

# SPARC Europe Mapping: Recommendations and Guidelines

## 1. Background

In 2016 SPARC Europe carried out a mapping exercise of the activities and outputs in 2015 and 2016 of organisations working in the Open Science field.<sup>1</sup> 28 organisations responded to the questionnaire. Apart from annual reports, the top outputs were recommendations and guidelines, which were produced by 19 organisations. The report on the mapping exercise notes:

“Considering the extent to which organisations are producing guidance, synergies may be found when exploring the thematic foci of papers, recommendations and guidelines. It is probably worthwhile exploring to what extent aligning messages here and speaking in a more similar voice might make sense in the future.”

This work endeavours to shed more light on the synergies and gaps amongst the provision of Recommendations and Guidelines in the area of Open Science by a range of institutions.

## 2. The survey

In order to explore in detail the thematic content and target groups of the recommendations and guidelines, the 19 organisations were sent a further questionnaire in the spring of 2017 requesting the following information on each of the recommendations and guidelines they published in the period 2014-16:

- Title
- Main target group (Business / industry / SMEs / start-ups / entrepreneurs; Library staff, Policy makers, Publishers, Research funders, Research managers, Researchers, Early career researchers incl. PhDs, Students, Teaching staff)
- Up to 3 topics (Legal matters incl. digital rights, copyright, licensing, Open Access, Open Data, Open Educational Resources, Research information / CRIS management, Research assessment / evaluation, Research infrastructure, Research data management, Text and data mining, Preservation)
- Accessibility (All, Clients, Individual members, Member organisations, Staff (internal))
- Licence (CC Public Domain, CC Attribution, CC Attribution-Share alike, CC-Attribution-NonCommercial, CC-Attribution-NoDerivatives)

Respondents were also offered a further descriptor of ‘Other’ for each category and a notes field. This represents a useful taxonomy for any future surveys or work.

---

<sup>1</sup> SPARC Europe (2016). Mapping Open Science & Open Scholarship in Europe, December 2016, SPARC Europe. Available at: <http://sparceurope.org/wp-content/uploads/2017/01/SPARCEuropeMappingOpenScienceinEurope.pdf>.

### 3. Results

#### Organisations

Responses were received from 12 organisations (63% response rate): COAR, CSC, DCC, DFG, ERC, EUA, Jisc, Knowledge Exchange, OAPEN; OASP, OpenAIRE, SURF. Seven of these are international or pan-European; the others are national, from Finland, Germany, the Netherlands and the UK (2).

The number of recommendations and guidelines provided by these organisations ranged from 2 to 30; the majority (7) were in single figures. Interestingly, the two most prolific organisations, providing 46% of the recommendations and guidelines, are national in scope (Germany and the UK).

Organisation	Number of recommendations and guidelines
DFG	30
Jisc	28
Knowledge Exchange	16
DCC	12
CSC	9
ERC	7
SURF	7
OASP	5
OAPEN	9
COAR	3
EUA	3
OpenAIRE	2

The survey has revealed a large number of resources, provided by organisations of high standing. A total of 127 titles were returned by responding organisations. Thirteen, however, were duplicate submissions (by DFG, Jisc and Knowledge Exchange) so the true number is 114. These duplicate submissions have not been excluded from the figures given below in order to maintain a true picture of each organisation's provision, which may reflect collaborative work, be aimed at different audiences, satisfy different missions or have different URLs.

#### Topics

The frequency of topics covered by the recommendations and guidelines is given in the following table:

Topic	Frequency
Open Access	98
Research data management	72
Research information / CRIS management	33
Other	30
Legal matters incl. digital rights, copyright, licensing	15
Open Data	12
Research infrastructure	9
Research assessment / evaluation	5
Open Educational Resources	4
Preservation	2
Text and data mining	2

Open Access and Research data management clearly receive the most attention. Popular sub-topics for Open Access include: policies (e.g. compliance), the transition to Open Access and monographs. Popular sub-topics for Research data management are mainly fairly practical: training; technical (e.g. repositories); Horizon 2020/ERC requirements.

It is perhaps a little surprising that Legal matters and Open Data do not appear more frequently; Open Data may of course also have been understood to be covered by Research data management.

The category 'Other' has the fourth highest frequency. It is difficult to discover what was referred to: only one respondent explained what was meant (collaboration; digital capabilities). Some (such as author identifiers, a preprints service, research support including training) would seem to be covered by 'Research infrastructure'. Other topics alluded to are 'Open scholarship/science' and 'Publishing'.

### Target Groups Addressed

The frequency of target groups addressed by recommendations and guidelines produced by the responding organisations is given in the following table:

Target Group	Frequency
Policy makers	63
Researchers	56
Research managers	54
Library staff	44
Funders	36
Publishers	28
All	3
Other	2
Early career researchers incl. PhDs	1
Not given	1
Business / industry / SMEs / start-ups / entrepreneurs	0
Students	0
Teaching staff	0

There is a significant divide between the first 6 target groups that are most frequently addressed by the organisations surveyed, ranging from 28 to 63, and the rest, ranging from 0 to 3. The first 6 (Policy makers, Researchers, Research managers, Library staff, Funders and Publishers) may be seen as central to the conduct of research. It is somewhat surprising, however, that there is only one guidance document (out of 288) for Early career researchers incl. PhDs: these are the research leaders of the future.

There is also no guidance at all for Students and Teaching staff; it may however well be the case that adequate guidance may be provided within institutions.

The nil frequency for Business / industry / SMEs / start-ups / entrepreneurs may be symptomatic of a general lack of engagement with this group, which could, in all fairness, be outwith the missions of the organisations surveyed. Many businesses, especially SMEs, might however be considered to be prime beneficiaries of Open Science materials.

### Topics by Target Group

The topics aimed at each target group and their frequency are given in the following table:

Target Group	Topic	Frequency
<b>Early career researchers incl. PhDs</b>	Open Access	1
<b>Total</b>		<b>1</b>
<b>Funders</b>	Research data management	14
	Open Access	10
	Research information / CRIS management	7
	Other	5
<b>Total</b>		<b>36</b>
<b>Library staff</b>	Open Access	17
	Research data management	7
	Research infrastructure	6
	Research information / CRIS management	5
	Legal matters incl. digital rights, copyright, licensing	2
	Open Data	2
	Open Educational Resources	2
	Other	2
	Research assessment / evaluation	1
<b>Total</b>		<b>44</b>
<b>Policy makers</b>	Open Access	24
	Research data management	16
	Research information / CRIS management	8
	Other	7
	Open Data	4
	Legal matters incl. digital rights, copyright, licensing	2
	Open Educational Resources	2
	Research assessment / evaluation	2
<b>Total</b>		<b>65</b>
<b>Publishers</b>	Open Access	17
	Other	4
	Research information / CRIS management	4
	Legal matters incl. digital rights, copyright, licensing	3
<b>Total</b>		<b>28</b>
<b>Research managers</b>	Research data management	20
	Open Access	16
	Research information / CRIS management	9
	Other	5
	Legal matters incl. digital rights, copyright, licensing	2
	Open Data	1
	Text and data mining	1
<b>Total</b>		<b>54</b>

<b>Researchers</b>	Research data management	14
	Open Access	13
	Legal matters incl. digital rights, copyright, licensing	6
	Open Data	5
	Other	5
	Preservation	2
	Research assessment / evaluation	2
	Research infrastructure	2
	Text and data mining	1
<b>Total</b>		<b>50</b>
<b>All</b>	Other	1
	Research data management	1
	Research infrastructure	1
<b>Total</b>		<b>3</b>
<b>Other</b>	Open Access	1
	Other	1
<b>Total</b>		<b>2</b>

As might be expected, the overall high frequency of the topics Open Access and Research data management is reflected here: these two topics dominate provision for most of the target groups.

A closer inspection of the data reveals that:

- Target groups served by the most recommendations and guidelines are: Policy makers – 65 (23%); Research managers – 54 (19%); Researchers – 50 (18%); Library staff – 44 (16%); Funders – 36 (13%); Publishers – 28 (10%).
- However, there are only 2 recommendations and guidelines on Legal matters incl. digital rights, copyright, licensing for Library staff; their advice role might be supported by more recommendations and guidelines;
- Similarly, there are also only 2 recommendations and guidelines on Legal matters incl. digital rights, copyright, licensing for Policy makers;
- Policy makers might also benefit from recommendations and guidelines on Research assessment;
- Recommendations and guidelines for Publishers are mainly on Open Access; this is understandable since the other topics are mostly of interest within institutions;
- Again, there is little provision (2 instances) on Legal matters incl. digital rights, copyright, licensing for Research managers; Researchers fare better, as they have 6;
- There is little provision on Open Data for Research managers.

#### Topics for Target Groups by Organisation

Multiple organisations (3 or more) provide recommendations and guidelines for:

- Funders on Open Access, Research data management and Research information / CRIS management;
- Library staff on Open Access and Research information / CRIS management;
- Policy makers on Open Access, Open Data, Research data management and Research information / CRIS management;
- Publishers on Open Access;

- Research managers on Open Access, Research data management and Research information / CRIS management;
- Researchers on Legal matters, Open Access and Research data management.

This indicates that there may well be duplication; however, it is not possible to determine the extent or frequency of duplication without further analysis of each resource.

## 4. Conclusions

This survey has provided a snapshot of the provision of recommendations and guidelines by 12 leading organisations with Open Access and/or science as a focus. It is not a complete picture as not all organisations were able to respond; however it does give a good indication of current provision, including duplication, and possible gaps.

### ***Current provision and possible duplication***

There exists a large number of resources (127), provided by organisations of high standing (COAR, CSC, DCC, DFG, ERC, EUA, Jisc, Knowledge Exchange, OAPEN; OASP, OpenAIRE, SURF). It may be a worthwhile exercise to publish a list of the resources, with URLs, arranged by topic and target group, to provide further access to a greater audience. The benefits and potentials of these resources are clear for a large audience designed for policy makers, research managers, researchers, library staff and funders. Beneficiaries are not only in Europe but also in developing countries.

Open Access and Research data management clearly receive the most attention. Open Access sub-topics include: policies (e.g. compliance), the transition to Open Access and monographs. Popular sub-topics for Research data management are mainly fairly practical: training; technical (e.g. repositories) and Horizon 2020/ERC requirements. These sub-topics may indicate some level of duplication in provision. Here, it would be beneficial to see how far duplication exists in certain areas and in future to see how efficiencies could be gained by more collaboration to avoid duplication.

### ***Gaps in provision***

Various topics are under-represented in the provision of recommendations and guidelines. These include Legal matters somewhat surprisingly. For example, only 2 recommendations and guidelines on Legal matters incl. digital rights, copyright, licensing exist for Library staff. Their advisory role might well be supported by more recommendations and guidelines; the same is true for recommendations and guidelines on Legal matters for Policy makers. Similarly, Open Data does not appear frequently with little provision on Open Data for Research managers for example who would seem to benefit from guidance here where development in Open Science is rife.

As far as serving the broader research community target groups is concerned, certain groups are represented to very low extents. Only one guidance document (out of 288) serves Early career researchers incl. PhDs who can be considered as the research leaders of the future. No guidance at all exists for Students and Teaching staff although it may be the case that adequate guidance may be provided within institutions for this group. The nil frequency for Business / industry / SMEs / start-ups / entrepreneurs may be symptomatic of a general lack of engagement by the academic scholarly publishing community with this group, which could, in all fairness, be outwith the missions of the organisations surveyed. Ironically, many businesses, especially SMEs, might however be considered to be prime beneficiaries of Open Science materials.

### ***The future***

One clear recommendation is to publish a list of the resources, with URLs, arranged by topic and target group and distribute to other resource engines such as FOSTER to provide further access to current resources to more Open Science and Open Access advocates.

It may also be useful to examine the gaps in provision and identify new recommendations and guidelines that would go some way at least to filling them.

**David Ball, October 2017**