

Examining barriers for establishing a national data service

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Abstract

A system for monitoring the current situation of Data Archive Services (DAS) maturity in European countries was developed during the CESSDA Strengthening and Widening in (SaW 2016 and 2017) and further adapted in CESSDA Widening Activities 2018 (WA 2018) projects for continuous monitoring. An assessment of the existing national data sharing culture, the development of the social science sector and its production of high-quality research data, the funders' research data policy requirements, and the capacity and skills of national grassroots initiatives, provide a framework for understanding the current situation in different countries. Methods used in the projects, included desk research of existing documents and a survey, combined with extensive interviews focused on the area of expertise of the informants (individuals from data services, research and decision makers' representatives from each country). The focus of the paper is the situation in 20 non-member CESSDA European countries with emerging and immature DAS initiatives. Results show that countries are slowly but persistently removing the key obstacles in establishing a DAS initiative in their respective countries. The remaining obstacles reside mainly outside the control of the data professional community – namely research funders slowly adopt data sharing policies and incentives for data sharing, including the provision of a sustainable DAS infrastructure, capable of supporting researchers with publishing and accessing research data. The results show that the lack of expertise and skills of DAS initiatives, their understanding of tools and services or organizational settings are not such an issue, as more mature DAS are organising training and mentorship activities. Detailed guidance in the DAS advocacy and planning was prepared in the framework of the above-mentioned pan-European and some past regional projects. The tools and framework of those activities will be referred to in the discussions as a resource that can be used in other countries and continents.

Keywords

strategies for setting up data service, international partnership, data policies, CESSDA

Introduction

Establishing and running a national Data Archive Service (DAS) can bring many benefits to the scientific community. The Consortium of European Social Science Data Archives (CESSDA), as a distributed pan-European social science data infrastructure, strives for a whole European Research Area (ERA) coverage, thus enabling equal opportunities for access to research data, regardless of researchers' origin. CESSDA membership is country-based, and a signature from the responsible Ministry needs to be obtained. Each country nominates a country Service Provider, which is usually an individual institution/organization that is actively engaged in the national DAS provision.

In order to document and support activities among the CESSDA Partners non-member countries, a system for monitoring individual country situations was developed during the CESSDA Strengthening and Widening ([SaW 2015 – 2017](#))² project. The effort was continued within the CESSDA Widening Activities ([WA 2018](#))³ project, which established a system of continuous monitoring in order to capture and reflect the most current progress. The monitoring aims to address the problems of less mature

DAS, and offers to search for solutions for the common problems and support for improvement. The aim is also to increase the visibility of individual country initiatives and organisations that may have spent long periods trying to establish a professional data service for their research community.

In this paper, we will examine mainly the results of the most recent WA 2018 project, where one of the tasks was to continue the monitoring of the status of data archive services, led by the [ADP](#)⁴. Both projects contained a number of other activities, which we will refer to when discussing the results of the monitoring.

Problem setup

The SaW and WA 2018 projects developed an unique monitoring approach that examines a range of conditions of establishing and running a DAS in each of the countries by addressing the wider context of the data-sharing ecosystem. The approach starts with estimating the overall financial position of social sciences in a country, and considers the differences among countries regarding the demand for data sharing services. Continuous national studies that produce high-quality data are important in this respect. Next, the data sharing culture among the scientific community was estimated, both regarding the readiness to share one's own data, and the widespread habit of using existing data whenever possible.

A broad area of enablers and constraints influence a data sharing culture in the social sciences community. In particular, the research funders add yet another dimension to the ecosystem, by providing the policy framework with requirements for all regarding opening data, by stimulating the data management planning in order to maximize access to high-quality reusable data, and by providing incentives and a support environment to those that prepare and openly share data. Finally, a mature ecosystem and an established culture of data sharing enable sustainable operation of a DAS, which in turn can support its parts to function well. It is the funders and the community of users and data depositors that influence the orientation of the DAS initiatives in individual countries and who can profit from its efficient functioning. In this respect, it is important that initiatives and small pilot DAS that arise based on well-developed professional grounds, actively engage with the user's community, and demonstrate and advocate with the decision makers about the justification of their activities. Developed DAS can have a multiplying effect to support further development of social sciences, in particular with providing access to relevant high-quality data that tackles important societal issues.

Evidence was collected and the situation in each above-mentioned aspects was examined for the range of European countries. Each of the aspects had a few pre-set questions, that were adapted during the in-depth interviews with selected national informants, and finally, a country report was written, emphasizing the main, either the positive factors or barriers and weaknesses in the system. The main focus was the DAS vitality and sustainability, both regarding internal organization and external conditions.

Stakeholders in individual countries or regions need to determine internal goals while comparing the current gaps in their countries with others and act correspondingly. A group of countries, identified to be at a similar level may consider following similar best practice examples to achieve a more mature and supportive open scientific data ecosystem. The results presented here can motivate in finding

sustainable arrangements for a particular national situations, matching the interests of both the scientific community and the policy makers.

Previous studies

As a baseline, some past studies were taken into account. The series of CESSDA widening projects were built upon the continuous experiences that arose from the UNESCO Workshop on Social Science Data Archives in Eastern Europe in 2002 (Hausstein and Guchteneire, 2002). A group of more than 10 countries' initiatives to establish the national DAS were engaged in informal cooperation under the EDAN - the East European Data Archives Network and coordinated by the GESIS Leibniz-Institute for Social Sciences at that time. The SERSCIDA project (2012-14) was the first in a series of projects that provided full-fledged support and activities workflow for establishing a national DAS from scratch. Four well-established CESSDA European DAS partnered in the project with the DAS initiatives from Bosnia and Hercegovina, Croatia and Serbia. Results of the surveys by the SERSCIDA project in Bosnia-Herzegovina, Croatia and Serbia show that in the absence of data infrastructure and support services, in practice, research data are mostly shared with colleagues and peers within the research group/institution, or not shared at all⁵, despite the fact that researchers may be very willing to share their research data with the wider scientific or civil community. Within the SERSCIDA project, working visits to well-established partners were organised⁶, training modules were delivered for archiving professionals, draft archive policies and business plan documents were developed and prototype webpages were established.

In the following years, a series of projects followed with similar aims and approach to SERSCIDA, including those mentioned in the introduction, which produced the manuals and guides and knowledge sharing materials that have the potential of wider relevance for the archiving community⁷. All the projects and initiatives mentioned provided some overview of the conditions and capacities of different organisations, residing in the national contexts.

A comprehensive overview of the national open social science data policies was provided for the first time in the IFDO Report from 2014 (Kvalheim and Kvamme, 2014). Chuck Humphrey's analysis (Humphrey, 2003) of the profiles and organisational settings that collected information of DAS worldwide, aiming at the proposal of how to establish a national DAS in Canada, started with a similar assumption as we do in the country reports: a comprehensive set of conditions needs to be explored in each national setting, which will in turn help to shape further development steps. That is, there is no development model that fits all.

As an inspiration about how to approach describing the complex situation regarding DAS in the variety of European countries, some of them in the initial stage of considering how to start activities used a metaphor of the data sharing ecosystem: 'It is a complex system involving data collectors, stewards, and users as well as sponsors and stakeholders; emergent and historical transparent technologies; and ever-growing data along with their myriad associated artefacts. The system must be understood in totality in order to optimize the whole and not just the individual components.' (Parsons et al., 2011, p. 557).

Data sharing culture is a key systemic component that determines the efficiency and sustainability of a data ecosystem. Much research has been done in the last decade across disciplines and at an international level on research data sharing culture, data sharing and management practices, on

barriers and enablers. This published literature provides us with much information on this topic, which is most likely applicable across countries. Both detailed qualitative or mixed studies (Borgman 2012, EAGDA, 2014, Van den Eynden et al., 2014) and comprehensive surveys (Sveinsdottir et al., 2013, Van den Eynden et al., 2016) assessing data sharing practices, barriers and enablers amongst researchers at a local, European or international level - some of which focus on specific research disciplines, others look across a range of disciplines – identify numerous perceived or real barriers to data sharing, such as the lack of standards and data infrastructure, the fear of competition, the costs and the absence of rewards to prepare data and documentation, amongst others. Among enablers of data sharing generally reported in the literature, we could stress the data sharing expectations of funders, institutions and journals (Tsoukala et al., 2016), the established habits in the research community, and the areas where DAS support is visible, like professional training on data management skills, and enabling data publication for citation.

Method

Results and reports from the previous widening activities (SERSCIDA, SEEDS) and in particular, the most recent SaW project reports (CESSDA SaW, 2017a,b) were taken into account while assessing the national situation in 2018, with an emphasis on change and progress being made nationally.

The mapping contains a review of the elements identified in the introduction of the wider data-sharing ecosystem: the interplay of the structural conditions of social science development, the funders open data policies and strategies, and the data sharing culture and the incentives that increase the data sharing habits of researchers. External stakeholders, in particular funders, can play an important role in improving the national data service sustainability. Research funders are the key stakeholders that can help to provide incentives and remove some of the barriers to data sharing. Advanced policy recommendations, appropriate funding mechanisms and a strong DAS can lead to a sustainable data-sharing ecosystem.

Finally, the countries where no formal DAS exist were analysed regarding the potentials of integration of initial RDM support infrastructure. By identifying proto-activities and open access support activities, we detected actors and institutions that could play a key role in the elaboration of a new national DAS. The list might be of help to funders and to the CESSDA Main Office on a national and an international level when planning further development.

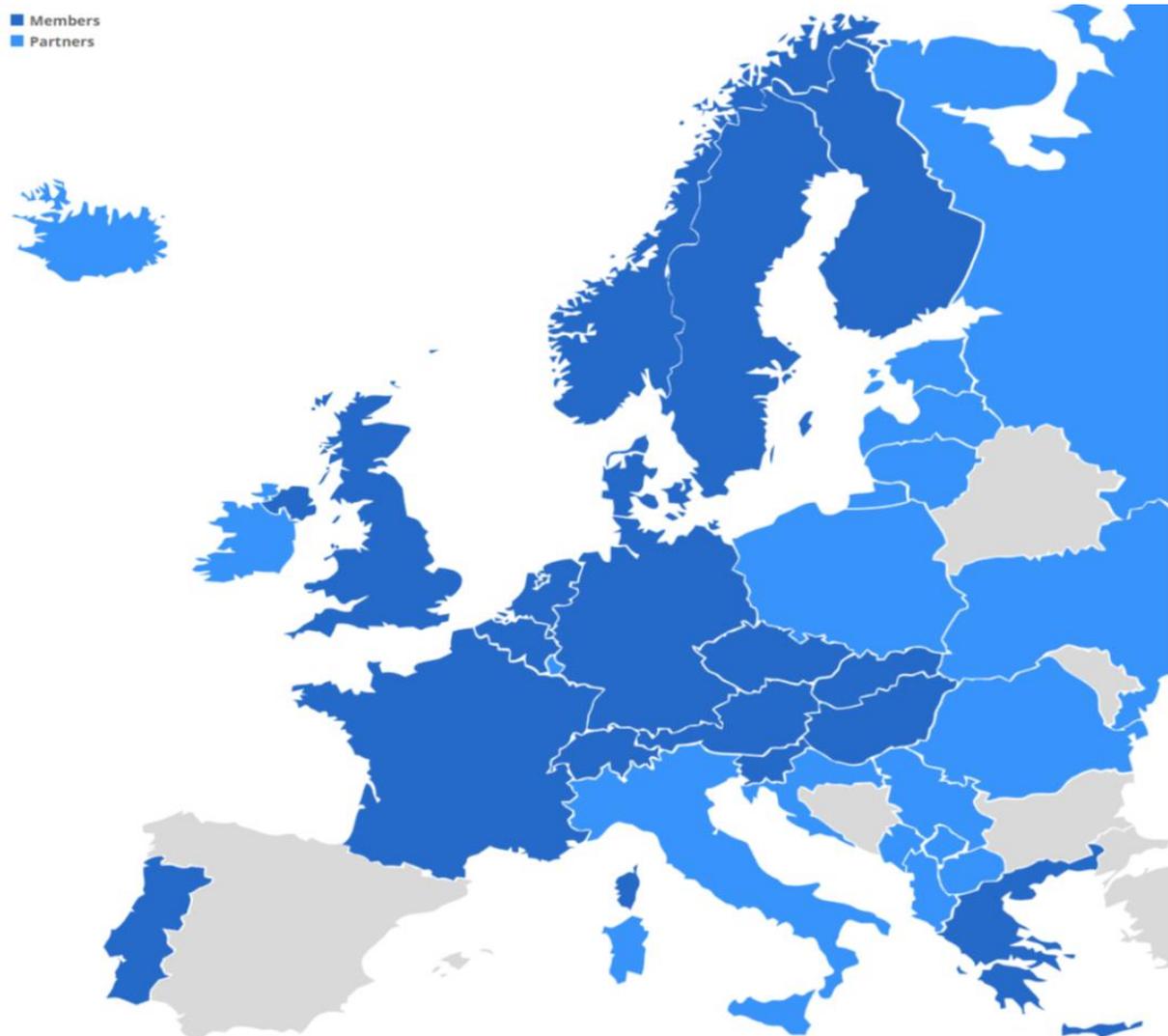
A monitoring system has been established consisting of the following steps: Step 1: Desk research to consult the existing sources of information; Step 2: Selection of contact(s); Step 3: Tailoring semi-structured interview (country and stakeholder-specific); Step 4: Contact and carry out the interview, either orally or written. The project group members utilised the guidelines and communication protocol for interviewers that contain a list of suggested interview questions and issues to be addressed, arranged along the content areas (see CESSDA WA, 2019, Appendix 1).

Monitoring has been based on regular short interviews of CESSDA Partners and other contacts established in non-member countries. The country reports on recent developments summed up information from the previous reports, and the monitoring interview.

The project group decided to approach 22 countries among all European Research Area CESSDA non-member countries to monitor in 2018. Those that had at least one possible productive contact identified in previous rounds of activities among the relevant stakeholders (policy makers, research

data expert or similar). A list of countries was determined and distributed between 5 partners for this task in June 2018. The Contact Info table from the CESSDA SaW project was updated with recent contacts. Reporting on the contacts made during the interviewing period was filled in by partners.

Following the communication protocol, including the initial contact e-mail template, the majority of the requests for interviews were sent between October and November 2018 and realised soon after. The last interviews were conducted in January 2019.



Map 1: CESSDA Member and Partner countries, as of mid-2018⁸

The most recent reports sum up past and existing information gathered on different occasions for each individual country, and add up to what is new from the fresh interviews.

Results

Most of the interviewees were social science data researchers or data librarians involved in the organisation of the national data archives service.

Some of the services have a longer time span, having been members of the old CESSDA (pre-European Research Infrastructure Consortium era). Some went through an institutional change, like in Ireland and Italy, where the seat of the DAS had moved compared to the old CESSDA. Some have sustained a low level of activity for a longer period of time, such as Estonia, Poland, Slovakia and Romania, without being able to make a breakthrough to achieve the status of a national service provider for CESSDA. The latter is due to not having a ministry ready to sign the agreement to join CESSDA and to sustainably support the national DAS.

From the recent era, the notable progress of the DAS initiatives in many countries results from their participation in the various widening projects mentioned before. These projects were important for engaging with stakeholders in countries (funders, researchers, etc.) and for developing the professional competence of the people and organisations involved. The projects helped to create well-elaborated plans for the DAS in Serbia, Croatia, and Macedonia, which have recently become new CESSDA member states.

Development of the social sciences sector in the country

The focus of the first part of the interviews was on funding capacities, human resources and infrastructure, international collaboration and national studies as a driver of DAS demand in the country.

Most reports that came from economically less developed countries share an impression of the low status of social sciences research, which leads to the generally low supply of high-quality key research data resources and the weak policy and funding support for data service activities.

Yet the creation of a data archiving service may influence the production of higher quality data in the future, by raising awareness of the importance of data sharing and by pooling the resources around fewer new data-collecting projects due to the wider reuse of existing data. These were among the justifications given in the national reports in favour of establishing the DAS in less developed countries like Albania and Kosovo.

Other perceived benefits include the fact that important national data can be preserved and used for longitudinal studies, such as evidence from ex-ante policy evaluations. Secondary data can bring value for teaching and training. Those arguments have been part of the reports and national development plans of some other countries, as was the case in Croatia and in Ireland.

RDM policy and support setting

One of the key elements of a data sharing ecosystem is national funders' policies for data documentation and management, facilitating data sharing and ethical and legal frameworks. A clear research data policy in a country prepares a space for an existing and emerging DAS to function more efficiently. A mature policy is exemplified by interview questions about the requirement to prepare a Data Management Plan (DMP), a recommendation about appropriate place of deposit, selection of data based on quality and reuse potential for long-term curation, and the importance of legal and ethical guidelines to attain clarity on the legal conditions framing the envisaged re-use of research data.

The EU commission has been active in setting the Open Science agenda for its members. The Open science policy platform contains references to European Open Science Cloud (EOSC), FAIR data and

other initiatives. With the launch of the Open Research Data Pilot in Horizon 2020 projects, the EOSC, the adoption of the Digital Single Markets strategy and the new Directive on Open Data and Public Sector Information, the RDM strategies and implementations are becoming an important factor in the research infrastructure development in countries where no formal DAS exists. Gradual implementation of the EU recommendations can be seen in the EU Commission report about current national open science policy activities (DGRI, 2018).

In the interviews, the topic was addressed from two angles. Following from the top-down requirements of the national research data policy aligned with the EU recommendations, the question was about how to support the bottom-up implementation. A notable example arises from Croatia, where the Croatian Initiative for the establishment of the Social Science Data Archive referred to a positive acceptance of the RDM training activities offered by them in different regions of the country. They have further speculated that the Croatian Science Foundation may extend the existing requirements for keeping research data from humanities to social sciences as well and that the future CESSDA Service Provider (SP) from the country can help to fulfil the requirements by offering a full range of data support services. Similarly, in Iceland, parallel to the three-year funding to build the DAS planned in 2019 at the Social Science Research Institute, the country is in a process of articulating the first Icelandic Research Infrastructure roadmap and a national policy for open access to data.

To conclude, we can observe the discrepancy between the sometimes-isolated policy plans in the countries, as visible in the EU reports about the national settings, and the reality of the low level of data sharing practices. A national DAS, that follows the CESSDA overall mission, can fill in that gap, including supporting data citation, and other incentives to the science community.

Data sharing culture

Attitudes, perceived barriers and incentives related to data sharing and RDM support and practices was the next topic of the interviews. Though data sharing culture is hard to assess objectively just by interviewing one or few informants from a country, the approach was to have informed country experts estimate, for example, the willingness of researchers to share data and the channels they use, and the experiences of researchers trying to obtain data when needed. Some of the questions addressed the rewards and career progression that someone could anticipate if they are active in open data sharing practices.

The answers reflect a generally low level of systemic data sharing and little or no awareness about best practices in managing and documenting data for reuse. In one of the interviews, an informant from Macedonia stated that currently *'(...)this is done on an individual basis by the involved researchers.'*

Countries with active initiatives for establishing the DAS can already show their visibility in their national setting, with researchers starting to think about data sharing from the project's beginning, and seeking collaboration with the DAS initiative. As reported in Croatia, the collaboration agreement with one of the projects *'will consist of preparation of the DMP, and final version of data for submission to the DAS service, with the purpose to further distribute data and promote its usage.'*

Data infrastructure

The assessment of data archive proto-activities in countries where no formal CESSDA membership exists was the main part of the recent CESSDA Widening 2018 reports. The focus of the description of the situation for the countries that do not have a national DAS was put on exploring the conditions for establishing a data service that could in the future obtain the role of a CESSDA national service provider. These were labelled as DAS proto-activities.

Some of the European countries have a long tradition of research data management (RDM) and data archiving in social sciences, while others are at the very beginning.

The overview of the profile and the organisational infrastructure shows that most organisations provide a publically available mission that clearly declares that it carries out the main required functions of a typical data archive. While the ambitions and potential for delivering a fully flagged DAS service are common to all types of organisations, the analysis also shows a substantial variation in some of the aspects of the maturity of self-assessments among the ‘aspiring’ members. Countries should provide long-term funds for the establishment and functioning of the DAS, in order to be able to fulfil the mission clearly stated in the documents. Sustainability of the DAS or the DAS initiative is the main problem in most of the countries considered in the reports. The main factor in sustainability is the lack of resources and the related absence of political support.

There are groups of countries that follow a similar path and have similar problems. In the first group are countries that are only at the beginning of their activities, and have made no firm decision about how to organise the DAS. Some institutions from those countries participated in some of the past CESSDA projects and were identified as potential partners, yet they do not show any recent activity on the institutional level, little or no advocacy or involvement in projects, and little or no political support. For some of those, no contacts could be established or there was no productive interview obtained in 2019, even though some of them participated in previous rounds of country reporting activities. The potential for future activities in existing human resources, technological infrastructures and support services (libraries, research institutes, and research information services) were areas addressed in the DAS proto-activities part of the assessments of the countries with no existing data infrastructure. These are countries like Cyprus, where the country report concludes with an observation: *‘Currently, there is no institutional and technical infrastructure for data deposit in SSH in Cyprus. Also, official steps or public initiatives towards establishing a DAS for the social sciences were not identified.’* The Kosovo DAS initiative representatives participated in the SEEDS project and continued their participation in the SaW, where areas of activities were strategically planned. Yet, upon requesting an update, the representatives explained, that currently, they *‘do not have any further comment to the state of the art and that they hope to find the support to boost the archive in Kosovo in the future’*. A similar situation has been found in Montenegro and Albania, even though both collaborated in writing the National development plans in previous rounds (CESSDA SaW, 2017b). A subgroup of the countries with no currently active initiative for establishing a DAS identified are Spain and Luxemburg, both of which had active social science data archives in the previous decades.

The next group consists of countries with a long established but very basic level of DAS service. The DAS have been running for some time on minimal financial and human resources. Usually, they are represented by a single person with little or no institutional support, seeking to reach the funder and decision-makers to help establish a more robust framework for a functioning DAS. The situation in

Poland is typical. Poland has the Polish Social Data Archive, ADS⁹, led by Marcin Zieliński for more than 20 years, sadly observing that despite a long tradition of making social research in Poland, *'most of the data have been already lost because of the lack of financial sources to preserve them and structural possibilities of long time preservation.'* Estonia, Romania, and Latvia have all been long established but unable to reach sufficient funding for a continuously running, mature DAS and lacking political support for the CESSDA country membership.

For those countries, the expertise has already been acquired in past years, by keeping in contact with the CESSDA Experts' community and participating in some of the projects. One of the most important ones was the SaW project, that in addition to the country's overall monitoring and planning, as already mentioned, also offered an introductory Core Trust Seal (CTS) training that experts from those countries attended (CESSDA SaW, 2017c). Voluntary self-assessment regarding the criteria of the CTS and organisational maturity self-assessment aimed for the country report was useful, as it actually demonstrated the lack of a sustainability component in its core. As observed, the DAS in those countries run without regular staff members, mainly on a voluntary basis of the involved individuals or as an in-kind contribution of host institutions.

Finally, there is a group of countries that are reaching the sufficient level of support from ministries and funders, while also showing a range of activities in improving the DAS. Among them are countries that were involved in all CESSDA widening projects, like Croatia and Serbia. Both became CESSDA members early in 2019. Those two countries started from scratch with the individuals who were involved in the series of widening projects, acquiring the necessary skills and competences and following the suggested advocacy and planning strategies. It took more than five years since the beginning of the first in a series, the SERSCIDA project, to reach success, and this is one of the biggest lessons learned - persistence eventually pays off. Macedonia reached membership status later this year, and Bosnia and Hercegovina, and Bulgaria, among the Balkan countries with no legacy of a DAS, have good prospects to gain support both nationally and institutionally.

Organisations in Italy, Ireland, Iceland, and Slovakia are active in extending their already established institutional services to nationwide services or consortia and are trying to gain ministry support for CESSDA membership. Belgium is unique within this group, as the country already obtained CESSDA membership status, parallel to the on-going SODA prototype project (Social Sciences Data Archive) which aims to set up a data archive in Belgium once again, as there was in the past. Common to all actively establishing organisations is detailed investigation about the technical and legal issues, in particular about the types of licenses and agreements with users, and the business model of the future.

Russia is a special case regarding CESSDA membership, since it is a non-EU country and therefore its inclusion probably demands a specifically developed legal framework. The Joint Economic and Social Data Archive (JESDA) has been running since the year 2000 with ambitions to actively contribute to a data sharing culture in the country by providing an extended training programme. The Ukrainian National Data Bank of Sociological Data "Kyiv Archive" as the national service provider for SSH data is in a similar position. The staff from both organisations attend events organised by the CESSDA lead projects, and actively contribute to the activities, including providing reports about the current situation regarding the DAS service and its environment.

Discussion

Visibility

Proto SPs gain their visibility in the national setting by being included in one or more CESSDA widening project activities. The CESSDA widening projects, following from the state-of-the-art national reports, provide a framework for 'proof of concept' of the the prototype DAS. National development plans and media packs are being produced in consecutive projects, with the guidance on the general OAI structure, actively adapted to specific national settings. Partners from institutions that collaborated in the widening projects that have either been working for some time already on the project of establishing a DAS, or are just starting, through their involvement in the projects catalyse the national discussion and help generate the network among different stakeholders. Thus, one important side product of the widening activities, both while preparing national reports and development plans, has been an updated contact list of the people in a country who were consulted in various phases of the project activities. Most importantly, when the decision makers and funders' representatives were involved in the National Development Plans, they added to the realistic planning and confirmation of the key aspects, including expectations regarding financial and political decisions about joining CESSDA and fulfilling their membership obligations.

The most effective way to gain a momentum of visibility was the opportunity for the new partners to host some of the planned conferences, meetings and workshops of the widening projects in their respective countries with financial support from the CESSDA projects. This was usually seen as an opportunity for the candidate National CESSDA SP to demonstrate to the national stakeholders their involvement in the professional community. The first day of a typical widening workshop was composed of an introductory session, where both national decision makers and an institution's leadership representatives were present, together with similarly profiled invited stakeholders from other countries. The aim was to present and exchange experiences both nationally and in European space¹⁰.

National development plans (NDP)

NDP addressed the series of challenges that a new DAS has to deal with (CESSDA SaW, 2017b). It starts with a mission and designate community statements. It covers the preservation policy, collection plan and organizational setting, including its board role, the staff composition and financial resources. The tools and services are described, either as a decision already taken or as a topic that needs to be dealt with in the next steps. The last round of the national reports considered the NDP fulfilment. What it showed is that the more detailed and specific to the circumstances of the organisation they are, the more effective they have been in their actual fulfilment. Among the countries that provided the NDP drafts during the SaW project, Kosovo, Montenegro and Albania didn't succeed in reporting on follow-up, however, all other countries are showing substantial progress.

Some of the partners were actively involved in the parallel CTS training and provisional self-assessments that were organized as the activity of the dedicated CESSDA Trust projects and continue to provide support for both members and non-members regarding gaining the CTS. Both NDP and CTS evaluation and planning processes follow the approach where guidance contains the range of options, and the organisations themselves realistically decide to choose the processing level and data complexity they feel capable to control, reflecting also on the national traditions of supply and demand for data. Thus the policy and organizational framework planning is structured around the decision to deal with anonymized data only, or to cover more complex services of secure access to sensitive personal data as well, including for example qualitative data. Most of the partners are engaged with different stakeholders to reach a more stable position, as seen from different projects

and activities reported on a country level. CESSDA Main Office has an active role in those countries, providing support letters or visits to the ministries' representatives. There is always an opportunity for experts from those institutions to collaborate in the CESSDA lead projects, and to participate in some of the workshops and training, which helps to sustain the professional contacts and to keep some minimal human resources involved.

Experts from different countries are seeking support in different areas that are covered in the resource directory, in particular looking for new shared tools for running a DAS. One of the areas identified during the SaW project is the customisation of DataVerse to the European setting with a simple docker installation, available for new or aspiring partners.

The CESSDA SaW and the WA 2018 projects prepared support packs for partners that address some of the problems identified. The WA 2018 project offered a Resource Directory (CESSDA WA, 2018a) that contains references to documents, training, tools and support services from the past CESSDA projects and from the SP's, addressing and analysing the needs of the partners that are expected to utilise the resources. The resources can help new partners build a professional basis in data archiving. The original resources from different SPs can also help the existing partners upgrade their services, for example in drafting the forms and agreements used in the DAS in relation to data deposit and access. Besides those, the resources that partners demand the most arise from the areas of technical infrastructure and funding and advocating for the DAS (CESSDA WA, 2018a), including references to the EU Open Science initiatives, and more clearly described criteria that the CESSDA members SP needs to fulfil.¹¹

In the new WA 2019 project the support extends to a mentorship programme, within which interested organisations with an ambition to improve on certain areas may apply to. The mentorship is delivered by the participating CESSDA SPs. Experts that are new to the CESSDA community and participated in the WA 2018 workshops and activities, expressed some concerns that the support information and resources are dispersed. The Expert guide on data archiving can fill that gap, customised to reflect the European DAS¹².

Conclusions

Parts of the conditions that affect the research data infrastructure concern the financial and institutional statuses of social sciences in each country. In some of the current CESSDA membership countries, we can find excellence in the development of social science that is supported with a robust and multifaceted research data service. What we often encounter at the other end is a syndrome of underdevelopment, where lack of funds affects every other aspect of the science system, including the infrastructure. Where social sciences have a low budget in general, there are usually also poor conditions for a data infrastructure. The impact of gradually establishing a robust data infrastructure in that case can have an even greater impact on building a data sharing culture and improving the excellence and the efficiency of research in general. If data is shared widely, it will have immediate effect through improved quality control and transparency of the research.

Focus for the countries that do not have a national DAS was put on exploring the conditions for establishing a data service that could in the future obtain the role of a CESSDA national SP. These conditions are to a large extent contained in the areas addressed in a wider data sharing ecosystem, such as the financial and structural conditions of the social sciences sectors, the scientific policy

requirements and norms established in the scientific community. These external stakeholders play their role in influencing the existence of a DAS and constitute a data sharing cultural environment.

There are internal stakeholders that are capable and willing to play a role in the establishment of new future services, and can bring current services to a higher maturity level. For the countries that do not have a running DAS, it is essential to ground the establishment of its services primarily on internal resources, which means finding the potential for future activities in existing human resources and organisational settings. The key factor in the slow but persistent growth of the CESSDA membership are enthusiastic and eager individuals that internalize as their mission the formation of a national DAS. Such individuals, at the beginning mainly supported by their home institutions (usually universities or research institutes), communicate and help to articulate the needs of their scientific and academic communities, by demonstrating the advantage of establishing a DAS. The lobbying activity with funders and decision makers eventually brings a change. The last part is probably the toughest, as evidenced by the many failed missions reported. The ministry staff is prone to fluctuations (frequently in some of the countries with a less stable political situation), and this may cause already obtained agreements fail.

The aims of the various widening projects are not fully accomplished, since full European coverage has not yet been obtained. New countries are joining or are about to join, which shows that the CESSDA widening projects add to catalysing the establishment of data services. The CESSDA, its national Service Providers and partners seek to continue their widening activities in some of the current and future projects¹³.

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End-notes

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² Strengthening and widening the European infrastructure for social science data archives project funded by the EU Horizon 2020 Research and Innovation Programme under the agreement No.674939. <http://cessdasaw.eu/about/>

³ *CESSDA Widening Activities 2018*, project under the call *CESSDA Work Plan Tasks 2018* <https://www.cessda.eu/About/Projects/Work-Plans/Work-Plan-2018#wide>

⁴ Arhiv Družboslovnih Podatkov [Social Science Data Archives, University of Ljubljana, Slovenia]. FORS – Swiss Foundation for Research in Social Sciences, ČSDA – Czech Social Science Data Archive, SND – Swedish National Data Service and TARKI – Foundation as project partners in WA 2018 contributed to the task.

⁵ See SERSCIDA project deliverables: Country mapping reports for Bosnia and Herzegovina, Croatia and Serbia. Project web: <http://www.serscida.eu/en/>; Deliverables: <http://www.serscida.eu/en/deliverables>

⁶ E.g. see https://www.adp.fdv.uni-lj.si/serscida_wp4_lj2013_working_visit/

⁷ Including SEEDS (South-Eastern European Data Services 2015-17; <http://seedsproject.ch>) project supported by Swiss National Funds; SaW, WA 2018 and 2019.

⁸ Update on current status of both members and partners with contact information of service providers is available at <https://www.cessda.eu/About/Consortium/CESSDA-Countries/>.

⁹ Polish Social Data Archive, ADS: <http://www.ads.org.pl>

¹⁰ See for example Strengthening And Widening Of The European Infrastructure Of Social Science Data Archives WA 2018 Workshop in Milano, Italy: <https://www.cessda.eu/widening2018/>, and Belgrade, Serbia: <https://www.cessda.eu/belgrade2018/>

¹¹ Compare: <https://www.cessda.eu/content/download/733/6532/file/Wittenberg.pdf>.

¹² Authors opinion is that Curating Research Data, Volume Two: A Handbook of Current Practice could serve as approximation for that purpose.

¹³ See Service Providers' tools & services on <https://www.cessda.eu/Tools-Services/For-Service-Providers>.