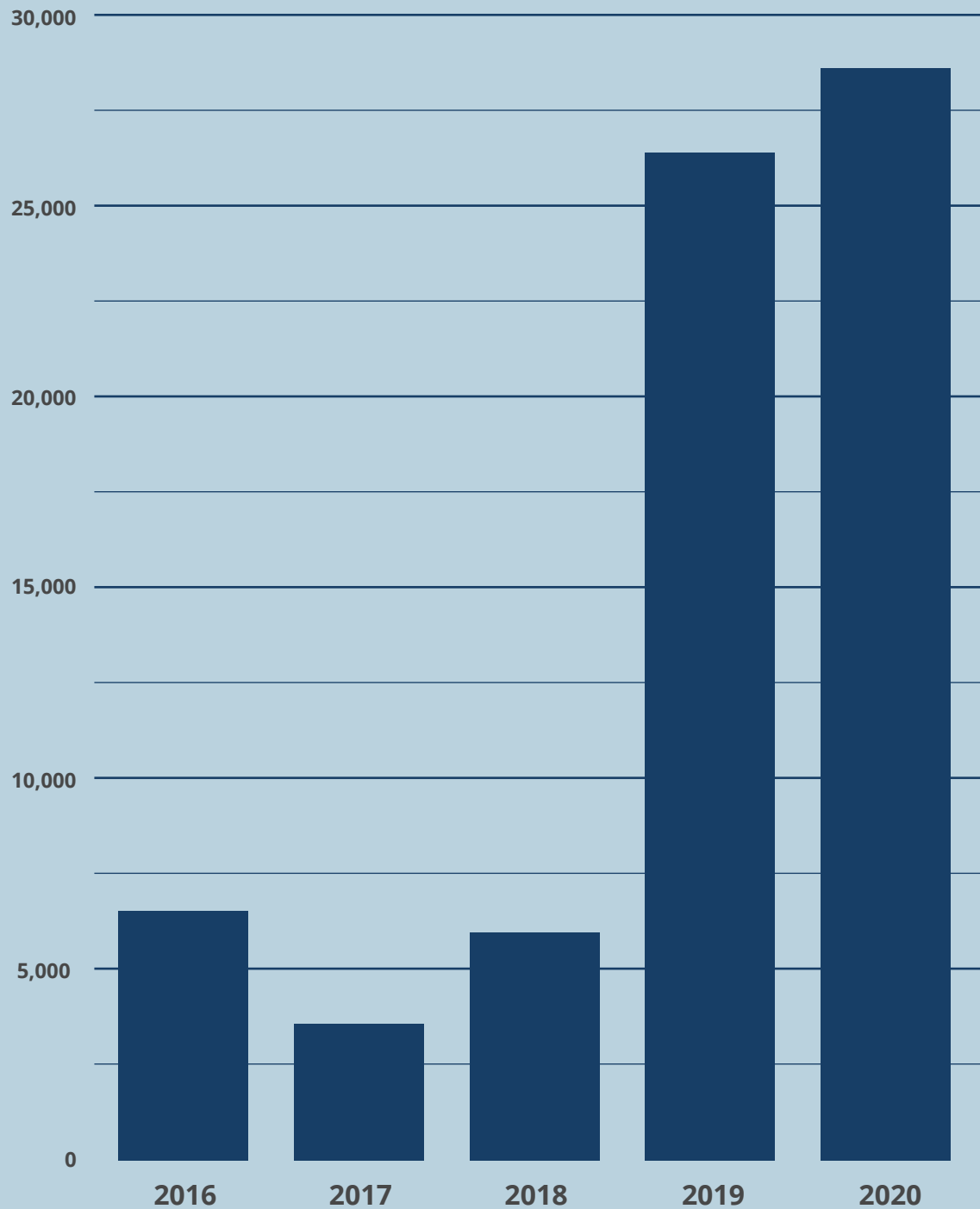| YEAR	NUMBER OF ORDERS
2016	521
2017	541
2018	523
2019	533
2020	438[18]

Data Descriptions

The SND catalogue also includes data descriptions that refer to data available from external sources, for example project websites, other organisations, authorities, or research infrastructures. Statistics on traffic from SND to external sites are not currently collected.

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[17] *Statistics not comparable to previous years due to the removal of approximately 400 Gallup studies. The Swedish Gallup Archive 1942–1956 is currently available from an SND Special Collection page.*

[18] *ISSP and ESS changed access level during 2019/2020 and are now available by direct download.*

DOWNLOADS AND DATASETS SUPPLIED

Downloads from the SND catalogue and datasets disseminated.
Downloads from Environment Climate Data Sweden (ECDS) were not included for 2016–2018 for technical reasons.

Economy

SND ANNUAL ACCOUNTS 2020

Figures stated in Thousand SEK

REVENUES	Notes	Results 2020	Budget 2020
Government grants		7,000	7,000
Swedish Research Council, Core activities		13,000	13,000
Swedish Research Council, CESSDA activities		1,000	1,000
Other income – SND Network Services		1,680	1,800
Wage cost compensation from the Consortium		9,000	9,000
Other income – CESSDA Tasks		634	206
EU Project ARIADNEPlus		708	750
EU Project SSHOC		162	442
EU Project EOSC-Nordic		0	260
EU Project RDA Node		252	359
Swe-Clarin		29	0
Swedish Research Council, ICPSR		350	350
Other income		160	0
Accruals	*1.*	294	0
Total Revenue		**34,269**	**34,167**

EXPENSES	Notes	Results 2020	Budget 2020
Staff costs		−19,570	−19,222
Staff costs – Consortium		−9,000	−9,000
Premises		−1,174	−1,174
Other operating costs		−129	−298
University IT fee, IT infrastructure, and IT licenses		−748	−851
Membership fees		−180	−475
University overhead and interest expense	2.	−2,603	−2,603
Depreciation		−76	−120
Internal co-financing SND		−58	0
Refunding Swe-Clarin		−196	0
ICPSR Scholarships for transfer		−249	−295
RDA activities		0	−339
Staff travel	3.	−144	−800
Conference/course fees	4.	−53	−130
SND conferences	5.	−57	−745
DoSp/Consortium activities	6.	−553	−1,150
Total Expenses		**−34,790**	**−37,202**
RESULT		**−521**	**−3,035**
Opening balance 2020			**7,180**
Ending balance 2020			**6,659**

Notes

1. Periodisation of EU project revenues. Revenues belong to 2020, but transfer has not yet taken place.

2. University overhead costs and negative interest for university bank funds.

3. Lower travel costs than budgeted, due to the COVID-19 pandemic.

4. Lower conference and course costs than budgeted, due to the COVID-19 pandemic.

5. Lower SND conference costs than budgeted, due to the COVID-19 pandemic.

6. Costs for DoSp Coordinator, Consortium activities and meetings.

Staff

SND Gothenburg

Administration and Services

Director
Max Petzold

Administrator,
Language Coordinator
Lisa Isaksson

Communications
Officer
Matilda Lindmark

Communications
Officer
Helena Rohdén

Financial
Administrator
Ann Nordström

Financial Officer
Anna Maria
Eriksson

Legal Officer
Erica Schweder

Senior Advisor
Iris Alfredsson

Senior Advisor
Birger Jerlehag

Deputy Director,
Team Leader
Elisabeth Strandhagen

Domain Specialist in
the Humanities
Stefan Ekman

Research Data
Advisor
Anneli Ambring

Research Data
Advisor
Jeremy Azzopardi

Research Data
Advisor
Eira Brandby

Research Data
Advisor
Martin Brandhagen
(Leave of absence)

Research Data
Advisor
Linda Härdelin

Research Data
Advisor
Ulf Jakobsson

Research Data
Advisor
Caspar Jordan

Research Data
Advisor
Ilze Lace

Research Data
Advisor
Rufus Latham

Research Data
Advisor
Stephan Nylinder

Research Data
Advisor
Dimitar Popovski

Research Data
Advisor
Arin Savran

Research Data
Advisor
Sara Svensson

Research Data
Advisor
Sofia Österberg

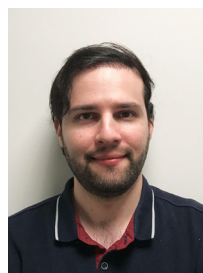Researcher
David Rayner

IT and Development

Head of IT
Johan Fihn Marberg

Acting IT Architect,
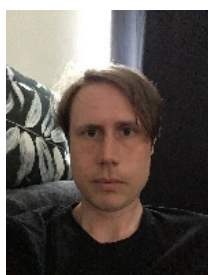System Developer
Pablo Millet

IT Architect
Olof Olsson

System Developer
Alireza Davoudian

System Developer
Stefan Jakobsson

System Developer
Hasse Lans

System Developer
Joakim Larsson

System Developer
Tobias Linde

System Developer
Fabian Samuelsson

Without picture:
IT Technician, Alicia Rain Olsbänning

Domain Specialists

Gustav Nilsonne
Coordinator
Karolinska Institutet

Anna Axmon
Lund University

Margaretha Hellström
Lund University

Darren Spruce
MAX IV,
Lund University

Ulf Jansson
Stockholm University

Anders Moberg
Stockholm University

Ida Taberman
Swedish University of
Agricultural Sciences

Ylva Toljander
Swedish University of
Agricultural Sciences

Anders Brändström
Umeå University

Karina Nilsson
Umeå University

Without picture:
Sudha Padmanabhan, MAX IV, Lund University
Lars Eklund, Uppsala Univeristy

Marcus Lundberg
Uppsala University

As well as Iris Alfredsson, Stefan Ekman and Elisabeth Strandhagen,
who are Domain Specialists at University of Gothenburg.

Steering Committee

Swedish National Data Service is run by a consortium consisting of nine universities. The steering committee of SND is made up of representatives from each of these universities. During 2020, the steering committee consisted of the following members:

Göran Landberg (Chair)
Deputy vice-chancellor and professor, Institute of Biomedicine,
University of Gothenburg

Ann-Sofie Axelsson
Head of department and library director,
Chalmers University of Technology

Cecilia M. Björkdahl
Project leader at Grants Office, Karolinska Institutet

Lars Burman
Chief librarian, Uppsala University

Maria Haglund
Chief librarian, KTH Royal Institute of Technology

Monica Lassi
IT Architect at LUNARC, Centre for Scientific and Technical Computing,
Lund University

Urban Lindgren
Professor at Department of Geography, Umeå University

Astri Muren
Deputy vice-chancellor and professor, Department of Economics,
Stockholm University

Linda Vidlund
Chief librarian, Swedish University of Agricultural Sciences