# RDA: Who? What? Where?

Introducing the Research Data Alliance and its Opportunities
for the Social Sciences

Ricarda Braukmann

Data Archiving and Networked Services (DANS)

National Node: RDA in the Netherlands

December 2019





# **Table of Contents**

1	Aim of	f this report	
2	What	is the RDA?	4
3	RDA a	nd the Social Sciences	6
		stegorization of the RDA groups and outputs	
	3.2 In	terest Groups	8
	3.2.1		
	3.2.2	Specific topics	
		orking Groups	
	3.3.1		
	3.3.2	Specific topics	
	3.4 Re	ecommendations and Outputs	14
	3.4.2	Specific topics	
	_		
4	Conclu	ısion	16
5	Glossa	ıry	17
6	Annen	ndix	18
_	, , , , p c i ,	.A./	



# 1 Aim of this report

This report aims to provide an introduction of the Research Data Alliance (RDA) for social science researchers. It summarizes the outcomes of an analysis of the RDA groups and outcomes and their relevance for scientists within the domain of social sciences. This report is an updated version of a report previously published in August 2018 which is available on Zenodo<sup>1</sup>. This work was executed as part of the RDA Europe 4.0 project<sup>2</sup> in which Data Archiving and Networked Services (DANS)<sup>3</sup> acts as a national RDA node in the Netherlands and as an ambassador for the social sciences.

In this report, a brief introduction of the RDA is given, followed by an outline of the current RDA Interest and Working Groups as well as the RDA outputs and recommendations (status October 2019). Groups and outputs were analyzed with respect to their relevance for social science researchers and the work considered most important for this target audience is highlighted. Social sciences in this context should be understood as the broad field of research that is concerned with "society and the relationships among individuals within a society"<sup>4</sup>. This definition includes, but is not limited to, the field of sociology, anthropology, communication sciences, psychology, educational sciences, pedagogics and economics.

This report should be seen as a starting point for researchers working within this domain to get acquainted with the RDA and identify work that would be interesting for them. This analysis can, in addition, be used by research supporters as basis to provide information to scientists at events or conferences specifically addressing the social science community.

<sup>2</sup> https://www.rd-alliance.org/rda-europe

<sup>3</sup> https://dans.knaw.nl/en/

<sup>4</sup> https://en.wikipedia.org/wiki/Social\_science



## 2 What is the RDA?

The Research Data Alliance, short RDA, is a community-driven organization that was launched in 2013 by the European Commission, the United States Government's National Science Foundation and National Institute of Standards and Technology, and the Australian Government's Department of Innovation. The goal of the RDA is to build the social and technical infrastructure that is needed to enable open sharing of data. The organization envisions "researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society"<sup>5</sup>. Since 2013, the EU has supported RDA activities within Europe, by funding Europe-specific projects such as RDA Europe 4.0 which was launched in March 2018 (with a duration of 27 months) and for which this report was produced.

In August 2019, the RDA counted over 8800 members from 137 different countries and from various backgrounds, including data professionals researchers, librarians and policy developers. Individual membership to the RDA is free for anyone who supports the RDA mission and its guiding principles (see Figure 1).

#### OPENNESS

Membership is open to all interested individuals who subscribe to the RDAs Guiding Principles. RDA community meetings and processes are open, and the deliverables of RDA working Groups will be publicly disseminated.

#### O CONSENSUS

The RDA moves forward by achieving consensus among its membership. RDA processes and procedures include appropriate mechanisms to resolve conflicts.

#### BALANCE

The RDA seeks to promote balanced representation of its membership and stakeholder communities.

#### HARMONIZATION

The RDA works to achieve harmonization across data standards, policies, technologies, infrastructure and communities.

#### O COMMUNITY - DRIVEN

The RDA is a public, community-driven body constituted of volunteer members and organizations, supported by the RDA Secretariat.

#### NON-PROFIT

RDA does not promote, endorse, or sell commercial products, technologies or services.

ip.



RESEARCH DATA ALLIANCE

GUIDING

**PRINCIPLES** 



RDA members can join **Interest Groups** (IGs) and **Working Groups** (WGs) focused on various topics related to data sharing and innovation. Both IGs and WGs undergo a review process before they are established and endorsed by the RDA.

IGs consists of experts from the community and serve as a platform for exchange. IGs produce outputs such as surveys, recommendations, reports, and can initiate new WGs. While IGs can be active over longer periods of time, WGs have a fixed period of 12 to 18 months during which members work on concrete outputs. WG outputs can include, for instance, technical specifications, conceptual models or frameworks, or implemented policies.

An important event at which members of the RDA come together are the **RDA Plenaries**. Plenaries are held every six months in different places around the world and serve as an important point of contact where the communities are brought together and where WGs and IGs present and discuss their work.

Find information about					
RDA in general	www.rd-alliance.org				
Interest Groups	www.rd-alliance.org/groups/interest-groups				
Working Groups	www.rd-alliance.org/groups/working-groups				
Recommendations & Outputs	www.rd-alliance.org/recommendations-and-outputs/all-				
	recommendations-and-outputs				
RDA Europe 4.0 Project	www.rd-alliance.org/rda-europe				
RDA on Twitter	@resdatall   @RDA_Europe   @RDA_US				
RDA on LinkedIn	www.linkedin.com/in/researchdataalliance/				
RDA Contact	www.rd-alliance.org/contact				
RDA and the Social Sciences	www.rd-alliance.org/rda-disciplines/rda-and-social-sciences				

Table 1. This table gives an overview of where to find information about the RDA online. All weblinks where accessed 29-10-2019.



## 3 RDA and the Social Sciences

The following part of this report provides an overview of the RDA IGs, WGS and Outputs which are of particular interest for researchers working within the field of social sciences.

To establish an overview of the RDA work, a list of the current IGs and WGs was taken from the RDA website in October 2019<sup>6,7</sup>. The IGs and WGs were then classified into broader categories (see 3.1) to structure the presentation and give a quick overview of the different aspects that are addressed by the RDA. Finally, the relevance of the IGs, WGs and Outputs for the social sciences was evaluated and the results of this evaluation are summarized in section 3.2 to 3.3 below.

# 3.1 Categorization of the RDA groups and outputs

The described analysis was performed in October 2019 when 56 Interest groups (IGs) and 32 Working Groups (WGs) were listed on the RDA website<sup>5,6.</sup> In order to establish a manageable overview of the

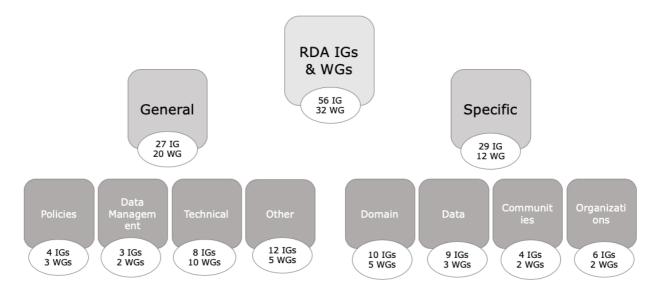


Figure 2. This Figure illustrates the classification that was adopted to group the Interest Groups (IGs) and Working Groups (WGs) into logical larger units to provide an overview of the work that is performed within the RDA.

6 https://www.rd-alliance.org/groups/interest-groups 7 https://www.rd-alliance.org/groups/working-groups



different aspects that are addressed by the RDA, the IGs and WGs as well as their corresponding outputs were grouped into larger units by classifying the groups into different categories according to the topics they are dealing with. The same classification was used as in the previous report<sup>8</sup> and it was chosen to create logical sub-groups suitable for this analysis focused on social sciences researchers. It should be noted that for other purposes and audiences, other classifications may be more appropriate. In addition, the RDA has since the publication of the first version of this report in August 2018 worked on a classification scheme for IG and WGs. This scheme classifies groups according to "Main Focus" and "Domain/Field of Expertise". Anyone interested in the RDA can now search for groups and outputs using these criteria (see Table 2).<sup>9</sup> In addition, dedicated pages for different disciplines on the RDA website<sup>10</sup>, including the social sciences<sup>11</sup> have also been created based on these efforts. The social science domain page is a good starting point for social science researchers to get to know the RDA and WGs and IGs relevant to this field.

Main Focus	Domain/Field of Expertise			
Data Management	Domain Agnostic			
Data Collection	Social Sciences			
Data Description	Natural Sciences			
Identity, Store, and Preserve	Engineering and Technology			
Disseminate, Link, and Find	Medical and Health Sciences			
Policy, Legal Compliance, and Capacity	Aricultural Sciences			
Not applicable	Humanities			

Table 2. Search criteria established by the RDA along which groups and outputs can be searched for on the RDA website $^{12}$ .

The classification that was applied for this report had two levels and a schematic overview is given in Figure 2. In a first step, groups were divided into General vs. Specific topics: Groups covering domain-general topics, such as data management or infrastructure development, were classified as *general*, whereas groups dealing with specific data, domains or communities were classified as *specific*.

8 https://doi.org/10.5281/zenodo.1401105

9 https://www.rd-alliance.org/rda-for-you

10 https://www.rd-alliance.org/rda-disciplines

11 https://www.rd-alliance.org/rda-disciplines/rda-and-social-sciences

12 https://www.rd-alliance.org/rda-for-you



In a second step, the general groups were divided into four categories: Policies and guidelines, data management, technical and infrastructure, and other (i.e. groups concerning domain-general topics that did not fit any of the prior three categories). The specific groups were also sub-divided into four categories: Domains, data, communities, and organizations.

Consecutively, for all IGs and WGs the description on the RDA website was studied in order to establish their relevance for social sciences researchers. Three categories were used: Groups were considered *highly relevant* if they covered topics that should be of interest for social sciences researchers in general. These topics, for instance, include dealing with privacy-sensitive data or RDA work on research data management. Groups that may be interesting for social sciences researchers depending on their exact field of research or particular interest were labeled as *moderately relevant*. This category includes, for instance, groups working on big data or within the field of linguistics. RDA groups that did not fit into these prior categories were labeled as being *low* in *relevance*. It should be noted that our analysis aims to give a broad perspective on relevance for social sciences, and that groups or outcomes classified as low relevance may still be interesting for a particular social sciences researcher interested in specific topics. Our analysis should be seen as a starting point for social science researchers that are new to the RDA and wish to receive some guidance through the large amount of work and topics covered by the RDA.

Below the results of the group and outcome assessment are presented, following the structure of the categorization described above. An overview of the results can be seen in the Appendix and the dataset has also been published on Zenodo (DOI: 10.5281/zenodo.3580618).

# 3.2 Interest Groups

In the following, an overview is given of the Interest Groups (IGs) that can be considered highly or moderately relevant for social sciences researchers. An overview of all IGs is given in the Appendix.

#### 3.2.1 General topics

#### 3.2.1.1 Policies and guidelines



All of the IGs in this category where classified as either highly or moderately relevant to social science researchers as these groups are engaged in creating policies and guidelines for general issues related to (open) research data. One group is considered highly relevant for social sciences researchers, namely the Ethics and Social Aspects of Data IG<sup>13</sup> which is concerned with ethical and social issues with respect to data archiving, sharing, and reuse. Given that most social sciences researchers deal with sensitive data that impose ethical issues, this IG is considered highly relevant for the community. The three other IGs in this category may also be interesting for social sciences researchers, but their relevance is more dependent on the interest and specific field of the particular researcher. The groups deal with basic concepts and framework models (Data Foundations and Terminology IG<sup>14</sup>), legal interoperability (RDA/CODATA Legal Interoperability IG<sup>15</sup>), and data policies that support publication of research (Data policy standardization and implementation IG<sup>16</sup>).

#### 3.2.1.2 Data Management

As with policies and recommendations, all groups within the Data Management category can be considered highly or moderately relevant for social sciences researchers. In particular, the <u>Education and Training on handling of research data IG<sup>17</sup></u> is seen as highly relevant as it fosters the exchange of information about developments and initiatives for trainings on how to manage research data throughout the data lifecycle. The other two IGs may be relevant for social sciences researchers interested in Data Management Plans (<u>Active Data Management Plans IG<sup>18</sup></u>) or data documentation and metadata (Data in Context IG<sup>19</sup>)

#### 3.2.1.3 Technical and infrastructure

Although associated outputs of IGs and related WGs dealing with technical aspects and infrastructure developments such as persistent identifiers, data provenance, or virtual research environments can be of interest for the social sciences, the IGs in this category were overall considered less relevant for social science researchers than the other categories. One IG that may be interesting for social science

 $<sup>^{13}\</sup> https://www.rd-alliance.org/groups/ethics-and-social-aspects-data.html$ 

 $<sup>^{14}\,</sup>https://www.rd-alliance.org/groups/data-foundations-and-terminology-ig.html$ 

 $<sup>^{15}\</sup> https://www.rd-alliance.org/groups/rdacodata-legal-interoperability-ig.html$ 

 $<sup>^{16}\</sup> https://www.rd-alliance.org/groups/data-policy-standardisation-and-implementation$ 

 $<sup>^{17}\,</sup>https://www.rd-alliance.org/groups/education-and-training-handling-research-data.html$ 

<sup>18</sup> https://www.rd-alliance.org/groups/active-data-management-plans.html

 $<sup>^{\</sup>rm 19}$  https://www.rd-alliance.org/groups/data-context-ig.html



researchers, however, is the Virtual Research Environment IG<sup>20</sup>. This IG is exploring all aspects of existing and planned future Virtual Research Environments with the aim of moving towards common policies and best practices.

#### 3.2.1.4 Other general topics

There are three additional IGs that can be considered highly relevant for social sciences researchers. Firstly, the <u>Disciplinary Collaboration Framework IG<sup>21</sup></u> aims to bring together different research disciplines to discuss disciplinary-specific use cases of RDA outputs and provide room for exchange and harmonization across disciplines. Such an IG is considered relevant for social sciences researchers as they can learn from use cases by other disciplines and represent the social sciences perspective. Secondly, the Data Discovery Paradigms IG<sup>22</sup> aims to improve the discovery of research data and may hence be highly relevant for social sciences researchers interested in finding and reusing data or making their own data findable. Lastly, the Sharing Rewards and Credit (SHARC) IG<sup>23</sup> is seeking to understand and improve the crediting and rewarding mechanisms in the data and resources sharing process. It currently covers several disciplines but lacks social sciences representatives despite being a general topic that is of interest to all communities and hence also to social science researchers. Besides these three highly relevant groups, eight groups can be considered moderately relevant, depending on the specific interest of the social sciences researcher. These groups deal with data commons (Coordinating the Global Open Research Commons IG<sup>24</sup>), rescue of data (Data Conservation IG<sup>25</sup>), the implementation of the FAIR principles (GO FAIR IG<sup>26</sup>), the development of a survey on Open Science Practices (IG for Surveying Open Data Practices<sup>27</sup>), Social challenges of data interoperability (Social Dynamics of Data Interoperability IG<sup>28</sup>) vocabulary services (Vocabulary Services IG<sup>29</sup>), concepts of data (From Observational Data to Information IG<sup>30</sup>), research data sharing (Open Questionnaire for

10

<sup>&</sup>lt;sup>20</sup> https://www.rd-alliance.org/groups/vre-ig.html

<sup>&</sup>lt;sup>21</sup> https://www.rd-alliance.org/groups/disciplinary-collaboration-framework-ig

<sup>&</sup>lt;sup>22</sup> https://www.rd-alliance.org/groups/data-discovery-paradigms-ig

<sup>&</sup>lt;sup>23</sup> https://www.rd-alliance.org/groups/sharing-rewards-and-credit-sharc-ig

<sup>24</sup> https://www.rd-alliance.org/groups/coordinating-global-open-research-commons-ig

<sup>25</sup> https://www.rd-alliance.org/groups/data-conservation-ig

<sup>26</sup> https://www.rd-alliance.org/groups/go-fair-ig

<sup>27</sup> https://www.rd-alliance.org/groups/ig-surveying-open-data-practices

<sup>28</sup> https://www.rd-alliance.org/groups/social-dynamics-data-interoperability-ig

<sup>29</sup> https://www.rd-alliance.org/groups/vocabulary-services-interest-group.html

 $<sup>{\</sup>tt 30\,https://www.rd-alliance.org/groups/observational-data-information-ig}$ 



Rescue IG<sup>32</sup>) and last but not least metadata (Metadata IG<sup>33</sup>)

### 3.2.2 Specific topics

#### 3.2.2.1 Domain

The most important RDA group for the social sciences is the recently established <u>Social Science Research Data IG<sup>34</sup>.</u> This groups aims to foster exchange between various professionals on issues particular to data originating from the social sciences and humanities. In addition, there are a couple of domain-specific groups that may be interesting for social scientists. Whether or not a domain-specific group is relevant of course highly depends on the specific field of research, therefore groups covering specific topics received the label moderately relevant. The following three domain-specific groups may be considered relevant for social sciences researcher: <u>Digital Practices in History and Ethnography IG<sup>35</sup></u>, <u>Linguistics Data IG<sup>36</sup> and the ELIXIR Bridging Force IG<sup>37</sup> working within the field of life sciences</u>.

#### 3.2.2.2 Data

Similar to domain-specific groups, data-specific groups may or may not be interesting for a social science researcher depending on their exact field of research. Taking a broad perspective on social sciences, we would consider four data-specific IGs as (potentially) relevant. The <u>RDA/NISO Privacy Implications of Research Data Sets IG<sup>38</sup></u> should be of interest to most social scientists as it discusses issues regarding data containing human subject information. In addition, IGs concerning developmental studies (<u>Data for Development IG<sup>39</sup></u>), big data (<u>Big Data IG<sup>40</sup></u>) and health data (<u>Health Data IG<sup>41</sup></u>) may also be considered relevant for researchers in the social sciences.

```
31 https://www.rd-alliance.org/groups/open-questionnaire-research-data-sharing-survey-ig
```

<sup>32</sup> https://www.rd-alliance.org/groups/data-rescue.html

<sup>33</sup> https://www.rd-alliance.org/groups/metadata-ig.html

<sup>34</sup> https://www.rd-alliance.org/groups/social-science-research-data-ig

 $<sup>35\</sup> https://www.rd-alliance.org/groups/digital-practices-history-and-ethnography-ig.html$ 

<sup>36</sup> https://www.rd-alliance.org/groups/linguistics-data-ig

<sup>37</sup> https://www.rd-alliance.org/groups/elixir-bridging-force-ig.html

<sup>38</sup> https://www.rd-alliance.org/groups/rdaniso-privacy-implications-research-data-sets-wg.html

<sup>39</sup> https://www.rd-alliance.org/groups/data-development.html

<sup>40</sup> https://www.rd-alliance.org/groups/big-data-analytics-ig.html

<sup>41</sup> https://www.rd-alliance.org/groups/health-data.html



#### 3.2.2.3 Communities and organizations

The last two classes of specific IGs concern specific communities or organizations (such as libraries, universities and research institutions). Most IGs within these two categories seem not directly relevant to social science researchers. Two IGs that may be considered relevant, however, are the <u>RDA for the Sustainable Development Goals IG<sup>42</sup></u> which is related to the <u>Data for Development IG</u>, and the <u>Early Career and Engagement IG<sup>43</sup></u>. The latter IG is established for early career researchers and RDA newcomers and helps its members to get a better understanding of the RDA and its working procedures. It is hence an interesting group for social sciences researchers who are new to the RDA and who would like some support in finding their way within the RDA.

## 3.3 Working Groups

In the following, an overview is given of the RDA Working Groups (WGs) that can be considered highly or moderately relevant for social sciences researchers. Since there are fewer WGs than IGs and as WGs deal with specific topics or use cases, overall fewer groups were classified as highly or moderately relevant for social sciences researchers.

## 3.3.1 General topics

Out of all 20 working groups dealing with general topics, two WGs were classified as highly relevant and six WGs were classified as moderately relevant for social science researchers.

Firstly, the Exposing Data Management Plans WG<sup>44</sup> was considered relevant as it aims to take a user perspective on Data Management Plans (DMPs) as well as addressing current problems concerning the lack of standards for DMPs. It is a valuable WG for social science researchers who would like to discuss and be involved in recent and upcoming developments concerning data management. The second group that was classified as highly relevant is the RDA/WDS Publishing Data Workflows WG.<sup>45</sup> This WG is concerned with data publishing and is working on an analysis of existing and emerging

<sup>43</sup> https://www.rd-alliance.org/groups/early-career-and-engagement-ig

<sup>44</sup> https://www.rd-alliance.org/groups/exposing-data-management-plans-wg

<sup>45</sup> https://www.rd-alliance.org/groups/rdawds-publishing-data-workflows-wg.html



workflows and standards for data publishing within different disciplines. As data sharing becomes increasingly relevant for researchers of all fields, this WG may provide a useful overview of the current state for social sciences researchers.

General WGs that may further be interesting for social science researchers cover a WG on FAIR data maturity (FAIR Data Maturity Model WG<sup>46</sup>), data usage metrics (Data Usage Metrics WG<sup>47</sup>), creating on a catalogues of metadata standards (Metadata Standards Catalog WG<sup>48</sup>) and a WG working on metadata for physical objects (RDA / TDWG Metadata Standards for attribution of physical and digital collections stewardship<sup>49</sup>). In addition, the Preserving Scientific Annotation WG<sup>50</sup> concerned with methodologies on annotation of digital resources across domains, and the Software Source Code Identification WG<sup>51</sup> discussing the identification of software artifacts may be of interest to social science researchers as well.

### 3.3.2 Specific topics

Most WGs dealing with specific topics do not seem directly relevant to social science researchers and hence only three WGs have been labeled as moderately relevant. Firstly, scientists working closer to the field of humanities may find the Empirical Humanities Metadata Working Group<sup>52</sup> interesting for their work. Secondly, the Reproducible Health Data Services WG<sup>53</sup> may be of interest for social scientists working in the field of health data. Last but not least the FAIRSharing Registry: connecting data policies, standards & databases WG<sup>54</sup> working on a searchable registry with information about databases, content standards, and journal and funder policies in the life sciences may be of interest for social scientists working close to the life science.

<sup>46</sup> https://www.rd-alliance.org/groups/fair-data-maturity-model-wg

<sup>47</sup> https://www.rd-alliance.org/groups/data-usage-metrics-wg

<sup>48</sup> https://www.rd-alliance.org/groups/metadata-standards-catalog-working-group.html

 $<sup>49\</sup> https://www.rd-alliance.org/groups/metadata-standards-attribution-physical-and-digital-collections-stewardship.html$ 

<sup>50</sup> https://www.rd-alliance.org/groups/preserving-scientific-annotation-wg

<sup>51</sup> https://www.rd-alliance.org/groups/software-source-code-identification-wg

<sup>52</sup> https://www.rd-alliance.org/groups/empirical-humanities-metadata-working-group.html

<sup>53</sup> https://www.rd-alliance.org/groups/reproducible-health-data-services-wg

<sup>54</sup> https://www.rd-alliance.org/group/fairsharing-registry-connecting-data-policies-standards-databases.html



# 3.4 Recommendations and Outputs

The RDA website at the time of writing listed 33 Outputs<sup>55</sup>. The RDA uses three classifications for the outputs: RDA Recommendations, Supporting Outputs, and Other Outputs.

*RDA Recommendations* have undergone formal phases of discussion, comment and decision making and are "produced by RDA Working Groups and are the official, endorsed results of RDA and considered our 'flagship' Outputs". *Supporting Outputs* have undergone community review and "are useful solutions from our RDA Working and Interest Groups, but may not be as clearly adoptable by organizations as our RDA Recommendations". Lastly, *Other Outputs* describe resources requested by a Working Group or Interest Group to be published on the RDA website, but have received no level of endorsement <sup>56</sup>.

From the 24 Outputs listed on the RDA website, ten outputs were *RDA Recommendations*, six were *Supporting Outputs* and eight were *Other Outputs*.

In our analysis, we did not further distinguish the status of the output, but rather focused on the relevance for social sciences researchers. The results are reported within the same classification framework that was used to group the IGs and WGs (see 3.1).

#### 3.4.1 General topics

There are two outputs that we classified as covering general topics that were considered highly relevant for social sciences researchers.

The <u>Metadata Standards Directory</u><sup>57</sup> output provides access to a directory of metadata standards for documenting research data, regardless of academic discipline. It features information for metadata in the social sciences and can therefore be seen as a useful tool for social sciences researchers.

Secondly, the output on <u>Eleven Quick Tips for Finding Research Data</u><sup>58</sup> provides eleven practical tips for data discovery which can be useful for social sciences researcher to effectively discover the data that meet their specific needs.

<sup>56</sup> https://rd-alliance.org/recommendations-and-outputs/all-recommendations-and-outputs

<sup>57</sup> rd-alliance.github.io/metadata-directory/

 $<sup>58\</sup> http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1006038$ 



In addition, five outputs were classified as moderately relevant. Firstly, <u>A curriculum for foundational Research Data Science skills for Early Career Researchers</u> may be of interest to those social science researchers working in education or with data science. This output describes the curriculum and example materials that were used for Early Career Researchers (ECR's) to teach them the basic skills in Data Science needed for their data.

Next, the output on <u>Legal Interoperability of Research Data: Principles and Implementation Guidelines</u><sup>60</sup> provides a set of practical guidelines for researchers dealing with the legal aspects entailed in the sharing of data and may therefore be interesting for social sciences researchers dealing with legal issues concerning their data.

Third, the output entitled <u>23 Things: Libraries For Research Data</u> <sup>61</sup> provides an overview of free online tools and resources that libraries for research data can use to incorporate research data management into their practice of librarianship. Although addressed at libraries, information about the available tools may be interesting for social scientists as well.

Another output that may interest social science researchers is <u>A survey of current practices in data search services<sup>62</sup></u> which was developed by the Data Discovery Paradigms IG. In the survey the group gathered information about practices and recommendations by data repositories in implementing relevancy ranking in search systems which may be relevant for social science researchers who are interested in data discovery and search improvements.

Finally, the output on <u>Workflows for Research Data Publishing: Models and Key Components</u><sup>63</sup> assists research communities in understanding their options for data publishing workflows and aims to increase awareness of emerging standards and best practices which can be useful for social sciences researchers who wish to increase their knowledge on data publishing.

#### 3.4.2 Specific topics

Of the recommendation concerning specific domains or communities, we found two outputs potentially relevant for social science researchers. The first output is <u>Addressing the Gaps:</u> Recommendations for Supporting the Long Tail of Research Data<sup>64</sup> and deals with long tail research

59 https://www.rd-alliance.org/group/rdacodata-summer-schools-data-science-and-cloud-computing-developing-world-wg/outcomes-0

<sup>&</sup>lt;sup>60</sup> doi: 10.5281/zenodo.162241

<sup>&</sup>lt;sup>61</sup> rd-alliance.org/group/libraries-research-data-ig/outcomes/23-things-libraries-research-data-supporting-output

 $<sup>^{62}\</sup> https://www.rd-alliance.org/group/data-discovery-paradigms-ig/outcomes/survey-current-practices-data-search-services$ 

<sup>&</sup>lt;sup>63</sup> doi: 10.15497/RDA00004 <sup>64</sup> doe: 10.15497/RDA00023



data which can apply to social sciences researchers. This output contains seven recommendations to support the long tail of research data and outlines the specific and unique data management challenges that come with such data. The second output that may be relevant for social science researchers working in the field of agriculture and nutrition is 39 Hints To Facilitate The Use Of Semantics For Data On Agriculture And Nutrition<sup>65</sup>. This output highlights several issues that need to be addressed to improve the use of semantics in this field of research.

4 Conclusion

This report presented the results of an analysis of RDA Interest, Working Groups and Outputs relevant for social science researchers. It consists of an updated version of a report previously published in August 2018<sup>66</sup>.

A brief introduction to the RDA was given to provide basic knowledge of the organization, its structure and way of working. In the following, a comprehensive analysis of all current RDA work has been presented and was evaluated with respect to its relevance for researchers working within the social sciences.

Seven IGs, two WGs and two RDA outcomes were classified as particularly relevant to the social science community, covering the recently established Social Science Research Data IG, as well as topics like sensitive data, training and data management planning, data discovery and standards for discipline-specific metadata (see Appendix for an overview of all groups and outcomes).

This report can be used as an initial guidance, pointing social scientists towards potentially interesting work of the RDA that they can use within their own field of research. It provides a starting point for finding a way through the large number of diverse groups that operate within the RDA. Identifying topics most relevant to the social sciences community should enhance the visibility of the RDA within this specific domain, encouraging social science researchers to engage (more) with the RDA in the future.

 $65\ https://www.rd-alliance.org/group/agrisemantics-wg/outcomes/39-hints-facilitate-use-semantics-data-agriculture-and-nutrition$ 

66https://doi.org/10.5281/zenodo.1401105



# 5 Glossary

Abbreviation	Full term
RDA	Research Data Alliance
IG	Interest Group
WG	Working Group
DMP	Data Management Plan



# 6 Appendix

Overview of the analysis of the RDA IGs [A], WGs [B] and Outputs [C] and their relevance for the social sciences. This dataset has also been published on Zenodo (DOI: 10.5281/zenodo.3580618).

Α

Interest Groups	Classification	Sub-Classification Topic		Relevance
Ethics and Social Aspects of Data IG	[1] General	[1] Policies and Guidelines	Ethics	high
Data Foundations and Terminology IG	[1] General	[1] Policies and Guidelines	Vocabulary agreements	moderate
RDA/CODATA Legal Interoperability IG	[1] General	[1] Policies and Guidelines	Legal interoperability	moderate
Data policy standardisation and implementation	[1] General	[1] Policies and Guidelines	Supporting publication of	moderate
Education and Training on handling of research data IG	[1] General	[2] Data Management	research Education and Training	high
Active Data Management Plans IG	[1] General	[2] Data Management	Data Management Plans	moderate
Data in Context IG	[1] General	[2] Data Management	Metadata	moderate
Data Fabric IG	[1] General	[3] Technical and Infrastructure	Data creation and	low
Federated Identity Management	[1] General	[3] Technical and Infrastructure	consumption Federated Identity Management	low
Open Science Graphs for FAIR Data IG	[1] General	[3] Technical and Infrastructure	Connecting research data	low
PID IG	[1] General	[3] Technical and Infrastructure	PID	low
RDA/CODATA Materials Data, Infrastructure &	[1] General	[3] Technical and Infrastructure	Infrastructure and	low
Interoperability IG Repository Platforms for Research Data IG	[1] General	[3] Technical and Infrastructure	Interoperability Repository platforms	low
Software Source Code IG	[1] General	[3] Technical and Infrastructure	Software source code	low
Virtual Research Environment IG (VRE-IG)	[1] General	[3] Technical and Infrastructure	Virtual Research Environment	moderate
Disciplinary Collaboration Framework IG	[1] General	[4] Other	Bringing disciplines together	high
Data Discovery Paradigms IG	[1] General	[4] Other	Data Discovery	high
Sharing Rewards and Credit (SHARC) IG	[1] General	[4] Other	Crediting and reward	high
Coordinating the Global Open Research Commons IG	[1] General	[4] Other	mechanisms in data sharing Data commons	moderate
Data Conservation IG	[1] General	[4] Other	Data Rescue	moderate
GO FAIR IG	[1] General	[4] Other	Implementing the FAIR	moderate
IG for Surveying Open Data Practices	[1] General	[4] Other	principles Survey	moderate
Social Dynamics of Data Interoperability IG	[1] General	[4] Other	Social challenges of data	moderate
Vocabulary Services Interest Group	[1] General	[4] Other	interoperability Vocabulary services	moderate
Data Rescue IG	[1] General	[4] Other Data Rescue		moderate
Metadata IG	[1] General	[4] Other	Metadata	moderate
Data Economics IG	[1] General	[4] Other	Data as economic good	low



Interest Groups	Classification	Sub-Classification	Topic	Relevance
Social Science Research Data IG	[2] Specific	[1] Domain	Social Sciences and Humanities	high
Digital Practices in History and Ethnography IG	[2] Specific	[1] Domain	History and Ethnography	moderate
Linguistics Data IG	[2] Specific	[1] Domain	Linguistics	moderate
ELIXIR Bridging Force IG	[2] Specific	[1] Domain	Life Sciences	moderate
Research Data Management in Engineering IG	[2] Specific	[1] Domain	Engineering	low
Agricultural Data Interest Group (IGAD)	[2] Specific	[1] Domain	Agriculture	low
ESIP/RDA Earth, Space, and Environmental	[2] Specific	[1] Domain	Earth, Space and	low
Sciences IG Geospatial IG	[2] Specific	[1] Domain	Environmental Sciences Geospatial data	low
Global Water Information IG	[2] Specific	[1] Domain	Water Information	low
Research data needs of the Photon and Neutron Science community IG	[2] Specific	[1] Domain	stakeholders Photon and Neutron Science	low
RDA/NISO Privacy Implications of Research Data	[2] Specific	[2] Data	Data containing human	high
Sets IG  Data for Development IG	[2] Specific	[2] Data	subject information Development Studies	moderate
Big Data IG	[2] Specific	[2] Data	Big Data	moderate
Health Data Interest Group	[2] Specific	[2] Data	Health Data	moderate
Biodiversity Data Integration IG	[2] Specific	[2] Data	Biodiversity	low
Chemistry Research Data IG	[2] Specific	[2] Data	Chemistry	low
International Indigenous Data Sovereignty IG	[2] Specific	[2] Data	Indigenous Data	low
Physical Samples and Collections in the Research	[2] Specific	[2] Data	Physical samples	low
<u>Data Ecosystem IG</u> <u>Small Unmanned Aircraft Systems' Data IG</u>	[2] Specific	[2] Data	Small Unmanned Aircraft Systems	low
RDA for the Sustainable Development Goals	[2] Specific	[3] Community	Developing world	moderate
Early Career and Engagement IG	[2] Specific	[3] Community	Early and Mid-Career	moderate
CODATA/RDA Research Data Science Schools for Low and Middle Income Countries	[2] Specific	[3] Community	Researchers Low and Middle Income Countries	low
Libraries for Research Data IG	[2] Specific	[3] Community	Librarians	low
Research Funders and Stakeholders on Open Research and Data Management Policies and	[2] Specific	[4] Organisations	Funders	low
<u>Practices IG</u> <u>Archives and Records Professionals for Research</u>	[2] Specific	[4] Organisations	Repositories	low
<u>Data IG</u> <u>Domain Repositories Interest Group</u>	[2] Specific	[4] Organisations	Domain repositories	low
National Data Services IG	[2] Specific	[4] Organisations	National Data Services	low
RDA/WDS Certification of Digital Repositories IG	[2] Specific	[4] Organisations	Certification of repositories	low
Research Data Architectures in Research	[2] Specific [4] Organisations Research institutions		low	
Institutions IG  Total	56			

IGs which were added since the last report in August 2018 are highlighted grey



В

Working Group	Classification	Sub-classification	Topic	Relevance
Data Usage Metrics WG	[1] General	[1] Policies and guidelines	Data usage metrics	moderate
FAIR Data Maturity Model WG	[1] General	[1] Policies and Guidelines	FAIR data	moderate
<u>Data Citation WG</u>	[1] General	[1] Policies and guidelines	Data citation	low
Exposing Data Management Plans WG	[1] General	[2] Data Management	Data Management Plans	high
DMP Common Standards WG	[1] General	[2] Data Management	Machine-actionable DMPs	low
InteroperAble Descriptions of Observable Property Terminology WG (I-ADOPT WG)	[1] General	[3] Technical and Infrastructure	Interoperability	low
Preserving Scientific Annotation WG	[1] General	[3] Technical and Infrastructure	Scientific Annotations	moderate
Brokering Framework Working Group	[1] General	[3] Technical and Infrastructure	Brokering	low
Data Description Registry Interoperability (DDRI) WG	[1] General	[3] Technical and Infrastructure	Data description	low
Data Versioning WG	[1] General	[3] Technical and Infrastructure	Versioning	low
Persistent Identification of Instruments	[1] General	[3] Technical and Infrastructure	PIDs	low
PID Kernel Information WG	[1] General	[3] Technical and Infrastructure	PIDs	low
RDA/WDS Scholarly Link Exchange (Scholix) WG	[1] General	[3] Technical and Infrastructure	Links between scholarly literature and data	low
Research Data Collections WG	[1] General	[3] Technical and Infrastructure	PIDs	low
Software Source Code Identification	[1] General	[3] Technical and Infrastructure	Software Source Code	moderate
RDA/WDS Publishing Data Workflows WG	[1] General	[4] Other	Standards and Workflows for Data publishing	high
Metadata Standards Catalog WG	[1] General	[4] Other	Catalogue of metadata standards	moderate
RDA / TDWG Metadata Standards for attribution of physical and digital collections stewardship	[1] General	[4] Other	Metadata of physical collections	moderate
Data Type Registries WG & #2	[1] General	[4] Other	Data type registries	low
WDS/RDA Assessment of Data Fitness for Use WG	[1] General	[4] Other	Data Quality	low
Empirical Humanities Metadata Working Group	[2] Specific	[1] Domain	Humanities Metadata	moderate
Agrisemantics WG	[2] Specific	[1] Domain	Agriculture	low
Capacity Development for Agriculture Data WG	[2] Specific	[1] Domain	Agriculture	low
International Materials Resource Registries WG	[2] Specific	[1] Domain	Materials Science and Engineering	low
Rice Data Interoperability WG	[2] Specific	[1] Domain	Rice	low
Reproducible Health Data Services WG	[2] Specific	[2] Data	Health data	moderate
Blockchain Applications in Health WG	[2] Specific	[2] Data	Health Science Data	low
Wheat Data Interoperability WG	[2] Specific	[2] Data	Wheat Data	low
FAIRSharing Registry: connecting data policies, standards & databases WG	[2] Specific	[3] Community	Life Sciences (was	moderate
RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World WG	[2] Specific	[3] Community	BioSharing Registry) Developing World	low
Research Data Repository Interoperability WG	[2] Specific	[4] Organisations	Repositories	low
Research Metadata Schemas WG	[2] Specific	[4] Other	Metadata	low
Total	32			

WGs which were added since the last report in August 2018 are highlighted grey



# C

Recommendation	Status of Recommendation	Classification	Sub-classification	Related Working Group	Relevance	DOI or Weblink
A curriculum for foundational Research Data Science skills for Early Career Researchers	RDA Endorsement in Process	[1] General	[1] Policies and Guidelines	RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World WG	moderate	doi: 10.15497/rda00038
Legal Interoperability of Research Data: Principles and Implementation Guidelines	RDA Supporting Outputs	[1] General	[1] Policies and guidelines	RDA/CODATA Legal Interoperability Interest Group	moderate	doi: 10.5281/zenodo.162241
23 Things: Libraries For Research Data	RDA Supporting Outputs	[1] General	[2] Data Management	Libraries for Research Data Interest Group	moderate	rd-alliance.org/group/libraries- research-data-ig/outcomes/23- things-libraries-research-data- supporting-output
Metadata Standards <u>Directory</u>	RDA Endorsement in Process	[1] General	[3] Technical and Infrastructure	Metadata standards directory Working Group	high	rd-alliance.github.io/metadata- directory/
Federated Identity Management for Research Collaborations	RDA Supporting Outputs	[1] General	[3] Technical and Infrastructure	Federated Identity Management	low	doi: 10.5281/zenodo.1296031
Summary of Virtual  Layer Recommendations	RDA Supporting Outputs	[1] General	[3] Technical and Infrastructure	Data Fabric IG	low	doi: 10.15497/RDA00026
Recommendation on Research Data Collections	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Research Data Collections WG	low	doi: 10.15497/RDA00022
Basic Vocabulary of Foundational Terminology Query Tool	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Data Foundation and Terminology Working Group	low	doi: 10.15497/06825049-8CA4-40BD- BCAF-DE9F0EA2FADF
Data Type Model and Registry	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Data Type Registries Working Group	low	doi: 10.15497/A5BCD108-ECC4-41BE- 91A7-20112FF77458
Scalable Dynamic-data Citation Methodology	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Data Citation Working Group	low	doi: 10.15497/RDA00016
Data Description Registry Interoperability Model	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Data Description Registry Interoperability Working Group	low	doi: 10.15497/RDA00003
Persistent Identifier Type Registry	RDA Endorsed	[1] General	[3] Technical and Infrastructure	PID Information Types Working Group	low	doi: 10.15497/FDAA09D5-5ED0- 403D-B97A-2675E1EBE786
Machine Actionable Policy Templates	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Practical Policy Working Group	low	doi: 10.15497/83E1B3F9-7E17-484A- A466-B3E5775121CC
Recommendation on Research Data Collections	RDA Endorsed	[1] General	[3] Technical and Infrastructure	Research Data Collections WG	low	doi: 10.15497/RDA00022
Sustainable Business Models for Brokering Middleware to support Research Interoperability	RDA Endorsement in Process	[1] General	[3] Technical and Infrastructure	Brokering Governance Working Group	low	rd-alliance.org/group/brokering-ig- brokering-governance- wg/outcomes/sustainable-business- models-brokering-middleware
A survey of current practices in data search services	RDA Supporting Outputs	[1] General	[4] Other	Data Discovery Paradigms IG	moderate	doi: doi.org/10.17632/7j43z6n22z.1
Eleven Quick Tips for Finding Research Data	RDA Supporting Outputs	[1] General	[4] Other	Data Discovery Paradigms Interest Group	high	doi: 10.1371/journal.pcbi.1006038
An open, universal literature-data cross- linking service	RDA Endorsement in Process	[1] General	[4] Other	RDA/WDS Publishing Data Services Working Group	low	doi: 10.15497/RDA00002



Recommendation	Status of Recommendation	Classification	Sub-classification	Related Working Group	Relevance	DOI or Weblink
Workflows for Research Data Publishing: Models and Key Components	RDA Endorsed	[1] General	[4] Other	RDA/WDS Publishing Data Workflows Working Group	moderate	doi: 10.15497/RDA00004
Income Streams for Data Repositories	RDA Supporting Outputs	[2] Specific	[1] Domain	RDA/WDS Publishing Data Cost Recovery for Data Centres Interest Group	low	doi: 10.5281/zenodo.46693
39 Hints To Facilitate The Use Of Semantics For Data On Agriculture And Nutrition	RDA Endorsement in Process	[2] Specific	[2] Data	Agrisemantics WG	moderate	doi: 10.15497/rda00036
Wheat Data Interoperability Guidelines, Ontologies and User Cases	RDA Endorsed	[2] Specific	[2] Data	Wheat Data Interoperability Working Group	low	doi: 10.15497/RDA00018
Addressing the Gaps: Recommendations for Supporting the Long Tail of Research Data	RDA Supporting Outputs	[2] Specific	[2] Data	Long Tail of Research Data IG	moderate	doi: 10.15497/RDA00023
Repository Audit and Certification Catalogues	RDA Endorsed	[2] Specific	[3] Community	Repository Audit and Certification / DSA-WDS Partnership Working Group	low	doi: 10.17026/dans-22n-gk35 ; doi:10.15497/rda00019
Interlinking standards, repositories and data policies: BioSharing WG Recommendations	RDA Endorsed	[2] Specific	[3] Community	BioSharing Registry: connecting data policies, standards & databases in life sciences WG	low	doi: 10.15497/RDA00017
Framework for Summer Schools in Data Science and Cloud Computing	RDA Endorsement in Process	[2] Specific	[3] Community	RDA/CODATA Summer Schools in Data Science and Cloud Computing in the DWW WG	low	zenodo.org/communities/codata-rda- research-data-science-summer- school/?page=1&size=20
Research Data Repository Interoperability WG Final Recommendations	RDA Endorsed	[2] Specific	[3] Community	Research Data Repository Interoperability WG	low	doi: 10.15497/RDA00025
Data Discovery Paradigms: User Requirements and Recommendations for Data Repositories	RDA Supporting Outputs	[2] Specific	[3] Community	Data Discovery Paradigms Interest Group	low	rd-alliance.org/group/data-discovery- paradigms-ig/outcomes/data- discovery-paradigms-user- requirements-and
Matrix of use cases and functional requirements for research data repository platforms	RDA Supporting Outputs	[2] Specific	[3] Community	Repository Platforms for Research Data Interest Group	low	rd-alliance.org/group/repository- platforms-research-data- ig/outcomes/matrix-use-cases-and- functional-requirements
Research Data Repository Interoperability Primer	RDA Supporting Outputs	[2] Specific	[3] Community	Research Data Repository Interoperability Working Group	low	doi: 10.15497/RDA00020
Repository Audit and Certification Catalogues	RDA Endorsed	[2] Specific	[4] Organisations	Repository Audit and Certification DSA–WDS Partnership WG	low	https://doi.org/10.17026/dans-22n- gk35 and https://doi.org/10.15497/rda00019
WDS/RDA Assessment Of Data Fitness For Use WG Outputs And Recommendations	RDA Endorsement in Process	[2] Specific	[4] Organisations	WDS/RDA Assessment of Data Fitness for Use WG	low	doi: 10.15497/rda00034
Total		33				

Outcomes which were added since the last report in August 2018 are highlighted grey