National Development Plan

AUSTRIA

November 2017
Introduction

Efforts by the Universities of Vienna, Linz, and Graz and the support of the Federal Ministry of Science, Research and Economy led to the launch of the Austrian Social Science Data Archive (AUSSDA) in November 2016. Since AUSSDA has already received funding and is well on its way to becoming a fully functioning archive, this development plan differs from that of other archives featured in this report. Members of the AUSSDA team evaluated their work and outlined their activities in this guide around the 6 month mark after the formal establishment of the archive. All information about timelines, what is being developed and even structural information is describing the situation around April 2017. This chapter can therefore act as a helpful reference for archives once they have received funding and are faced with the questions of what to do next. AUSSDA’s next steps, from developing a service portfolio, a governance structure, and policy documents, are outlined, and AUSSDA team members have also outlined some additional aspects to consider in the first phase of establishment.

Mission

The Austrian Social Science Data Archive (AUSSDA) is a core social science research infrastructure in Austria, offering research data and archiving services. It is located at the Universities of Vienna, Graz, and Linz and is funded by the Austrian Federal Ministry of Science, Research and Economy (BMWPW).

AUSSDA strives to become the leading research infrastructure for the social sciences in Austria, offering high quality, sustainable, and easy-to-use solutions for archiving digital data, along with world-wide access to it. The archive follows international standards in order to make deposited social science data and documentation findable, accessible, interoperable and reusable. AUSSDA is active in a growing network of national and international partners, promoting high archiving standards and contributing to archive solutions of the future.

Our collection covers all social science data. We support the open data movement and work towards maximizing the potential for data use within our user group. The primary beneficiaries of our services are researchers, while our online services can also be used by students, educational institutions as well as media representatives and the public. We stand for integrity in data archiving and promote ethical research principles.

“We make social science data accessible, creating opportunities for research and data reuse, benefitting science and society.”

General features of the data service

**Definition of organisation**

AUSSDA, the Austrian Social Science Data Archive, is a consortium of three universities. Its headquarters are at the University of Vienna. It has the status of a “core facility” at the University of Vienna. It reports directly to the head of the Vienna University Library. The University of Graz and the University of Linz are partners. The main technical infrastructure and all archive material are maintained and stored at the University of Vienna.

AUSSDA is a supplier and collector of research data for the social sciences in Austria. Its mission is to become (1) the main supplier of data in the social sciences in Austria and (2) the most prominent address for archiving data in the social sciences in Austria.

**Scope of collection**

AUSSDA archives social science data from all disciplines. Examples include the fields of political science, sociology, media and communications, economics and business, educational sciences, law, psychology, social and economic geography, public health, demography, contemporary and social history, as well as other social sciences or interdisciplinary studies. AUSSDA accommodates various data sources such as surveys, content analyses, experiments, and others. Presently, data is primarily derived from research in political science, sociology, and media and communications.

The Austrian Social Science Data Archive’s main priority is in collecting quantitative social science data. Other data types are added to the collection if they provide valuable scientific insight for the archive’s designated community.

The focus is on traditional-scale data. AUSSDA will participate in open data, open access, open innovation and big data initiatives. Possibilities to archive and disseminate big data and social media data will be explored.

**Services and activities**

AUSSDA’s main services are:

- Solicitation and acquisition of data from data producers;
- Curation and long-term preservation of data;
- Online catalogue of archived data;
- Access to and dissemination of data for use in secondary analysis.
The main tasks of AUSSDA are adding new data to its collection and making these available for secondary use. AUSSDA is compliant with international scientific standards of archiving activities. The data archive actively pursues suitable data and devises appropriate plans for their dissemination. AUSSDA will work closely together with other institutions, such as faculties, funding bodies and ministries to reach out to the scientific community.

AUSSDA supports an open data policy and works hard to achieve free data access whenever possible. Metadata will be available for data mining, and the data shall be available for use for as many purposes as possible within the applicable license models granted to AUSSDA by the data depositors. By offering advice on available license models, AUSSDA ensures that researchers understand data protection issues and usage scenarios to achieve an appropriate archiving and dissemination strategy.

In the initial three years of the setup phase, AUSSDA will offer the following services and activities:

» Materials and trainings for data depositors (how to prepare data for inclusion in the archive, how to deposit prepared data);
» Materials and trainings for data users (how to find data in the catalogue, how to download data);
» Support, assistance, and advice for data depositors and data users;
» Promotional activities and outreach to users;
» Regional collaboration and establishment of networks of users;
» Data management training for researchers;
» Data Management Plan (DMP) Services;
» Legal protection (through archive’s policy, terms of use, deposit agreements and metadata guidelines) for both data providers and repository operators;
» Differentiated rights management (through licenses and different levels of access, from closed or embargoed access, through various levels of restricted access to open access);
» Citability of data (assignment of persistent identifier, e.g. DOI);
» Allowing assignment of personal identifiers (e.g. ORCID);
» Script-based anonymization checks;
» Wider promotion of “Open Access“ to data.
AUSSDA organizes its services along the data life cycle:

- Proposal development and data management plans -> archive can be contacted for advice on data management plan;
- Project start-up -> documentation guidelines, informed consent;
- Data collection and file creation -> best practice, tutorials, quality controls;
- Data analysis -> manage dataset files, backup data and documentation, information on archiving options;
- Preparing data for sharing -> file formats, contact archive for advice on licenses;
- Depositing data -> complete relevant forms, compliance with standards;
- Outreach -> dissemination of data, data from AUSSDA in university's curricula.

The Austrian Social Science Data Archive is not merely a place to store data. AUSSDA can accompany researchers every step of the way, from an initial data management plan to the dissemination of the collected data. Besides archiving, AUSSDA provides assistance to data depositors in the form of documentation guidelines, best practice examples and lists of necessary quality controls, thereby ensuring the adherence to internationally defined standards. Data consumers also benefit from AUSSDA’s services and support, concerning not only the availability of certain data, but also aspects on how to use specific datasets. AUSSDA will play an active role in the Austrian social science community and will visit institutions in Austria to introduce the archive and its uses to researchers and students.

**Beneficiaries**

Sharing research data by making it openly accessible not only furthers the field of social sciences in Austria, it allows young academics to learn from past research - its design and implementation. The services of AUSSDA target Austrian social scientists, but apart from regulations on individual datasets no general restrictions are in place as to who can access and use data: professors, junior researchers and students are all welcome to use and contribute to the archive, as long as all necessary archive regulations are followed. While anyone can use the data within the provided license models, researchers will in particular benefit from the infrastructure AUSSDA provides, specifically its secure, long-term storage. Academic journals increasingly require data accompanying submissions to be made available in an appropriate data archive. In recent years, no such trustworthy depository existed for the social sciences in Austria. AUSSDA fills this infrastructural gap.

AUSSDA considers its role as going beyond data archiving. The archive can be contacted by
aspiring researchers requiring assistance. Additionally, AUSSDA provides example datasets to be used in university courses, allowing an easy introduction to the use of the data archive and to quantitative methods.

**Governance structure**
As of March 2017, AUSSDA has established a working group and plans to build a national advisory board and an international advisory board. The working group guides strategic, financial and policy related decisions of AUSSDA. All policy documents have to pass the working group before they become binding for AUSSDA. It consists of the AUSSDA-team, representatives of the partner institutions (University of Vienna, University of Linz, University of Graz), the head of the Vienna University Library (responsible for financial decisions and financial reporting), and a representative of the BMWF (funding federal ministry). The working group currently consists of 15 people. In the first year (2017) this board will meet 4 times (February, April, June, tbd) to ensure a constant dialogue among all partners. The number of meetings may be adapted in subsequent years.

*Figure 1: AUSSDA’s governance and internal structure*
Responsible for overseeing that AUSSDA is compliant with the goals and operating within the applicable financial rules are representatives of the BMWFW and the head of the Vienna University Library. They are members of the working group. The annual formal approval process includes an annual performance report of AUSSDA to the ministry.

AUSSDA is supported by two advisory boards. The national advisory board is currently under construction. It has been proposed that it should consist of representatives from (1) all Austrian universities, (2) the Federal Ministry of Science, Research and Economy (BMWFW), (3) the Austrian Science Fund (FWF), (4) the Austrian Academy of Sciences (ÖAW), (5) the Institute for Advanced Studies (IHS), (6) the Austrian Research Promotion Agency (FFG), (7) the Austrian Institute of Economic Research (WIFO) and (8) the national statistical institute. Members of the national advisory board support AUSSDA with their expertise and promote AUSSDA within their institution. The views expressed by the national advisory board are recommendations.

The international advisory board provides guidance, expertise, and support. Seven CESSDA members are represented as members in the board. It is comprised of individuals with valuable insights into various areas of expertise of archival systems. This includes leading researchers of international standing, representatives of CESSDA members and people who are involved in technical roadmaps but no dedicated IT specialists. Strategic partners from outside of Europe may be added to the international advisory board in the future. The international advisory board consists of members from the following institutions: ADP (Social Science Data Archives/ Slovenia), CSDA (Czech Social Science Data Archive/ Czech Republic), DANS (Data Archiving and Networked Services/ Netherlands), FORS (Swiss Centre of Expertise in the Social Sciences/ Switzerland), GESIS (Leibniz Institute for the Social Sciences/ Germany), NSD (Norwegian Centre for Research Data/ Norway), and UKDS (UK Data Service/ UK).

**Financing schemes**

AUSSDA is funded by the Federal Ministry of Science, Research and Economy (BMWFW). All expenses necessary to establish a long-term social science data archive in Austria have been considered. Eventually AUSSDA will be fully integrated into the organizational and infrastructural settings of the University of Vienna and its partners at the University of Linz and the University of Graz, making it an integral part of the Austrian social science community.
Resources and challenges

Host institution

AUSSDA is a subdivision of the Vienna University Library, which in turn is part of the University of Vienna. The University of Vienna, founded in 1365, is one of the oldest and largest universities in Europe. About 9,500 employees, 6,700 of whom are academic employees, work at 19 faculties and centres. This makes the University of Vienna Austria’s largest research and education institution. With more than 180 degree programmes, the University offers the most diverse range of studies in Austria.

As Austria’s largest and oldest university, the University of Vienna is well-established within the national research community. Partners at the Universities of Graz and Linz play a vital role in connecting AUSSDA to existing national research networks. Cooperation is planned with additional Austrian research institutions and the national statistical institute Statistics Austria.

Through the University of Vienna Computer Centre, AUSSDA has access to the necessary technical infrastructure. This includes email accounts, Wi-Fi and the University’s data network, online storage spaces and a website, all necessary hardware and software, IT security, the possibility of attending IT courses, as well as support provided by qualified computer experts.

The Vienna University Library provides various service infrastructures to support members of the University in their research, teaching and learning. It offers the academic community archiving solutions with a focus on mid-term and long-term preservation of digital resources and research data. It furthermore transfers know-how and technology to academic institutions in five European countries and to the national funding body FWF. Staff from AUSSDA has also been conducting Data Management Plan trainings within the institutional staff development programme of the University of Vienna. Additionally, the Vienna University Library coordinated the three-year, nation-wide project e-Infrastructures Austria (www.e-infrastructures.at), which involved 26 partner institutions in Austria. This project allowed effective stakeholder engagement with Austrian representatives of ministries, research funders, research communities, scientific libraries, ICT-services, legal services, research support and publishers.

The University of Vienna has published an Open Access Policy (https://openaccess.univie.ac.at/en/policy/) and fully supports the establishment of AUSSDA. AUSSDA was established as a core facility at the University of Vienna which indicates the strong support from the head of the University.
The head of AUSSDA is a recognized professional in survey research with a strong publication record and a proven track record of establishing and leading high-performance teams. He has a large network which extends beyond Europe with affiliations at the University of Michigan and at the Australian National University.

AUSSDA has good relations with the Federal Ministry of Science, Research and Economy. Its representatives are regularly updated on AUSSDA’s development and its future plans and one representative is a member of the board and strongly supports AUSSDA in its establishment phase.

**Human resources and internal structure**

AUSSDA has a flat hierarchical structure and will employ one head of the archive, one project manager and five data processing specialists with the following profile and activities.

1 **head of AUSSDA**

Profile: Social sciences/statistical background; data management skills.

Main activities:

- Leadership of the data archive;
- Setting of policy and procedural rules;
- Relations with national and international stakeholders and partners;
- CESSDA-related activities.

1 **project manager**

Profile: Humanities and library information background.

Main activities:

- Project management;
- Relations with national stakeholders and partners;
- Office management;
- Data management plans;
- Licenses;
- Website;
5 data processing specialists

The basic profile and activities for all data processing specialists are:

Profile: Social sciences/statistical background; data management skills.

Main activities:

- Solicitation of data;
- Data and documentation ingest;
- Data curation and preservation;
- Contracts creation for data depositors and data users;
- Information and advice to researchers and students;
- Data service promotion towards the research community (the beneficiaries).

The data processing specialists also work on specific projects and tasks such as:

- Development of policies, workflow protocols for ingest and data delivery, data protection and informed consent, as well as open educational resources;
- Data migration from binary format to current formats;
- Regional contact points;
- Marketing strategy;
- Website;
- Survey expert: ISSP, Social survey Austria;
- Relations with international stakeholders and partners;
- CESSDA projects (ELSST, SaW, metadata, etc.);
- Data Seal of Approval;
- NESSTAR server setup and administration;
- DDI.
Partner support and cooperation

National stakeholders and partners

AUSSDA is in regular contact (email, phone and personal meetings) with the responsible ministry and informs ministry representatives about current work and future plans. The Austrian Social Science Data Archive is in the process of reaching out to the Austrian Science Fund, the Austrian Academy of Sciences, the Institute for Advanced Studies, the Austrian Research Promotion Agency and the Austrian Institute of Economic Research in order to establish cooperation and to define its place in the Austrian research community. A collaborative effort is underway to form a partnership with the national statistical institute Statistik Austria. In addition to representatives at the universities of Vienna, Linz and Graz, contacts at all Austrian universities are being identified and asked to join the national oversight board.

International stakeholders and partners

AUSSDA can rely on a large network of support including all national service providers of the Consortium of European Social Science Data Archives (CESSDA). The establishment of AUSSDA takes place in accordance with the goals set out in the Austrian Research Infrastructure Action Plan (2014-2020). The ESFRI infrastructure CESSDA constitutes an integral part of Austrian research infrastructure.

Planning for the data service

Establishment plan (before day 1)

Organisation and internal structure

AUSSDA is located at the University of Vienna; the offices are located at Teinfaltstrasse 8, 1010 Vienna. Partners are located at the Universities of Graz and Linz. The AUSSDA working group and international board have been formed; the national board is being set up.

Services to be developed

- Data acquisition;
- Data management plan;
- Data processing (validation, data conversion, metadata);
- Specialized infrastructure of long-term data storage with searchable interface;
- Data dissemination;
» Balancing demands of data providers and data users through agreements adhering to legal requirements;
» Trainings for students.

Classification scheme of data types to be archived

AUSSDA focuses on the collection of –primarily– quantitative social science data. A data collection policy has been developed. The following description for data access levels was developed as part of the data collection policy:

» Open data can be accessed by anyone.
» Restricted access can take on the following forms:
  - Standard access allows registered users access to all data in the archive that are not restricted to certain user groups and do not require special conditions or agreements.
  - Restricted user group access defines a predefined user group that is allowed access to data and access is automatically granted when a person meets these defined criteria. This can be controlled case-wise or by implementing automatic authentication (e.g. through an email address from a predefined list of domains).
  - Access on demand may be applied to data and the decision to grant access or not is made with every request.
» Embargoed data is archived and not accessible for a defined timespan. After this time period, the preselected access and license models apply.

Promotional activities

» Creation of a bilingual (German and English) AUSSDA website, stakeholders mailing list for regular updates, conferences;
» Development of institutional brand and logo;
» Development of website (www.aussda.at);
» Major public event to promote AUSSDA in November 2017;
» Customer support and documented guidelines/tutorials for data providers and data users;
» Other outreach activities.

Technical infrastructure

» Technical hardware offered by university;
» Software and tools selected (Stata, SPSS, project management software, ...);
» Database and archiving system tool: decision-making in progress; currently, Nesstar is being used.
Policies, quality control procedures and workflows

- Establishment of data policies and written protocols for data management and access in progress;
- Data preservation and succession plan is on the development roadmap;
- Policy and plans for data backup and security developed through service level agreement with central computer services of university;
- Agreements and contracts are being developed by a lawyer;
- Standardisation of policy and tools (including compliance with CESSDA and Data Seal of Approval) is being monitored.

Operational plan (after day 1)

Implementation and maintenance of technical systems

Computers, servers, security and backup systems are installed. Nesstar installation nearly complete.

Data acquisition and curation (solicit and process research data)

Existing research projects with potentially valuable data have been identified. Pilot projects to test ingest have been started.

Activity report, outreach and promotion

Annual reporting to the ministry is in place. Target groups are being identified; this includes research community, policy-makers and media.

Networking and internal and external communications (e.g., newsletters, email lists)

Email lists are being created and a strategy for ongoing communication will be further developed in the future. International conferences and workshops, as well as CESSDA events have been attended by team members.

Ensuring sustainability and working toward growth

Regular meetings with high-level ministry officials take place as part of the national advisory board and the working group. A major public event will take place on November 17th 2017, high-level ministry officials will be present. AUSSDA has talked to funding agencies and informed them of AUSSDA’s activities.
Afterword

The NDP for Austria has been drawn up by AUSSDA following the CESSDA SaW Guide for developing national data service plans. The contact person is Lars Kaczmirek (lars.kaczmirek@univie.ac.at).

Acknowledgements: We thank Christian Bischof, Veronika Heider, Trond Kvamme and Christina Bornatici for their helpful comments.

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Disclaimer: This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 674939.