



## **Deliverable D7.1 – Policy review work methodology**

OPENing UP new methods, indicators and tools for peer review, impact measurement and dissemination of research results

Project acronym: OpenUP

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| Author                                   | Viltė Banelytė, PPMI  |
| Reviewers                                | Vilius Stančiauskas, PPMI; Eleni Toli, UoA; Michela Vignoli, AIT.       |
| Contributors                             | Peter Kraker, KNOW; Edit Görögh, UGOE; Saskia Woutersen-Windhower, UvA. |
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| 13 January 2017 | 0.2     | Comments from Vilius Stančiauskas integrated, a new draft produced.                         |
| 26 January      | 0.3     | Draft final prepared with integrated comments from partners (UoA, AIT, KNOW and UGOE).      |
| 31 January      | 1       | Final comments from partners integrated and final adjustments made. Final version prepared. |

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## Abbreviations

EC – European Commission

EU – European Union

MS – Member State

OA – Open access

OPR – Open peer-review

OS – Open Science

SWOT analysis – Strength, weaknesses, opportunities and threats analysis

WP – Work Package

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# 1. Introduction

One of the core goals of the OpenUP project is to provide a set of validated practical policy recommendations and implementation guidelines for EU, national and institutional policymakers on peer-review, novel dissemination and alternative research impact metrics. The recommendations will serve as a tool in supporting decision makers to advance a more open and gender-sensitive science system. This document outlines in detail the research methodology that the OpenUP project will employ to provide such recommendations. The main steps are the following:

- Desk research and analysis of available literature on currently existing practices and policies in the three pillars of OpenUP (peer-review, innovative dissemination and alternative metrics);
- Interviews with policy makers in eight selected EU countries;
- SWOT analysis of possible policy recommendations;
- Summary reports and validation workshops with focus groups;
- Final policy reports including validated policy recommendations for more open and gender-sensitive peer review, impact measurement, and dissemination procedures.

The table below outlines a more specific timeline of the foreseen activities for WP7. It details the tasks and sub-activities that will be conducted. The table also specifies the timeline of all the tasks. The timeline might change during the course of the project, due to availability of interviewees, organisational issues, final date chosen for validation workshops or availability of stakeholders for the validation workshop.

**Table 2. Tasks and activities to be conducted in WP7 and their start and end dates.**

| Task                 | Sub-activities   | Start/end dates                      |
|----------------------|--|--------------------------------------|
| Desk research        | N/A  | 1 February 2017 – 30 April 2017      |
| Interviews           | Interview questionnaire development  | 1 March 2017 – 1 April 2017          |
|                      | Final list of interviewees and interviewers                                    | 1 March 2017 – 1 April 2017          |
|                      | List of experts for focus group  | 1 March 2017 – 1 April 2017          |
|                      | Interviewing   | 15 March 2017 – 15 May 2017          |
|                      | Preliminary results analysis and preliminary report                            | 1 June 2017 – 31 July 2017           |
| SWOT analysis        | Collecting inputs from WPs3-6  | 1 July 2017 – 31 August 2017         |
|                      | Conducting SWOT analysis of initial results                                    | 1 August 2017 – 31 August 2017       |
| Summary reports      | Reporting based on inputs from desk and field research and SWOT analysis       | 1 September 2017 – 31 October 2017   |
| Validation workshops | Final list of experts identified for validation workshops                      | 1 September 2017 – 30 September 2017 |
|                      | Organisation (selecting the location and the venue, inviting the participants) | 1 February 2018 – 30 April 2018      |
|                      | Validation workshop execution  | 1 May 2018 – 31 July 2018            |
| Final policy reports | Incorporation of final inputs and results into final policy reports            | 1 June 2018 – 31 July 2018           |

## 2. Desk research and analysis of available literature

The policies in the area of Open Science (OS), that includes novel approaches in peer review, research dissemination and impact metrics, differ across European countries. There are also variations in institutional policies and practices in different organisations. To map and analyse the currently existing policies, the research team will carry out extensive desk research of available scientific and grey literature, policy documents and reports on the use of open peer-review (OPR), innovative dissemination and alternative metrics.

Firstly, we will conduct a search and mapping of currently existing policies and practices on the three OpenUP project pillars mentioned above. The main focus will lie on policy documents and guidelines released by national research councils, research funders and publishers. Although the exercise will include an EU-wide scan, the researchers will draw a particular focus to the following eight countries: Germany, Austria, Italy, Greece, Lithuania, Switzerland, the Netherlands and the UK. These countries represent various levels of uptake and implementation of Open Science and Open Access (OA) policies. The targeted overview and analysis of existing policies and practices in these Member States will help OpenUP researchers to formulate recommendations that can be beneficial to all the countries across the EU. Also, the fact that OpenUP's partner organisations are based in the selected countries (with the exception of the UK) will help to avoid language barriers and gain better access to the relevant stakeholders.

In order to map existing policies and practices in the three project areas, we will analyse documents and reports produced by relevant OS policy and e-infrastructure projects (see Table 3 for a provisional list). In addition, the reports produced in work packages (WP) three, four and five (deliverables D3.1, D3.2, D4.1, D5.1, D5.2 and D5.3) of the OpenUP project will serve as further sources to identify relevant information. As these reports address and analyse the most recent issues of peer-review processes and dissemination and measurement of research results, they will be used as primary literature sources in our desk research.

**Table 3. Draft list of Open Science related projects to be reviewed for the literature review.**

| Project title                              | Brief description  |
|--|--|
| 101 Innovations in Scholarly Communication | Changing practices, workflows and tools in scholarly communication<br><a href="https://101innovations.wordpress.com/">https://101innovations.wordpress.com/</a>  |
| Annotating All Knowledge                   | A new layer created over all knowledge, supported by major publishers:<br><a href="https://hypothes.is/annotating-all-knowledge/">https://hypothes.is/annotating-all-knowledge/</a>  |
| BASE                                       | Bielefeld Academic Search Engine: <a href="https://www.base-search.net/">https://www.base-search.net/</a>  |
| ContentMine                                | Open source text and data mining project; <a href="http://contentmine.org">http://contentmine.org</a>  |
| ENGAGE Data                                | Development and use of a data infrastructure, incorporating distributed and diverse public sector information (PSI) resources capable of supporting scientific collaboration and research, particularly for the Social Science and Humanities (SSH) scientific communities, while also empowering the deployment of open governmental data towards citizens. |
| ENGAGE Science                             | The project aims to help teachers address contemporary science issues and applications relevant to students; develop teachers' beliefs, knowledge and classroom practice for 'RRI'; & provide students a strong foundation to engage in science issues they will meet during their lives   |
| EUDAT                                      | Pan-European Collaborative Data Infrastructure, activities related to data access and reuse  |
| FORCE11                                    | Esp. the Scholarly Commons Working Group: <a href="https://www.force11.org/group/scholarly-commons-working-group">https://www.force11.org/group/scholarly-commons-working-group</a>  |
| FOSTER                                     | Promotion of open science practice and skills directed to researchers and research-performing institutions; a downstream companion project to the upstream-focussed PASTEUR4OA   |

|  |   |
|--|---|
| FOSTERplus                                     | Fostering the practical implementation of Open Science in Horizon 2020 and beyond. The project supports the implementation of the Open Science policies of the European Commission in Horizon 2020. The project delivers and aims to sustain a European-wide training programme targeting researchers, project administrators and other stakeholders.   |
| FutureTDM                                      | The FutureTDM project seeks to improve uptake of text and data mining (TDM) in the EU   |
| LEARNrdm                                       | Implementing the LERU roadmap for research data   |
| MOVING   | EU project developing an innovative training platform that enables people from all societal sectors (companies, universities, public administration) to fundamentally improve their information literacy by training how to use, choose, reflect and evaluate data/text mining methods in connection with their daily research tasks. <a href="http://moving-project.eu/">http://moving-project.eu/</a> |
| NISO Alternative Assessment Metrics Initiative | Development and adoption of new assessment metrics, which include usage-based metrics, social media references, and network behavioural analysis. In addition, NISO explores potential assessment criteria for non-traditional research outputs, such as data sets, visualizations, software, and other applications  |
| OASIS  | Open the Access to photonics life Science Infrastructure for SMEs   |
| Open Knowledge Maps                            | Creating a visual interface to the world's scientific knowledge that can be used by anyone in order to dramatically improve the discoverability of research results. <a href="http://openknowledgemaps.org">http://openknowledgemaps.org</a>  |
| OpenAIRE                                       | A pan-European infrastructure interconnecting Open Access repositories, archives and journals that support Open Access policies. OpenAIRE is one of the key services supporting the H2020 OA policies   |
| OpenMinTeD                                     | OpenMinted sets out to create an open, service-oriented ep-Infrastructure for Text and Data Mining (TDM) of scientific and scholarly content. Researchers can collaboratively create, discover, share and re-use Knowledge from a wide range of text-based scientific related sources in a seamless way. <a href="http://openminted.eu/">http://openminted.eu/</a>                                      |
| openscienceASAP                                | “Open Science as a Practice”: Austrian project focusing on the practical implementation of open science in research and education: <a href="http://openscienceasap.org/">http://openscienceasap.org/</a>  |
| OpenScienceLink                                | An EU-funded project introducing and piloting a holistic approach to the publication, sharing, linking, review and evaluation of research results, based on the open access to scientific information   |
| OSF  | Open Science Framework  |
| PASTEUR4OA                                     | Development of open access strategies and policies at the national level and building of a network of centres of expertise in Member States in support of policymaking at the national level.   |
| PEERE  | Improvement of efficiency, transparency and accountability of peer review through a trans-disciplinary, cross-sectorial collaboration   |
| Project SOAP                                   | Study of Open Access Publishing   |
| RDA Europe                                     | The Research Data Alliance (RDA) builds the social and technical bridges that enable open sharing of data.  |
| RECODE   | Policy Recommendations for Open Access to Research Data in Europe   |
| Responsible Metrics                            | Building of a framework for responsible metrics designed to ensure that indicators and underlying data infrastructure develop in ways that support the diverse qualities and impacts of research.   |
| rOpenSci                                       | Transforming science through open data; <a href="http://ropensci.org">http://ropensci.org</a>   |
| RRI Tools                                      | Development of a set of digital resources to advocate, train, disseminate and implement RRI under Horizon 2020  |
| RRI-ICT  | The RRI-ICT Forum project aims at analysing, supporting and promoting the contribution of Social Sciences and Humanities (SSH) and the Responsible Research and Innovation (RRI) approach in ICT research and innovation under H2020. <a href="http://rri-ict.eu/about-rri-ict/">http://rri-ict.eu/about-rri-ict/</a>   |
| SIM4RDM  | Examining commonalities and differences in national approaches to support for research data management in European member states, with recommendations for action   |
| Snowball Metrics                               | Initiative of top universities primarily in the UK for standardized and transparent metrics <a href="http://snowballmetrics.com">http://snowballmetrics.com</a>   |
| YEAR   | Young European Associated Researchers network: <a href="http://www.year-network.com/">http://www.year-network.com/</a>  |



Through online research we will identify other relevant policy documents, articles and grey literature reports that we will use in the policy and practice mapping exercise. Also, the snowballing method<sup>1</sup> will be employed to scan bibliographies of already identified publications for further articles and reports. We have already conducted initial search and identified publications that will be used in our desk research (see tables below). These are draft lists that will be expanded and refined during desk research phase.

**Table 4. Draft list of relevant publications and reports to be included in the literature review.**

| Relevant publications and reports  |
|--|
| Archambault, E. et al. 2014 Proportion of Open Access Papers Published in Peer-Reviewed Journals at the European and World Levels—1996–2013.   |
| Archambault, E. et al. 2014. Evolution of Open Access Policies and Availability, 1996–2013.  |
| Archambault, E., Caruso, J. & Nico, A. (Science-Metrix). 2014. State-of-art analysis of OA strategies to peer-review publications.   |
| Bauer, B., Blechl, G., Bock, C., Danowski, P., Ferus, A., et al. 2015, November 30. Recommendations for the Transition to Open Access in Austria. Zenodo. <a href="http://doi.org/10.5281/zenodo.34079">http://doi.org/10.5281/zenodo.34079</a>  |
| Caruso, J., Nicol, A, & Archambault, E. 2014. Comparative analysis of the strengths and weaknesses of existing open access strategies.   |
| Caruso, J., Nicol, A, & Archambault, E. 2014. State-of-art analysis of OA strategies to scientific data.   |
| Council of the European Union. 2015. Towards open and excellent European science - follow up to the Science 2.0 public consultation.   |
| Crouzier, T. 2015. Science Ecosystem 2.0: how will change occur? Report commissioned by Directorate-General for Research and Innovation, Research, Innovation, and Science Policy Experts High Level Group, Luxembourg: Publications Office of the European Union.                       |
| De Backere, K. et al., 2014. Boosting open innovation and knowledge transfer in the European Union, Independent Expert Group Report on open innovation and knowledge transfer. European Commission, Directorate General Research. Luxembourg: Publications Office of the European Union. |
| Directorate-General for Research and Innovation (RTD). 2016. Draft European Open Science Agenda.   |
| Doove, J. 2016. Amsterdam call for action on open science.   |
| EC Communication to the European Parliament, the Council, the European economic and social committee and the committee of the regions. COM(2016) 178 final. European Cloud Initiative - Building a competitive data and knowledge economy in Europe.                                     |
| European Commission Expert Group on Altmetrics. 2016. Next-generation altmetrics: responsible metrics and evaluation for open science. Call for evidence.  |
| European Commission. 2016. Open Innovation, Open Science, Open to the world. A vision for Europe.  |
| Hansen, J. 2015. Chronos: Partnership for Open Access Policy Implementation. COASPA, Progressive Roads to OA.  |
| Haustein, S. 2016. Grand challenges in altmetrics: heterogeneity, data quality and dependencies. <i>Scientometrics</i> , 108(1), 413–423.  |
| Hicks, D., Wouters, P., Waltman, L., de Rijcke, S., & Rafols, I. 2015. Bibliometrics: The Leiden Manifesto for research metrics. <i>Nature</i> , 520(7548), 429–431.   |
| Jubb, M. et al., 2015. Monitoring the Transition to Open Access: A report for the Universities UK Open Access Co-ordination Group.   |
| Knowledge Exchange & Science Europe, 2016. Funding research data management and related infrastructures. Knowledge Exchange and Science Europe briefing paper.   |
| Kraker, P., Dörler, D., Ferus, A., Gutounig, R., Heigl, F., et al. 2016. The Vienna Principles: A Vision for Scholarly Communication in the 21st Century. Zenodo.  |
| Open Access Publishing Policies in Science Europe Member Organisations. Key Results from Science Europe and Global Research Council Survey. Science Europe report, October 2016.   |

<sup>1</sup> Snowballing is a method for finding literature sources that starts by selecting a relevant publication and using the bibliography of this paper for further identification of relevant literature. Booth, A., Sutton, A., & Papaioannou, D. 2016. Systematic approaches to a successful literature review. Second edition. CPI Group (UK) Ltd, Croydon.

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|---|
| OpenAIRE: Experiments in Open Peer Review.  |
| Organisation for Economic Co-operation and Development. 2007. OECD principles and guidelines for access to research data from public funding. Paris, France: OECD.  |
| Peer Review: A Global View, 2016.   |
| Putting down roots Securing the future of open access policies. Workshop 10 November 2015; Report dated January 2016. Initiated by Knowledge Exchange.  |
| Reports produced by DG Research and Innovation established Expert Group on Altmetrics.  |
| Reports produced by ERAC Standing Working Group (SWG) on Open Science and Innovation.   |
| Reports produced by Open Science Policy Platform.   |
| Research Councils UK, 2016. Concordat on Open Research Data.  |
| Ross-Hellauer, T. 2016. Novel Modes for Open Peer Review. OpenAIRE2020 report (not published yet).  |
| SIM4RDM. 2012. European Landscape Study of Research Data Management.  |
| Smith, A. 2015. Alternative Open Access Publishing Models: Exploring New Territories in Scholarly Communication. Report on the workshop held on 12 October 2015 at the European Commission Directorate-General for Communications Networks, Content and Technology. |
| Taylor & Francis, 2014. Open Access Survey June 2014.   |
| The transition towards an Open Science system, EU Competitiveness Council Report, May 26-27, 2016.  |
| Van den Eynden, V., Knight, G., et al. 2016. Survey of Wellcome researchers and their attitudes to open research. UK Data Service.  |
| Vignoli, M., Kraker, P., & Sevault, A. 2015. Paving the way for Science 2.0: top-down and bottom-up approaches. In International Conference for E-Democracy and Open Government (CEDEM'15) (pp. 119-130).   |
| Wilsdon, J., et al. 2015. The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management.   |

**Table 5. Draft list of academic publications to be included in the literature review.**

| Relevant academic literature  |
|---|
| Aarssen, L., & Lortie, C. J. 2010. Ideas for judging merit in manuscripts and authors. <i>Ideas in Ecology and Evolution</i> , 3(0).  |
| Acreman, B. et. al. 2016. Report from the Peer Review Workgroup. <i>Open Scholarship Initiative Proceedings</i> , Vol. 1.   |
| Alhoori, H., Furuta, R., Tabet, M. and Samaka, M. et al. 2014. Altmetrics for Country-Level Research Assessment: The Emergence of Digital Libraries - Research and Practices. <i>Lecture Notes in Computer Science</i> , 8839: 59-64. |
| Birukou, A., Wakeling, J. R., Bartolini, C., Casati, F., et al. 2011. Alternatives to peer review: novel approaches for research evaluation. <i>Frontiers in Computational Neuroscience</i> , 5, 56.                                  |
| Björk, B. C., and Salomon, D. 2012. Open access versus subscription journals: a comparison of scientific impact. <i>BMC Medicine</i> 10:73.   |
| Björk, B. C., Laakso, M., Welling, P., Paetau, P. 2014. Anatomy of green open access. <i>Journal of the Association for Information Science and Technology</i> , 65(2), 237-250.  |
| Bornmann, L. 2014. Do altmetrics point to the broader impact of research? An overview of benefits and disadvantages of altmetrics. <i>Journal of Informetrics</i> , 8/4: 895-903.   |
| Borsuk, R. M., Aarssen, L. W., Budden, A. E., et al. 2009. To Name or Not to Name: The Effect of Changing Author Gender on Peer Review. <i>BioScience</i> , 59(11), 985-989.  |
| Budden, A. E., Tregenza, T., Aarssen, L. W., Koricheva, J., Leimu, R., & Lortie, C. J. 2008. Double-blind review favours increased representation of female authors. <i>Trends in Ecology &amp; Evolution</i> , 23(1), 4-6.           |
| Ceci, S. J., & Williams, W. M. 2011. Understanding current causes of women's underrepresentation in science. <i>Proceedings of the National Academy of Sciences</i> , 108(8), 3157-3162.  |
| Cress, P. E. 2014. Using altmetrics and social media to supplement impact factor: maximizing your article's academic and societal impact. <i>Aesthetic surgery journal</i> , 34/7: 1123-6.  |
| Dhiman, A. K. 2015. Bibliometrics to Altmetrics: Changing Trends in Assessing Research Impact. <i>Desidoc Journal of Library &amp; Information Technology</i> , 35/4: 310-5.  |
| Elsevier. 2016. Is open peer review the way forward? Retrieved November 10, 2016.   |
| Erdt, M., Nagarajan, A., Sin, S.-C. J. and Theng, Y.-L. 2016. Altmetrics: An analysis of the state-of-the-art in measuring research impact on social media. <i>Scientometrics</i> , 109/2: 1117-66.                                   |

Fox, C. W., Burns, C. S., & Meyer, J. A. 2016. Editor and reviewer gender influence the peer review process but not peer review outcomes at an ecology journal. *Functional Ecology*, 30(1), 140–153.

Hank, C., Sugimoto, C. R., Tsou, A. and Pomerantz, J. 2014. Faculty and student interactions via Facebook: Policies, preferences, and practices. *It - Information Technology*, 56/5.

Harley D, et.al. 2010. Assessing the future landscape of scholarly communication: An exploration of faculty values and needs in seven disciplines. Center for Studies in Higher Education, UC Berkley.

Harley, D, Acord S. 2011. Peer review in Academic Promotion and Publishing: Its Meaning, Locus, and Future. Center for Studies in Higher Education, UC Berkley.

Kouper, I. 2010. Science blogs and public engagement with science: practices, challenges, and opportunities. *Journal of Science Communication*, 9/1: A02.

Levin, N., Leonelli, S., Weckowska, D., Castle, D., & Dupré, J. 2016. How Do Scientists Define Openness? Exploring the Relationship Between Open Science Policies and Research Practice. *Bulletin of Science, Technology & Society*, Vol. 36(2) 128–141.

McKiernan, E. C., Bourne, P. E., Brown, C. T., Buck, S., et al. 2016. How open science helps researchers succeed. *eLife*, 5, e16800.

Mulligan, A., Hall, L. and Raphael, E. (2013), Peer review in a changing world: An international study measuring the attitudes of researchers. *J Am Soc Inf Sci Tec*, 64: 132–161.

Mutz, R., Bornmann, L., & Daniel, H.-D. 2012. Does Gender Matter in Grant Peer Review? *Zeitschrift Fur Psychologie*, 220(2), 121–129.

Nature, Editorial. 2017. Gender imbalance in science journals is still pervasive. The latest update on Nature's sexism shows an increase in female contributors and referees since 2012, but there is a long way to go. *Nature* 541, 435–436

Open Review: A Study of Contexts and Practices. 2016

Paul-Hus, A., Sugimoto, C. R., Haustein, S. and Larivière, V. (2015). Is there a gender gap in social media metrics?. In: A. A. Salah, Y. Tonta, C. R. Sugimoto and U. Al (eds) Proceedings of Issi 2015 Istanbul: 15<sup>th</sup> International Society of Scientometrics and Informetrics Conference, pp. 37–45.

Peters, I., Kraker, P., Lex, E., Gumpenberger, C., & Gorraiz, J. 2016. Research data explored: an extended analysis of citations and altmetrics. *Scientometrics*, 107(2), 1–22.

Rapple, C. 2016. Institutional Conservatism in Scholarly Communications: Thoughts from UKSG's One-day Conference.

Schiermeier, Q. 2017. 'You never said my peer review was confidential' — scientist challenges publisher. Open-science advocate says journals should be clearer to peer-reviewers about terms and conditions. *Nature* 541, 446

Walker, R., and Rocha da Silva, P. 2015. Emerging trends in peer review—a survey. *Frontiers in Neurosciences*.

Wennerås, C., & Wold, A. 1997. Nepotism and sexism in peer-review. *Nature*, 387(6631), 341–343.

Whittaker, R. J. 2008. Journal review and gender equality: a critical comment on Budden et al. *Trends in Ecology & Evolution*, 23(9), 478–479.

Whyte, A., & Pryor, G. 2011. Open Science in Practice: Researcher Perspectives and Participation. *International Journal of Digital Curation*, 6(1), 199–213.

### 3. Interviews with policy makers and other stakeholders

After the desk research phase, the research team will conduct in-depth interviews with various stakeholders and policy makers actively involved in the three pillar areas of the project. The aim of the interviews will be two-fold. Firstly, they will provide relevant input on the research topics from a broad range of perspectives. Interviews with stakeholders will also help to identify potential candidates for validation workshops, which will be conducted at a later stage of the project.

Through completed initial desk research as well as consultations with partners, we have identified a preliminary list of potential interviewees (see Table 6). They include researchers, academics, and representatives from publishers, national research councils, national funding agencies and platforms promoting Open Science practices. The current list is rather extensive and includes people from all across Europe, not only our selected eight Member States. The particular list was drafted taking into consideration such factors as stakeholder's knowledge and understanding in the field of OS, their specific experience in working towards promotion of OS and related topics and recommendations from the OpenUP consortium partners. It is a draft list and it will be narrowed down through further literature research as well as networking opportunities during project workshops and participations in dissemination events.

**Table 6. Draft list of possible interviewees.**

| Name (country, if known)   | Description of role and representation   |
|--|--|
| <b>European Commission</b>   |  |
| Augusto Burgueño Arjona  | Head of Unit "eInfrastructure"; coordinates Géant, PRACE, EUDAT, OpenAIRE and the European Grid Initiative (EGI)   |
| Daniel Spichtinger   | Open access policy officer   |
| Jean-Claude Burgelman  | Head of Unit for Data, Open Access and Foresight and Chair of DG RTD Taskforce on Open Science   |
| Jean-Francois Dechamp  | Open access policy officer   |
| Wainer Lusoli  | Policy Officer at the European Commission, in charge of the European Open Science Cloud  |
| <b>Policy level stakeholders/ research councils / scientific societies</b> |  |
| Alina Irimia (Romania)   | Ministry of National Education and Scientific Research, Romania. Executive Agency for Higher Education, Research and Innovation Funding (UEFISCDI). Currently adviser at the Ministry of National Education and Scientific Research for open science issues. She is also key node delegate in the Knowledge Net developed by the European project PASTEUR40A (Open Access Policy Alignment Strategies for European Union Research) |
| Barend Mons  | Initiated the FAIR data initiative and in 2015, was appointed Chair of the European Commission's High Level Expert Group for the "European Open Science Cloud"   |
| Juan Bicarregui  | Played a key role in formulating UK policy on opening up access to research outputs and was UK representative on the GSO Data Working Group. Chaired a cross Research Council group that published the RCUK Joint Principles on Data and associated Guidelines. Juan was a member of the steering group that set up the Research Data Alliance and is currently co-chair of the RDA Organisational Advisory Board.                 |
| Klaus Tochtermann (Germany)  | Chairman of the Leibniz Research Association Science 2.0, Director of ZBW, HLEG European Open Science Cloud, advisor to the German government on open science  |
| Laurent Ghys (Belgium)   | Belgium, Department of Federal, Interfederal and International Co-ordination, Belgian Science Policy Office (BELSPO)   |
| Michele Garfinkel  | The European Molecular Biology Organization (EMBO), Manager of the EMBO Science Policy Programme   |

|                                    |  |
|------------------------------------|--|
| Patrick Garda (France)             | Vice-Director of the ICT, Mathematics, Physics, and Nanotechnologies Department at the French Ministry of National Education, Higher Education and Research  |
| Professor Duncan Wingham           | Chief Executive, Natural Environment Research Council and Open Data Champion, Research Councils UK   |
| <b>Research funders</b>            |  |
| Ben Johnson (UK)                   | HEFCE Research policy advisor  |
| Dr Anna Wetterbom (Sweden)         | Senior Research Officer at the Swedish Research Council; Vice Chair of the board for ELIXIR, Swedish delegate to e-IRG, and has previously been part of Science Europe's WG on data  |
| Falk Reckling (Austria)            | FWF, Department Head – Strategic Analysis, Head of the Open Access Network Austria (OANA)  |
| Kristiina Hormia Poutanen          | Association of European Research Libraries (LIBER), President  |
| Mark Thorley (UK)                  | RCUK, Head of Science Information and Data Management Coordinator  |
| Matthias Kleiner                   | Science Europe, Member of the Governing Board  |
| Roar Skåli (Norway)                | Special Adviser at the Department of Research Infrastructure, the Research Council of Norway (RCN). His main responsibilities are eInfrastructure, eScience and Open Access to Research Data. He is also involved in the National Financing Initiative for Research infrastructure, including the ESFRI projects |
| Robert Kiley (UK)                  | Wellcome Trust, Head of Digital Services   |
| Ron Dekker (The Netherlands)       | NWO Director, responsible for OA dossier   |
| <b>Publishers</b>                  |  |
| Cameron Neylon (UK)                | PLOS, Director of Advocacy (until June 2015)   |
| Catriona MacCallum                 | PLOS Advocacy  |
| Elizabeth Marincola                | CEO, PLOS  |
| Emma House                         | Director, Publisher Relations, The Publishers Association  |
| Eva Wille                          | Wiley-VCH  |
| Iain Hrynaszkiwicz                 | Head of Data Publishing, Springer Nature   |
| Michael Mabe                       | International Association of Scientific, Technical and Medical Publishers (STM), Chief Executive Officer   |
| Pascal Hitzler, Krzysztof Janowicz | Editors-in-chief of the Semantic Web Journal (open peer review process)  |
| Paul Peters                        | Open Access Scholarly Publishers Association (OASPA), President  |
| Phil Hurst                         | Publisher from the Royal Society   |
| Stephanie Harriman                 | Medical Editor at BioMed Central   |
| <b>Researchers / Academia</b>      |  |
| Björn Brembs (DE)                  | Neurobiologist working with open science workflows, open access advocate   |
| Dominika Bijos                     | Research Associate   |
| Ernst Kristiansen                  | European Association of Research and Technology Organisations (EARTO), Treasurer and Member of Executive Board   |
| Eva Méndez Rodríguez               | Young European Research Universities Network (YERUN), Representative for YERUN, Deputy Vice-President for Strategy and Digital Education of Universidad Carlos III de Madrid (institutional member of the YERUN network)   |
| Gernot Deinzer                     | Regensburg University, KE OA Working Group   |
| Isabella Peters (Germany)          | Professor of Web Science at ZBW Leibniz Information Center for Economics and Kiel University. Expert Group on Altmetrics   |
| James Wilsdon (UK)                 | Professor of Research Policy and Director of Impact and Engagement in the Faculty of Social Sciences at the University of Sheffield. Expert Group on Altmetrics, Chair   |
| Jarmo Saarti (Finland)             | University of Eastern Finland, Library Director  |
| Judit Bar-Ilan (Israel)            | Professor at the Department of Information Science at Bar-Ilan University. Expert Group on Altmetrics  |
| Karel Luyben                       | The Conference of European Schools for Advanced Engineering Education and Research (CEASAR), President   |
| Katja Mayer (Austria)              | Social sciences researcher studying RRI and open science practices   |
| Kurt Deketelaere                   | League of European Research Universities (LERU), Secretary-General   |

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| Leonhard Dobusch (Austria)       | Professor at University of Innsbruck, media and copyright specialist  |
| Manuela Epure                    | The Alliance of Central and East European Universities (ACEU), Vice-President   |
| Michela Bertero                  | Co-founder and representative for EU-LIFE (alliance of 13 top research centres in Life Sciences to support and strengthen European research excellence), high-level member and Head of the International and Scientific Affairs Unit of the EU-LIFE partner CRG (Centre for Genomic Regulation, Barcelona, Spain) |
| Morgens Standfaer (Denmark)      | Technical University of Denmark, Head of Bibliometrics and Data Management  |
| Naujko Jahn (Germany)            | Bielefeld University, BASE  |
| Norbert Lossau                   | European University Association (EUA), Vice-President of the University of Göttingen  |
| Paul Wouters (The Netherlands)   | Professor in Scientometrics. Expert Group on Altmetrics   |
| Robert Frodeman (USA)            | Professor of Philosophy at the University of North Texas. Expert Group on Altmetrics  |
| Ross Mounce (UK)                 | Bioinformaticist, Editor of RiO journal, former Panton Fellow   |
| Stefanie Lindstaedt (Austria)    | Professer at TU Graz, Member of HLEG European Open Science Cloud  |
| <b>Open science platforms</b>    |   |
| Bill Hubbard (UK)                | Centre for Research Communications  |
| Christophe Rossel                | European Physical Society (EPS), President  |
| Eelco Ferwerda (The Netherlands) | OAPEN Foundation, Service provider  |
| Elly Dijk (The Netherlands)      | DANS, Head Data Services (responsible for the NARCIS, Dutch OA portal)  |
| Geoff Bilder (UK)                | CrossREF, Director of Strategic Initiatives   |
| Jan van den Biesen               | Business Europe, representative for Business Europe, Member of the Research and Technological Innovation Working Group of Business Europe   |
| Jennifer Edmond                  | Digital Research Infrastructure for Arts and Humanities (DARIAH), representative for DARIAH, Member of the DARIAH-IE steering committee   |
| Johannes Vogel                   | European Citizen Science Association (ECSA), Chair  |
| John Wood                        | Research Data Alliance (RDA), Co-Chair of RDA and Chair of RDA Europe   |
| Josh Brown (UK, Switzerland)     | ORCID, Director of European Advocacy  |
| Kathleen Shearer                 | Executive Director (Confederation of Open Access Repositories COAR)   |
| Paola Fargiulo (Italy)           | CINECA, International Business Development Unit   |
| Peter Murray-Rust (UK)           | Founder of the ContentMine ( <a href="http://contentmine.org">http://contentmine.org</a> ), University of Cambridge   |
| Puneet Kishor                    | Former manager of the science department at Creative Commons, now worldwide open science advocate and consultant  |
| Rebecca Lawrence                 | F1000, Managing Director  |
| Sabina Leonelli                  | Global Young Academy (GYA), elected Member  |
| Sergio Andreozzi                 | The EGI Foundation, an international collaboration that federates the digital capabilities, resources and expertise of national and international research communities in Europe and worldwide, Strategy & Policy Manager   |
| Stefan Kasberger (Austria)       | Chairman of Open Knowledge Austria, founder of openscienceASAP  |
| Steve Cotter                     | GÉANT, a pan-European collaboration on e-infrastructure and services for research and education, Chief Executive Officer  |
| Tuija Hirvikoski                 | European Network of Living Labs (ENoLL), elected President  |
| Wolfram Koch                     | European Association for Chemical and Molecular Sciences (EUCHEMS), Member of Executive Board   |
| <b>Libraries</b>                 |   |
| Andreas Ferus (Austria)          | Dept. Director of the library of the Academy of Fine Arts Vienna  |
| Bertil Dorch (Denmark)           | University of Southern Denmark, Library Director  |

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| Gyöngyi Karacsony (Hungary)           | Director of University and National Library of Debrecen  |
| Just de Leeuwe (the Netherlands)      | TU Delft Library, OA coordinator at TUD, OpenAIRE representative and provider of the Dutch OA website  |
| Kai Geschihh (Germany)                | Max Planck Digital Library, Open Access Policy   |
| Lambert Heller (Germany)              | Head of Open Science Lab at the German Library for Science and Technology (TUB Hannover)   |
| Tua Hindersson-Soderholm (Finland)    | Hanken University, Library Director  |
| Wilma van Wezenbeek (the Netherlands) | Library Director, TU Delft. The chair of the UKB (UKB is the Dutch consortium of the thirteen university libraries and the National Library of the Netherlands) OA Working group, and involved with the national plan open science for The Netherlands |

The stakeholder interviews will be carried out face-to-face or via telephone or skype, depending on the availability and location of the interviewee. Our team will contact potential interviewees by e-mail (a standard invitation email will be provided) or telephone. The researchers will provide them with information about the OpenUP project, indicate the main interview questions and propose some alternative dates for the interviews. As PPMI and other project partners participate in various conferences and workshops related to the OS theme, potential interviewees will also be approached during these events. Depending on location and availability of the interviewee, the interviews will be conducted by researchers from PPMI or another OpenUP partner organisation.

During the initial desk research and literature mapping phases, we will develop a list of topics and questions that will be used as a background for preparing detailed interview questionnaires. The questionnaires will be tailored to the specific context of each interviewee and his/her background (representative of academia, publishers, research councils, etc.). We have outlined the following preliminary topics that we foresee to address during the interviews (the list will be modified after the desk research):

- Overall opinion and attitude to OS and OA policies as well as OPR, novel research dissemination methods and alternative impact measurements;
- The main practices and policies of OPR, innovative dissemination of research and alternative impact measurements in their institution and/or country;
- Main barriers to increased uptake of innovative practices;
- Possible avenues and measures to increase the uptake;
- Outstanding examples of recent policy or practice shifts in his/her organisation or country.

In total, we plan to conduct around 25-30 interviews (3-4 interviews per selected country). When choosing the potential interview candidates, we will aim to ensure equal gender distribution as well as representation of different stakeholder groups. A typical interview should take approximately 1 hour to complete. The researcher will record the interview (with the permission of the interviewee) or take written notes. Afterwards, interview summaries will be prepared to be used for our analysis and report writing. Anonymity and confidentiality will be ensured throughout the process and no specific examples/situations will be mentioned in the deliverables without prior consent of the interviewee.

## 4. SWOT analysis

By combining findings from desk research, interviews and results generated in WP3, WP4 and WP5, we will formulate initial policy recommendations for EU, national and institutional policymakers. These

recommendations could be used to support the transition to more open peer-review practices, novel dissemination of research results and their impact measurement. The initial policy recommendations will be critically analysed by means of a SWOT analysis.<sup>2</sup> The Strength, Weaknesses, Opportunities and Threats (SWOT) analysis will be used as a tool to understand the strengths and weaknesses of drafted policy recommendations, and to identify opportunities and threats these solutions might bring about in different European countries and across research communities. This exercise will help PPMI researchers to draft specific and relevant recommendations and identify obstacles for their implementation. The SWOT analysis will be included in the summary reports & discussed in the focus groups (see section below).

## 5. Summary reports validation through focus groups

The initial results of WP7 efforts and the SWOT exercise will be put together in two summary reports:

1. A summary policy recommendation report on peer-review, impact measurement and novel dissemination practices.
2. Specific summary report on gender issues in peer-review, impact measurement and novel dissemination activities.

These two reports will be concise and structured summaries of the results of WP7 and other work packages. They will build on all OpenUP's efforts and will include additional information to support policymaking in specific research contexts, including consideration of impacts on equity, scaling up, and monitoring and evaluation. These reports will be presented at the focus group session (see description below) which will then contribute to the validation of our findings and policy recommendations. Preliminary structure of the reports will be as follows:

- Desk research
- Mapping of current policies and practices in the eight selected countries
- Main interview findings
- Key conclusions and policy recommendations with their specific SWOT analysis

PPMI will organise a validation workshop with focus group discussions to validate the overall findings of our work in WP7. It will be a full-day event with the two sessions. During the first session the overall project's results will be presented. In the second session the team will present the recommendations that will be discussed and validated by the expert audience. Around 20-25 experts will be invited to participate in the event. The planned location for the workshops is Brussels, but the consortium will consider other location options (for example, collocating the workshops together with another OS related event could be an option).

The workshops will gather feedback from every key target group of OpenUP and validate the findings. We will use a purposive sample to ensure a breadth of perspectives from relevant target audiences and balanced inputs from male and female participants. After conducting desk research as well as interviews, we will prepare a draft list of participants that will be invited to attend the workshops. To avoid a heavy dominance of participants from a few countries, which would hamper our goal to produce cross-EU outputs and recommendations, invitations will be targeted to participants from at least eight

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<sup>2</sup> <https://rapidbi.com/swotanalysis/>



Member States. Also, we will aim to ensure a balance between representatives of academia, funding agencies, publishers as well as policy makers.

The focus group session will be audio taped and transcribed, if participants agree (otherwise written notes will be taken during the workshops). The end result of the focus group will be modifications and further inputs to the summary policy reports. These editions will be analysed and synthesised by PPMI researchers and integrated into the final reports.

## 6. Final reports

Two reports will be produced as main outputs of WP7:

- A policy report on peer-review, impact measurement and novel dissemination practices;
- A specific policy report on gender issues in peer-review, impact measurement and novel dissemination activities.

All the findings and results of WP7 activities will be included in these two reports. The reports will follow the same structure of the summary reports but will include validated findings and policy recommendations for peer review, impact measurement and dissemination activities. These two reports will be disseminated by using various channels, including OpenUP's social media platforms, the OpenUP Hub, the OpenUP final conference and networks of partner organisations. Beyond that, the OpenUP consortium partners are involved to various degrees in various national and international working groups (e.g. Open Science Policy Platform) and are, therefore, well placed to disseminate the findings of the project and facilitate the uptake of the recommendations at EU and national levels.