SOPs4RI

D5.1: Protocol for the focus group interviews

Authors: M.P. Sørensen, T. Ravn, A.-K. Bendtsen
Reviewer: A. Domaradzka
Editor: M.P. Sørensen

Project title: Standard Operating Procedures for Research Integrity
Project acronym: SOPs4RI
Grant Agreement no.: 824481
Lead contractor for this deliverable: Aarhus University

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824481.

Coordination and Support Action
H2020-SwafS-03-2018

Project full title

"Standard Operating Procedures for Research Integrity"

Project acronym

SOPs4RI

Grant Agreement no.

824481

D5.1: Protocol for the focus group interviews

Editor:	Mads P. Sørensen
Version:	1.0
Dissemination level[1]:	PU
Authors:	Mads P. Sørensen, Tine Ravn, Anna-Kathrine Bendtsen (AU)
Reviewer:	Anna Domaradzka (UoW)
Due date of deliverable:	31 January, 2020
Actual submission date:	30 January, 2020
Start date of project:	01 January, 2019
Duration:	48 months
Organisation name of lead contractor for this deliverable:	Aarhus University (AU)

[1]This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824481

PU – Public; PP – Restricted to other programme participants (including the Commission Services); RE – Restricted to a group specified by the consortium (including the Commission Services); CO – Confidential, only for members of the consortium (including the Commission Services).

Document metadata

Version	*Date*	*Modification reason*	*Modified by*
0.1	06.12.19	First draft	Mads P. Sørensen, Tine Ravn, Anna-Kathrine Bendtsen (AU)
0.2	20.12.19	Second draft – revised based on comments and suggestions for improvements from partners in the work package and from VUmc (WP4 leader).	Mads P. Sørensen Tine Ravn, Anna-Kathrine Bendtsen (AU)
0.3	21.01.20	Third draft - review	Anna Domaradzka-Widła
1.0	23.01.20	Final version 1.0 – revised based on comments from reviewer and comments from WP-partners	Mads P. Sørensen, Tine Ravn

Table of contents

1. Introduction

1.1 Abbreviations

RI – Research Integrity

SOP – Standard operating procedure

RPO – Research performing organisation

RFO – Research funding organisation

RIPP – Research Integrity Promotion Plan

ECoC – European Code of Conduct

CBA – Cost Benefit Analysis

1.2 Terminology

Code: a document guiding the members of an organisation on ethical standards and how to achieve them.

Ethics/integrity codes are formal documents sending a message about moral standards guiding professional behaviour by providing principles, values, standards, or rules of behaviour.

Guideline: a statement of principles or issues to consider when performing a task, aimed to guide courses of action.

Guidelines give direction and help users make decisions. They are often created based on the consensus of experts after detailed evaluation and assessment of available evidence. They may include checklists.

Standard Operating Procedure (SOP): a detailed, written instruction, aimed to achieve uniform action step-by-step.

SOPs prescribe specific actions; they liberate users from decision-taking by ensuring that the procedure is followed. They may come in the shape of a 'decision-tree'/flow-diagram, similar to what is referred to as an algorithm in clinical contexts.

Toolbox: a structured collection of easy-to-use SOPs and guidelines that RPOs and RFOs can use when developing their own Research Integrity Promotion Plans.

Research Integrity Promotion Plan (RIPP): a document describing how a specific institution will ensure, foster and promote responsible research practices, avoid detrimental practices, and handle misconduct.

It is the intention that RPOs and RFOs should form their own RIPPs in order for them to take disciplinary, organisational and national differences into account.

1.3 About SOPs4RI

SOPs4RI (Standard Operating Procedures for Research Integrity) is a four-year (2019-2022), multi-partner transdisciplinary project funded by the European Commission (H2020-SwafS-03-2018, Grant Agreement no. 824481). The project has 13 partners in 10 European countries, and is coordinated by Aarhus University (AU). The project's homepage can be found here: https://www.sops4ri.eu/. SOPs4RI has also been preregistered at the Open Science Framework: https://osf.io/49fbk/

Objectives

SOPs4RI will deliver an online, freely accessible and easy-to-use 'toolbox' that can help Research Performing Organisations (RPOs) and Research Funding Organisations (RFOs) cultivate research integrity and reduce detrimental practice. The end product of SOPs4RI thus addresses needs of RPOs and RFOs, contributing to solving problems related to research integrity and enabling positive change.

SOPs4RI takes a mixed-methods, co-creative approach to the development and empirical validation of Standard Operating Procedures (SOPs) and Guidelines to cultivate research integrity and reduce detrimental practices. Empirical elements of the project include 20 expert interviews, a three-round Delphi consensus consultation process, 32 focus groups across academic disciplines, an online survey of researchers across 31 countries, and four co-creation workshops engaging stakeholders.

Through comprehensive empirical research and inclusion of core user groups, SOPs4RI will develop an array of Standard Operating Procedures (SOPs) and Guidelines that are sensitive to the organisational context and the academic domain in which they will be applied. The sequential implementation of qualitative, quantitative, and co-creative parts of the empirical research programme will enable iterative refinement of the properties of the SOPs and Guidelines. SOPs4RI includes a pilot programme, in which selected RPOs and RFOs apply the SOPs and Guidelines in local practices. A number of public and private research funding organisations as well as university networks have confirmed their willingness to participate in the pilot phase. Results of this final step of the validation procedure will feed into the final version of SOPs and Guidelines.

1.4 About this deliverable

Deliverable 5.1. is the protocol of the focus group study in SOPs4RI. The focus group study is described in detail in the following. First, the focus group study is introduced. Hereafter, the protocol describes the methodology behind the study, the study participants, including selection criteria, and the recruitment strategy. Relevant ethical considerations as well as expected scientific and social benefits of the study are also described. In the appendix section, all other relevant documents (invitation letter, privacy policy, consent form, interview guide etc.) can be found.

2. The Focus Group Study

2.1 Introduction to WP5 – The Focus Group Study

The aim of the focus group study is to provide discipline specific knowledge on SOPs and guidelines related to research integrity. The focus group study will consist of 32 focus group interviews with researchers from the humanities, social science, natural science, and medical science together with relevant stakeholders. 16 focus groups will involve researches from the different main fields of research, and 16 groups will comprise researchers as well as relevant stakeholders (see section 2.2 and 2.3 below for more details). It is the aim of the focus group study to generate field specific knowledge on the first version of the SOPs and guidelines (created in WP4). Further, the focus group study will generate knowledge on which topics are most important for researchers from different disciplines. The focus group study will map the most important topics to cover within the different main fields of research as well as qualitative data on the different disciplines' understandings of the need for SOPs and guidelines within these topic areas.

The main output of the focus group study is a report (Deliverable 5.2.) describing different disciplines' needs for SOPs and guidelines as well as their response to the first version of the SOPs and guidelines (the identified topics, see appendix I). This report will be used in the development of the next version of the SOPs and guidelines. The data generated in the focus group study will also be used in academic publications.

2.2 Methodology

2.2.1 Design and analysis

The focus group study consist of 32 discipline-related focus group interviews. Researchers use many different approaches and methods in their work, and it is important that the SOPs and guidelines are meaningful and useful for researchers. We will therefore ensure that all main disciplines and main research approaches are represented in the groups.

Hence, we will conduct 8 focus group interviews within the humanities, 8 within social science, 8 within natural science (incl. technical science) and 8 within medical science (incl. biomedicine). Half of the focus groups will be comprised of researchers only, while the other half of the focus groups will be comprised of both researchers from the different fields outlined above and relevant stakeholders. Section 2.3 describes the composition of the focus groups in details.

Interview/moderator guide

The focus group interviews will follow an interview/moderator guide (see appendix II), which in addition to a number of opening and closing interview questions consists of two main elements:

1) *In-depth discussions on two- or -three topics*
    a. Each focus group will discuss a selection of the topics from the topic list (see appendix I) in depth. Appendix III shows the distribution of topics between the 32 focus groups.
2) *Sorting exercise*
    a. In the exercise, each focus group will sort all the topics selected for the first version of the toolbox: 'SOPs and guidelines vers. 1' (see appendix XI) in three groups
        i. Topics that are *very important* for research integrity within my field of research/work
        ii. Topics that are *somewhat important* for research integrity within my field of research/work
        iii. Topics with *no or very little importance* for research integrity in my field of research/work

Research questions

The focus group study will address the following three research questions:

1) Is there a need for different SOPs and guidelines in different fields for the same topics/subtopics?

    - In order to answer this question, we first need to *understand* how the different main areas of research comprehend the different topics and subtopics. Thereafter, we also need to understand their needs for SOPs and guidelines for the different topics.

    - In all focus group interviews, we will therefore have *in-depth discussions of two or three selected topics*. After thorough deliberations among the partners in the work package, including VUmc as lead of WP4, we selected 10 topics for the researcher groups and 8 topics for the mixed group to be discussed in detail in the interviews (see appendix I). When choosing the topics, we started with the first draft of the topics and subtopics for the first version of the toolbox (see SOPs4RI, D. 4.2.). We hereafter discussed all the topics in detail and made a decision on whether to include the topic or not. In some cases, we chose to include a subtopic. We based our decision on expected benefits of discussing a topic in the focus group interviews (i.e. new perspectives, new knowledge on disciplinary differences, etc.).

    - Hereafter, we decided on how to combine the topics in pairs or groups of three and how to distribute them between the groups and partners (see appendix III). The main idea behind this grouping is that all the selected issues will be discussed within all main areas. This means that each selected topic will be discussed in four groups: one group within the humanities, one group within the social sciences, one group within the natural sciences (incl. the technical sciences), and one group within the medical sciences. In this way, we will get feedback from all main areas of research on all topics.

The rational for how the topics were paired/grouped is explained in appendix IV.

2) Which topics and subtopics are the most important ones for the different disciplines/main research fields (humanities, social science, natural science, and medical science)?

    - In case we end up with too many topics and subtopics to cover in the SOPs4RI project, we need to be able to *prioritise* the most relevant topics for the different main areas of research. The *sorting exercise* will help us with this. The exercise will be carried out in all 32 groups with two different sets of topics, one for the 16 mixed groups and one for the 16 researchers only groups (see appendix XI). These lists are identical with the final lists of topics for the first version of the toolbox as described in SOPs4RI's Deliverable 4.2. Thus, the sorting exercise will create knowledge on how researchers and stakeholders prioritise the selected topics in version 1.0 of the toolbox.

3) Do the different disciplines have any topics or subtopics to add to the map of the landscape?

    - Although the topics for the first version of the toolbox (cf. D. 4.2.) have been selected on the basis of a thorough research process in WP3, we might have missed a topic that is important. The discussions in the groups together with an open question ("Are there other important topics that need to be addressed by RPOs and/or RFOs in their future RIPPs?") at the end of the sorting exercise will help us discover extra topics that need to be *added to* the map of the landscape that we get from WP4.

Recording, transcription and analysis

The focus group interviews will be audio recorded, transcribed and subsequently coded in NVivo. The coding process will mainly follow a deductive coding strategy based on the three research questions. The main output will be a project report describing the results of the focus group interviews, focusing on answering the three research questions and describing differences and similarities in needs and understandings between the four main disciplinary research areas. The findings of the study will also be published in relevant journals within the field.

2.2.2 Practical implementation

In practice, the execution of the 32 focus group interviews is distributed between SOPs4RI-partners from six different countries (coordinated by AU). The interviews will be carried out in nine different European countries (Denmark, Spain, The Netherlands, Germany, Belgium, Croatia, Italy, the UK and Greece, see appendix III), primarily at partner universities where we have the necessary institutional backup and local knowledge to be able to recruit participants and to conduct interviews.

The focus group study will follow this timeline (see also detailed roadmap for WP5 in appendix V):

- September 2019 - January 2020:

  Design, incl. invitation letters, interview guides etc., sampling strategy, ethical approval, test interviews, and recruitment (see section 2.4 below for elaboration on recruitment strategy)

- February 2020 – April 2020:

  Conduct 32 focus group interviews, make transcripts

- April 2020 – August 2020:

  Coding, Analysis, and Reporting

2.3 Study participants – inclusion, exclusion and selection criteria

The study will identify and recruit participants to the focus group interviews from all main areas of science. Researchers use different approaches and methods in their work and it is important that the SOPs and guidelines are meaningful and useful for all researchers. The study will therefore also make sure that all main methodological approaches (for example qualitative and quantitative in the social sciences) are represented in the focus groups. The study will furthermore identify and recruit relevant stakeholders to participate in the focus group interviews.

The study will conduct 8 focus group interviews within the humanities, 8 within social science, 8 within natural science (including technical science) and 8 within medical science (including biomedicine). Half of the focus groups (16 groups, 4 per main discipline) will consist of researchers only. Recruitment of participants in these groups will take place on the basis of the researchers' main methodological approaches in their work. We will also make sure to include experienced researchers, who have entered management positions (head of departments, associate deans etc.), since they also possess valuable knowledge on organizational issues. The other half of the groups will include relevant stakeholders as interviewees. The stakeholders will be recruited from research integrity offices (RIOs), funding organisations, academies, journals, ministries, industry etc. We will especially aim at including one stakeholder employed in a high level management position in a research-funding organisation (RFOs) and one stakeholder from a research integrity office (RIOs) in each of the 16 stakeholder groups.

2.3.1 Composition of groups

(8 groups) Humanities

- 4 focus groups based on HUM-researchers' *basic orientation in research*: 1 language disciplines, 1 philosophical and aesthetic disciplines, 1 historical disciplines, and 1 communication disciplines

- 4 groups will include researchers from the humanities plus relevant stakeholders

(8 groups) Social sciences

- 4 focus groups based on whether researchers have *a qualitative or a quantitative* orientation in their research (2+2)
- 4 groups will include researchers from social science plus relevant stakeholders

(8 groups) Natural sciences (incl. technical science)

- 4 groups are formed as *either laboratory/experimental/applied/field research* groups(3) *or theoretical* groups (1)
- 4 other groups will comprise researchers from natural science and technical science together with relevant stakeholders

(8 groups) Medical sciences (incl. biomedicine)

- 4 groups with researchers are formed as *either basic research groups*(2) *or clinical/translational/public health* groups (2)
- 4 groups will comprise researchers from medical science including biomedicine together with relevant stakeholders

2.3.2 Further selection criteria

a. Each of the focus groups should consist of approximately six participants
b. Both seniors/permanent position holders (professors, associate professors, senior researchers, etc.) and junior researchers/non-permanent position holders (post docs, assistant professors, last year PhD students) in the groups.
    - Interviewees, who are dependent on each other (e.g. a lab leader and an employee from the same lab), should not be recruited to the same group.
c. The gender composition of the focus groups should be balanced

d. Two-three different sub-disciplines must be represented in each focus group.
e. Aim for including three different stakeholders in the mixed focus groups (minimum two)
    - Types of stakeholders: RIOs and university administration, academies of science, journals, RFOs, governmental bodies, industry, science journalists, researcher unions
    - Stakeholders must have discipline specific knowledge
f. The selected disciplines must cover all major fields of the four main areas.
g. Interviewees have to be able to do the interview in English.
    - If the interviewees prefer it, the Introduction to the focus group interview (see Interview/moderator guide in section 3.2. below) may be done in the national language.

2.4 Recruitment strategy

Researchers will be recruited from universities and other research institutions. Stakeholders will be recruited from RIOs and university administrations, academies of science, journals, RFOs, governmental bodies, industry, science journalism organisations, and researcher unions.

The focus group interviews will primarily be conducted at partner universities where we have the necessary institutional backup and local knowledge to be able to recruit participants and to conduct the interviews. Overall, the focus group study will apply a purposeful sampling strategy with the intention to gather "information rich cases" (Patton, 1990, p. 169) based on the number of pre-selected criteria included above (see section 2.3.2). Moreover, to identify "information rich key informants" (ibid. p. 176), the study will use the approach of snowball/chain sampling. This entails that relevant volunteers from our existing networks together with new volunteers recruited at conferences and seminars, where the SOPs4RI project is presented, will be asked to act as gate-keepers and help us recruit relevant researchers and stakeholders within their organisations and institutions.

In the recruitment process, we will invite potential researcher and stakeholder participants via an invitation letter that provides information about the overall aim of the focus group (cf. appendix V).

2.5 Ethical considerations

An Ethical Approval for conducting the focus group study has been obtained from the Research Ethics Committee at Aarhus University (5th of December 2019, see appendix VII). Additionally, ethical standards and guidelines of Horizon2020 will be rigorously applied. Participants will be provided with a description of the overall aim of the SOPs4RI project, the specific aim of the Focus Group Study, an outline of the procedures involved in the focus group study, as well as the benefits and risks/burdens involved in participating (cf. appendix VI (Invitation Letter), appendix VIII (Consent Form) and appendix IX (Information Letter)).

2.5.1 Risk and inconveniences

The focus group study poses a small risk of discovering sensitive information, for instance concerning research misconduct cases or problems with how specific institutions deal with research integrity issues. In the focus group introduction and debriefing, the focus group facilitators will emphasise that participants are not to repeat what is said in the focus group interviews to others.

The participants will be informed about these matters in an informed consent form (see appendix VIII and section 2.5.2), which they will see and sign before the focus group interviews. By signing the informed consent form, the participants agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group session.

2.5.2 Informed consent

Before the focus group interview, all participants in the focus groups will be presented with an information letter (appendix IX) and an informed consent form (appendix VIII). These include information on the project's purpose, funding, recruiting processes, methodologies, expected risks/adverse effects, beneficiaries of research results, communication of research results, all matters concerning data collection, analysis and protection of the participants personal information, the participants' opportunities for leaving the study and for viewing, and if relevant, commenting on transcriptions of interviews and quotations. In the informed consent form, it is very clearly described what the participants give their consent to by signing the form. The informed consent form follows the guidelines of Aarhus University (cf. appendix VIII, please also see the focus group study's privacy policy in appendix X).

2.5.3 Data management and privacy

We will ensure that our data management procedures comply with the General Data Protection regulation (GDPR, link) of the European Union. Our procedures for data management and privacy is specified in our privacy policy (cf. appendix X). The invitation letter (appendix VI) provides a link to the privacy policy and in this way informs participants of our procedures regarding data management and privacy.

2.6 Expected scientific and social benefits of the research

SOPs4RI aims to promote excellent research that aligns with the principles and norms of the European Code of Conduct for Research Integrity, and to help research performing organisations (RPOs) and research funding organisations (RFOs) to counter research misconduct. Through the development and empirical validation of a toolbox with standard

operating procedures (SOPs) and guidelines, which RPOs and RFOs can use in their Research Integrity Promoting Plans (RIPPs), the project intends to help cultivating research integrity and reducing detrimental practices in science.

The aim of the focus group study is to provide discipline specific knowledge on research integrity topics. In the focus group interviews, we wish to learn from the participants' various experiences. We want to understand what kinds of research integrity topics are important for researchers and stakeholders from different fields. Without this knowledge, we would not be able to make a discipline sensitive toolbox for RPOs and RFOs. The toolbox would instead risk being too generic, with no or little relevance to the different main areas of research. By participating in a focus group interview, the participants will help us improve the tools that RPOs and RFOs are going to use in their RIPPs – and in this way make sure that disciplinary differences and different stakeholder needs are taken into account.

2.7 Expected outputs

The expected output of this study is:

1) This protocol (deliverable 5.1.)
2) Deliverable 5.2. "Report on the results of the focus group interviews"
3) One or more published articles in relevant academic journals. The first article will be on the main results of the study and include all partners in WP5 as co-authors. Hereafter, publications on single aspects of our findings can be made. Here, different partners can act as main authors and take the initiative to such papers. However, all other partners in WP5 should have a chance to become co-authors of these papers (provided, of course, that they would like to become co-authors of the paper and are willing to put in the necessary work).

2.8 Contribution of work package partners

Aarhus University (AU) will lead the work in WP5 described above. Other SOPs4RI partners will participate in the design and planning phase, in the conduction of the focus group interviews and in the analysis and writing of the final report and academic papers. Contribution of work package partners is described below:

WP Partner	Description of contribution	Months
AU	WP lead. Leading the designing and planning of the focus group study, conducting 10 focus groups, transcribing these 10 interviews, coding all the interviews, leading the analysis work and report writing.	22.00
MEFST	Involvement in designing and planning of focus group study plus responsible for conducting 6 focus group interviews (with help from UoT, who will conduct two of the interviews), including transcription of the interviews.	5.00
NTUA	Involvement in designing and planning of focus group study plus responsible for conducting 6 focus group interviews (with help from LSE, who will conduct two of the interviews), including transcription of the interviews.	5.00
UL (CWTS)	Involvement in designing and planning of focus group study plus responsible for conducting 10 focus group interviews (with help from VU), including transcription of the interviews. Involvement in the analysis and report writing.	10.00
LSE	Involvement in designing and planning of focus groups + the conduction of two groups.	2.00

UNITN	Involvement in designing and planning of focus groups + the conduction of two groups.	2.00

2.9 References

Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Thousand Oaks, CA, US: Sage Publications, Inc.

3. Appendixes

3.1 Appendix I. Topic list with questions and probes

	Topics for Researcher groups	Start questions	Probes	Topics for mixed groups	Start questions	Probes
1.	**Education and training in RI**	Education and training in research integrity issues are often emphasized as important to promote a more responsible research culture. – Which type of issues do you think should be covered in RI training?	Different issues for different groups? – students, junior and senior researchers) What kind of procedures could your institution/organization implement to ensure a high level of RI training?	**Education and training in RI**	Education and training in research integrity issues are often emphasized as important to promote a more responsible research culture. In this regard, funders can provide an incentive to researchers to obtain good education and training in RI. –	Different issues for different groups? – students, junior and senior researchers) Do you think funders should ask that researchers are trained in research integrity issues to receive funding? (if yes, type of RI issues?)

			Would it be a good idea to have SOPs or guidelines here?		Which type of issues do you think should be covered in RI training?	What kind of procedures could your institution/organization implement to ensure a high level of RI training? Would it be a good idea to have SOPs or guidelines here?
2.	**Research ethics structures**	Research ethics structures seem to differentiate between research fields and across institutions and countries. Which type of issues do you think	What kind of procedures could your institution/organization implement to ensure a sound and transparent ethical approval process?	**Research ethics structures**	Research ethics structures seem to differentiate between research fields and across institutions and countries. Which type of issues do you think	What kind of procedures could your institution/organization implement to ensure a sound and transparent ethical approval process?

		should be covered in ethical approvals within your main field of research? (Hum, Soc Sci, Med, Nat)	What is the perception of ethics regulatory procedures in your field? (hinderance/nuisance, basic condition of doing good research, necessary step to receive funding, etc.) Would it be a good idea to have SOPs or guidelines here?		should be covered in ethical approvals within your main field of research? (Hum, Soc Sci, Med, Nat)	Would it be a good idea to have SOPs or guidelines here?
3.	**Publication and Communica-**	Is open science an important issue within your field of research? How do you practice	What are main RI-related barriers of practicing open science in your field?	**Publication and Communication** (open science)	Is open science an important issue within X field of research?	What kind of procedures could a RFO implement to

	tion (author-ship, open sci-ence)	open science? (e.g. OSF, protocols, citizen science projects, use of ResearchGate/ Mendeley etc.) How do you distribute authorships within your field of research?	What kind of procedures could your institution/or-ganization implement to promote open science? What kind of procedures could your institution/or-ganization implement to promote clear authorship guidelines? Would it be a good idea to have SOPs or guidelines here? (authorships/open science)		How is it typically practiced? (e.g. OSF, protocols, citizen sci-ence projects, use of ResearchGate/ Men-deley etc.) Should funders re-quire that beneficiar-ies (researchers and research institutions) live up to certain standards when it comes to open sci-ence?	promote clear standards for open science? Would it be a good idea to have SOPs or guidelines here? (authorships/open science)

4.	**Dealing with breaches of RI** (including RI investigations, procedures, sanctions, whistleblowers)	We know that institutions and organizations deal with breaches of RI in different ways and that it e.g. varies whether there are local Research integrity offices (RIOs) and if national research integrity committees are appointed within and across countries.	"Do you see a need for more RI counselling and advice? (institutional/organizational, nationally)" Would it be a good idea to have SOPs or guidelines here? What kind of procedures could your institution/organization implement to be better equipped to handle breaches of RI? (FFP, QRP)	**Dealing with breaches of RI** (including RI investigations, procedures, sanctions, whistleblowers)	We know that institutions and organizations deal with breaches of RI in different ways and that it e.g. varies whether there are local Research integrity offices (RIOs) and if national research integrity committees are appointed within and across countries.	"Do you see a need for more RI counselling and advice? (institutional/organizational, nationally)" Would it be a good idea to have SOPs or guidelines here? What kind of procedures could your institution/organization implement to be better equipped to handle breaches of RI? (FFP, QRP)

		Which type of issues would you like to see covered in RPOs' and RFOs' policies on (potential) breaches of RI? (e.g. allegation, investigation, appeal, sanction, dissemination, infrastructure etc.)			Which type of issues would you like to see covered in RPOs' and RFOs' policies on (potential) breaches of RI? (e.g. allegation, investigation, appeal, sanction, dissemination, infrastructure etc.)	
5.	**Data management (GDPR)**	All researchers in Europe have to comply with the European GDPR rules. Do you see any challenges in fulfilling these requirements?	Do you always know how to be GDPR compliant with the data generated from your research?	**Selection and evaluation of proposals**	When research projects are funded, they need to be in compliance with existing research integrity requirements and, ideally, this should be	Would it be a good idea to request a RI plan from the applicants? What elements should be covered in such a plan? What about diversity issues?

			What kind of procedures could your institution/organization implement to support responsible research practices when collaborating with other RPOs? Would it be a good idea to have SOPs or guidelines here?		transparent in research applications when RFOs select and evaluate proposals – In research applications, which RI elements do you view as important to include? Why?	How do we avoid that this becomes a pure box ticking exercise? There are of course also many other issues to consider when selecting and evaluating project proposals: How can funders e.g. ensure that the most relevant methods are used? How can plagiarism be discovered? Would it be a good idea to have SOPs or guidelines here? What kind of procedures could RFOs implement to

						ensure that funded research applications actually adhere to RI requirements ?
6.	**Independence from commercial influences(academy/ industry collaborations)**	Issues regarding appropriate interference and research independence can emerge in collaborations between academia and industry/SMEs How do you experience academia/Industry collaborations in terms of ensuring that	(Good/bad examples?) What kind of procedures could your institution/organization implement to support scientific freedom in academic/industry collaborations? Would it be a good idea to have SOPs or guidelines here?	**Independence from commercial influences(academy/ industry collaborations)**	Issues regarding appropriate interference and research independence can emerge in collaborations between academia and industry/SMEs How do you experience academia/Industry collaborations in terms of ensuring that	(Good/bad examples?) What kind of procedures could your institution/organization implement to support scientific freedom in academic/industry collaborations?

		research remains independent from commercial influence? Can you think of other issues that might endanger academic independence, and for which some guidance might be helpful?			research remains independent from commercial influence? Can you think of other issues that might endanger academic independence, and for which some guidance might be helpful?	Would it be a good idea to have SOPs or guidelines here?
7.	**Research collaboration among RPOs**	We know from existing research that perceptions of how to practice responsible conduct of research can be quite diverse.	Have you experienced any problems when it comes to being able to conduct your research in a responsible way?	**Monitoring of funded applications**	When research projects are funded, they need to be in compliance with existing research integrity requirements.	RI requirements also include financial monitoring and monitoring of the research plan/grant agreement – how do we secure that funds are used in the way they were supposed to

		How do you experience collaborations with other research performing organizations?	What kind of procedures could your institution/organization implement to support responsible research practices when collaborating with other RPOs? Would it be a good idea to have SOPs or guidelines here?		How can funded applications best be monitored to secure compliance with RI requirements?	be used? And how do we ensure that researchers live up to the grant agreement (research plan)? What kind of monitoring procedures could RPOs and RFOs implement to ensure that funded research applications actually adhere to RI requirements? Would it be a good idea to have SOPs or guidelines here? How do we avoid too much bureaucracy here?

8.	**Transparency** (Supporting a responsible research process)	Transparency is considered an important norm in all fields of research; it has for example a prominent place in many Codes of Conduct for Research Integrity. We would like to hear your thought about how transparency can be ensured in your	What kind of procedures could your university implement to ensure transparency within your field? Would it be a good idea to have SOPs or guidelines here?	**Conflict of interest**	From a previous study in this project, it seems that conflicts of interest might be a central issue both to RPOs and RFOs (e.g. in regard to review committee members/reviewers)-	What kind of procedures could RPOs and/or RFOs implement to reduce conflicts of interest? Would it be a good idea to have SOPs or guidelines here?

		field of science?" (Example of possible problems with transparency: That it is difficult to follow a paper – its methods, analysis or other parts of it – because of a lack of transparency)			Have you encountered conflicts of interest? (examples?) How do you manage them?	
9.	**Managing competition and publication pressure**	We know from existing research that competition and publication pressure in some cases may challenge responsible research practices – but we don't know how this	Do you know what is expected of you in terms of publications? Do you think the incentive structures in your institution (e.g. policies on hiring,			

		plays out within different disciplines. In your fields of research, do you experience that competition and publication pressure can jeopardize responsible research practices? (In what way? Examples?)	promotions, remuneration) influence publication pressure and competition? (in what way?) Could your institution use other measures to assess researchers, in order to alleviate competition and publication pressure? What kinds of additional procedures could your RPO implement to ensure that			

			competition and publication pressure do not jeopardize RI? Would it be a good idea to have SOPs or guidelines here? Publication (e.g. publication policy) and Competition (e.g. positions/career progression)			

10.	**Responsible supervision and mentoring**	Responsible supervision and mentoring are often emphasized as important to promote a more responsible research culture. – Which type of issues do you think should be covered in RI supervision?	(Different for various positions/team collaborations?) What kind of procedures could your institution/organization implement to ensure a high level of RI mentoring / supervision? Would it be a good idea to have SOPs or guidelines here? (e.g. PhD/ Post doc guidelines, PI team leadership)			

3.2 Appendix II. Interview/moderator guide

The focus group study – the interview/moderator guide

Consent form (5 minutes)

"Before we start the interview, we need you to sign the consent forms we send you in advance." [Have extra copies ready for signing, in case the participants haven't brought a signed version of the copy that was send to them].

Introduction (10 minutes)

[Parts of the following text – 'Background' and 'What we are going to talk about today' – will be send to participants beforehand, when the interview appointment is confirmed. During the interview, the main points are summarized in a few slides].

Welcome

Thank you very much for taking the time to participate in this focus group study. We are very pleased that you accepted our invitation.

Background [May be done in the national language, if needed]

In the new research framework program in the EU – Horizon Europe – that kicks off in January 2021, the European Commission wishes to strengthen its commitment to Research Integrity by requiring that organisations, that receive EU funding, not only formally declare compliance with the European Code of Conduct for Research Integrity (ALLEA), but also do this in practice by implementing so-called Research Integrity Promotion Plans (RIPPs). [Have a copy of the Code of Conduct ready if anybody asks what that is]

A RIPP is a plan for how the organization will ensure, foster and promote responsible research practices, avoid detrimental practices, and handle misconduct.

Our project, which is called SOPs4RI (Standard Operating Procedures for Research Integrity), has been asked by the commission to deliver a document describing which topics that should be covered in the RIPPs. The research group behind SOPs4RI consists of 13 organisations in 10 different European countries. We are working towards creating an online, freely available toolbox with

Standard Operating Procedures (SOPs) and Guidelines that Research Producing Organisations (RPO, e.g. universities) and Research Funding Organisations (RFO) can use in their work with the RIPPs.

- [Show an example of a guideline] By guidelines, we mean statements of principles or issues to consider when performing a task, aimed to guide courses of action. Guidelines give direction and help users make decisions. They may include checklists.

- [Show an example of a SOP] Standard Operating Procedure (SOP) are on the other hand a detailed, written instruction, aimed to achieve uniform action step-by-step. SOPs prescribe specific actions; they liberate users from decision-taking by ensuring that the procedure is followed. They may come in the shape of a 'decision-tree'/flow-diagram, similar to what is referred to as an algorithm in clinical contexts.

In order to make the toolbox useful for different organisations, it is important that it is sensitive towards national, organisational and disciplinary differences. In different work packages, we look into different aspects of this. The purpose of the focus group study, which this interview is a part of, is to help us gain a better understanding of different disciplines'/main research areas' needs for research integrity support from RPOs and RFOs in the form of SOPs and/or guidelines. The focus group study consists of 32 interviews overall.

What we are going to talk about today

We have invited you today, because you are researchers [or stakeholders] within x main area of research.

In previous work in SOPs4RI, we have identified a number of topics that influence research integrity, and that are therefore important for universities and other research producing [or funding] organisations to address. Today, we will present you with some of the topics in order to learn more about your understanding of them – and your area of research's needs for SOPs or guidelines for these topics. In all, we are going to discuss two [or three] topics in-depth. We also have an exercise where you will be asked to sort a longer list of topics into three different groups, depending on their relevance and importance for your field of research. More about that later.

Practical issues

The interview will take 2 hours including a short break after an hour. [There is coffee, tea and water on the table. There is also some cake and some fruit, so please help yourself to some of that OR sandwiches/light lunch in the break].

In the interview today, we start with a couple of open questions. We then specifically look at two [or three] topics in-depth before we have a break. Hereafter, we turn to the exercise before rounding off.

In a focus group interview, there are fewer questions than in a normal interview. It is important that you talk together and discuss the issues. Our role is primarily to be moderators for a conversation between you.

We also have to emphasise that all issues discussed in the focus group interview are confidential. It is important that everybody can talk freely without fearing that what he or she says here might be brought up elsewhere.

After the interview

The interview will be audio recorded so that we can remember what has been said today. The subsequent interview transcriptions will be anonymized and handled in alignment with the European Union's General Data Protection Regulation as outlined in the consent form and the project's privacy policy.

Introduction of participants

All participants introduce themselves [starting with their names, so that the transcribers can separate their voices.]

Opening questions (10-15 minutes)

For the 16 researcher only groups

1) "When you think about your own work/research, are there any areas related to RI where it would be beneficial to have more clear guidelines or SOPs?"

Probes:

"Have you experienced any problems when it comes to being able to conduct your research in a responsible way and would it have been useful for you to have SOPs or guidelines here?" "Do you sometimes experience that it is difficult to find out what the right way to act is, when you are working with RI issues, for example some of the issues you just mentioned?"

2) "Which topics would you like to see covered in a RIPP at your institution?"

Probe:

"What is the most important topic for enhancing RI in your area of research?"

For the 16 mixed groups

1) "Funders could potentially play a role in setting RI standards that beneficiaries – both researchers and their host institutions – should live up to in order to receive funding. Which areas related to RI would you like to see funders focusing on?

Probe:

"What is the most important topic for enhancing RI in X main field of research – and is it a topic that funders should do something about?"

"Which problems related to RI do you encounter in your work?"

"Now we would like to delve into two [or three] RI topics that might be important for universities or other research producing organisations [or funders] to focus on: topic no. 1 is …, topic no. 2. Is … [and topic no. is …]

[Overall, 40 minutes are allocated to the two or three topics]

First topic (15 minutes):

Second topic (15 minutes):

Third topic (15 minutes):

Break (10 minutes)

[Moderator explains when the interview will start again]

The sorting exercise (25 minutes)

Introduction

In our project (SOPs4RI), we have via a Delphi survey [Explain, if needed, what a Delphi consensus consultation process is], expert interviews and scoping reviews identified a number of topics that effect research integrity and that universities and other research producing organizations [or RFOs, for mixed groups] might need to address. However, we don't know which of these issues are especially important for x main field of research. We would therefore like you as a group to talk about and to sort these topics into three categories:

- In group 1, you place the topics that are *very important* for RI within your field of research,
- In group 2, you place the topics that are *somewhat important* within your field of research,
- In group 3, you place the topics that are of *no or minimal importance* for research integrity within your field of research.

[We are especially interested in hearing their thought on how it should be – what we *ideally should focus on*– seen from their disciplinary perspective.]

[The cards with the topics are placed on the table together with three other cards with group numbers, all participants get 3 minutes for themselves to think about the question, and collectively they hereafter negotiate which cards to put into group 1, 2 and 3.]

[Remember to take a photo of the cards at the end of the exercise!]

Follow up questions, examples:

- For the topics that are placed in group 1, "Is there a need for SOPs or guidelines for these topics?"
- "Why have you placed X in group Y?"
- "Is X not important since you have placed it in group 3?"

Add to topics (5 minutes)

"Are there important topics for RI that we have missed? Are there other topics we need to include? Things that RPOs and RFOs have to pay attention to and implement SOPs and guidelines for?"

Rounding off/debriefing (5 minutes)

- Thank you for you participation.
- What will happen now: transcripts, analysis, report to the EC (we'll send the report to you) plus academic papers.
- End with a short evaluation of the interview "How have you experienced the focus group?

Extended feedback round during pilot focus groups (substitutes Rounding off/debriefing) (20-30 minutes)

- Thank you for you participation.
- What will happen now: transcripts, analysis, report to the EC (we'll send the report to you) plus academic papers.

"Since this is the first focus group we are conducting in this focus group study, it would be helpful for us if you could provide us with some feedback on the interviews. We will use this feedback to optimize the next focus groups."

Questions and concerns to be discussed

- How did you experience the introduction – were the slides clear?
    - Did you feel you got enough information - and relevant information?
- For each of the main questions in the topic guide (2-3 per focus group)
    - One of the main topics we addressed in the focus group was "…". Were the questions related to this topic clear? Was there any ambiguity/lack of clarity in how the questions were asked?
        - Is there something we could improve in the questions discussed?
- Regarding the sorting exercise
    - Was it clear what was expected of you during the exercise?
    - Were there any problems in conducting the exercise? Suggestions for improvements?
- On the general process of the focus groups
    - What could the facilitators do better to maximize the outcome of the focus group interview?
    - How did you perceive the informed consent process?
- Is there any other general feedback you would like to give us about the focus group?

3.3 Appendix III. Topic division and distribution of focus groups

Aarhus

Discipline	**Place**	**Topic 1**	**Topic 2**	**Topic 3**	*Back-up topic*
HUM historical	DK	Data management	Transparency	Independence from commercial influences	
HUM stakeholder/researchers	ES	Research ethics structures	Selection and evaluation of proposals	-	*Independence from commercial influences*
SOC stakeholder/researcher	DK	Research ethics structures	Selection and evaluation of proposals	-	*Independence from commercial influences*
SOC qualitative	ES	Data management	Transparency	Research collaboration among RPOs	-
NAT lab/exp/app	ES	Data management	Independence from commercial influences	-	
NAT theoretical	DK	Dealing with breaches of RI	Transparency		*Data management*
NAT stakeholders/researchers	DK	Research ethics structures	Selection and evaluation of proposals	-	*Monitoring of funded applications*
MED stakeholders/researchers	DK	Research ethics structures	Selection and evaluation of proposals	-	*Education and training for RI*
MED stakeholders/researchers	ES	Independence from commercial influences	Conflict of interest	-	*Monitoring of funded applications*
MED clin/trans/pub health	DK	Data management	Transparency	Independence from commercial influences	*Publication and communication*

CWTS & VUmc

Discipline	**Place**	**Topic 1**	**Topic 2**	**Topic 3**	*Back-up topic*
HUM language	NL	Managing competition and publication pressure	Supervising & Mentoring	Education & Training in RI	-
HUM stakeholders/researchers	NL	Education and training in RI	Dealing with breaches of RI	-	*Publication and communication*
HUM stakeholders/researchers	DE	Publication and communication	Monitoring of funded applications	-	*Education and training in RI*
SOC stakeholders/researchers	NL	Education and training in RI	Dealing with breaches of RI	-	*Research ethics regulatory procedures*
SOC quantitative	NL	Managing competition and publication pressure	Supervising/Mentoring	-	*Education and training in RI*
SOC qualitative	DE	Education and training in RI	Publication and communication	-	*Managing competition and publication pressure*
NAT lab/exp/app	BE	Managing competition and publication pressure	Supervising/Mentoring	Research collaboration among RPOs	-
NAT stakeholders/researchers	NL	Education and training in RI	Dealing with breaches of RI	-	*Research ethics regulatory procedures*
MED stakeholders/researchers	BE	Education and training in RI	Dealing with breaches of RI	-	*Publication and*

					communication
MED clin/trans/pub health	NL	Managing competition and publication pressure	Supervising/Mentoring	Research collaboration among RPOs	-

MEFST & UoT

Discipline	**Place**	**Topic 1**	**Topic 2**	**Topic 3**	*Back-up topic*
HUM communication	HR	Research collaboration among RPOs	Publication and communication	-	*Supervision and mentoring*
SOC stakeholders/researchers	HR	Publication and communication	Monitoring of funded applications	-	*Dealing with breaches of RI*
NAT lab/exp/app	HR	Education and training in RI	Publication and communication	Research ethics structures	-
NAT stakeholders/researchers	IT	Publication and communication	Monitoring of funded applications	-	*Conflicts of interest*
MED basic research	HR	Education and training in RI	Publication and communication	-	*Reseach collaboration among RPOs*
MED stakeholders/researchers	IT	Publication and communication	Monitoring of funded applications	-	*Conflicts of interest*

NTUA & LSE

Discipline	**Place**	**Topic 1**	**Topic 2**	**Topic 3**	*Back-up topic*

HUM philosophical & aesthetic	UK	Research ethics structures	Dealing with breaches of RI	-	*Transparency*
HUM stakeholders/researchers	GR	Independence from commercial influences	Conflict of interest	-	*Selection and evaluation of proposals*
SOC quantitative	UK	Research ethics structures	Dealing with breaches of RI	Independence from commercial influences	-
SOC stakeholders/researchers	GR	Independence from commercial influences	Conflict of interest	-	*Selection and evaluation of proposals*
NAT stakeholders/researchers	GR	Independence from commercial influences	Conflict of interest	-	*Dealing with breaches of RI*
MED basic research	GR	Research ethics structures	Dealing with breaches of RI	Independence from commercial influences	-

3.4 Appendix IV: The rationale for the combination of topics in the interviews

The tables in this appendix show which topics are combined in the interviews and the reasons behind the single pairings/groupings. The overall rationale behind the pairing/grouping is that we wanted to combine 'most similar topics' in order to make them supplement and inform each other as much as possible. The intention is to gain as deep knowledge as possible about the topics in the focus groups (i.e. to open up for 'thick descriptions').

RPO Topics to combine			**Reasons**
Data management	Transparency	Collaboration among RPOs	*Data management and transparency (e.g. preregistration) issues are closely related to each other. Collaboration among RPOs will have important implications on data management and trans-parency, so it is interesting to discuss these in the same focus groups.*
Managing competition and publication pressure	Supervision and mentoring		*The way that supervision and mentoring is done has a strong influence on research culture and the pressures that researchers feel.*
Education and training in RI	Publication and communication		*A big part of research integrity education is related to improving awareness about things like open science, authorship issues, predatory publishing, etc.*
Research ethics structures	Dealing with breaches of RI	Independence from commerical influences	*These are the topics, which contain a lot of existing resources. It is interesting to find out about disciplinary*

			differences here to see if existing resources are appropriate across fields.

RFO Topics to combine			**Reasons**
Research ethics structures	Selection and evaluation of proposals		*These are both topics that need to be addressed early on (before the project has even received funding) and it is therefore make sense to cover them together.*
Independence from commerical influences	Conflict of interest		*Both of these topics have to do with conflicts of interest, but the first one is more focused on commercial influences. Therefore, it is appropriate to discuss them together.*
Publication and communication	Monitoring of funded applications		*Since monitoring as well as publication and communication are aspects of research that occur later down the line in the process (after the project has received funding and run for a little while), it makes sense to discuss these topics together.*
Education and training in RI	Dealing with breaches of RI		*By discussing breaches and education together, we can explore what happens (or should happen) when RI is not adhered to and what kinds of awareness/education/training is needed to prevent such things from happening or to deal with them.*

3.5 Appendix V. Detailed Roadmap for WP5

SOPs4RI - Roadmap for WP5

Planning and designing

Deadline	Task	Responsible/involved
15/8-19	Matching of expectations with WP4 on what we get from WP4 - and what we are expected deliver to WP4	MPS
15/8-19	Agenda for kick-off meeting in WP5	MPS/TR
29/8-19	Kick-off meeting for WP in Aarhus	MPS/all
29/8-19	Task distribution between partners	MPS/all
29/8-19	Sampling strategy	TR/all
20/9-19 (send out for comments before 10/9)	Invitation letter	TR/comments from all
20/9-19	Excel template for recruitment	TR
20/10 (process begins at kick-off meeting)	Create exercise for focus group interviews	MPS, TR/all
1/11 (draft for comments 15/10)	Interview guide	MPS, TR, CWTS/all

1/11-19 (draft for comments 15/10)	Consent form	TR/all
1/11-19	Finalize design of focus group interviews (Milestone 13 in SOPs4RI)	MPS/all
8/11-19 (draft for comments 3/11-19)	Submit Ethical Approval application to Aarhus University's Research Ethics Committee (to be discussed by them on their meeting 5 December)	MPS, TR/all
18/11-19, from 13:00 to 15:00 CET	Skype meeting on recruitment process and test interviews	All partners
11/12-19	Test of interview guide/four test interviews	AU, CWTS, NTUA, MEFST
16/12-19, from 13:00 to 15:00 CET	Skype meeting on experience with test interviews (Any problems in the interview guide? Exercise? Other things?) + status on recruitment process	All partners
20/12-19	Adjustment of interview guide and exercise	MPS, TR, CWTS
15/1-20	Recruitment of interviewees finalized	All partners
15/1-20	Guidelines for practicalities in connection with the interviews (recording, material, catering etc.)	TR
31/12-19	Deliverable 5.1 ready for review: Protocol for the focus group interviews. This protocol must give a detailed description of the design, methods and aims of the focus group interviews.	MPS/TR and CWTS + comments from all.

31/1-20	All focus group interviews are planned (incl. recruitment of interviewees, booking of rooms, catering, check of recording equipment etc.) (Milestone 14 in SOPs4RI).	All partners
31/1-20	Deliverable 5.1 uploaded to the EC	AU

Interviewing

Deadline	Task	Responsible/involved
1/2-20	Interview period begins	All
15/2-20	Template for transcription of interviews send out	TR
31/3-20	32 focus group interviews conducted	All
23/4-20	Transcription of 32 focus group interviews finalized (can begin immediately after each interview has been conducted) (Milestone 15 in SOPs4RI).	AU, CWTS, MEFST, NTUA

Analysing and reporting

Deadline	Task	Responsible/involved
15/4-20	Coding strategy finalised	AU, CWTS
24/4-20	Coding of interviews in NVivo begins	AU, CWTS

31/5-20	Coding of all interviews completed	AU, CWTS
1/6-20	Analysis strategy finalized and analysis of interviews begins: • responses to version 1.0 of the SOPs and guidelines • discipline specific needs regarding SOPs and guidelines	AU, CWTS
30/6-20	Analysis completed	AU, CWTS
1/7-20	Writing period for report on the results of the focus group interviews begins. The report is going to describe the results of the focus group interviews, focusing on the differences between the four main disciplinary areas. It should be written in accordance with the expectations described in the protocol for WP4.	AU, CWTS, all partners comment and/or contribute
31/7-20	Deliverable 5.2 ready for review: This deliverable will be formed as a draft of a journal article, summarizing the main results from WP5	AU, all partners
31/8-20	Deliverable 5.2. uploaded to the EC	AU

3.6 Appendix VI. Invitation Letter

Invitation to participate in a focus group discussion on promoting a strong research integrity culture

Dear Sir/Madam [replaced by name],

We invite you to take part in a focus group discussion organized by the European project SOPs4RI (Standard Operating Procedures for Research Integrity: https://www.sops4ri.eu/) **on the xx of March 2020 at the …. University.**

SOPs4RI is funded by the European Commission as part of the SwafS (Science with and for Society) program within Horizon 2020. SOPs4RI aims to promote excellent research and a strong research integrity culture across European Research Performing Organisations (RPOs) and Research Funding Organisations (RFOs).

As part of the project, we plan to conduct 32 focus group interviews across Europe with researchers from the humanities, social science, natural science, and medical science together with main stakeholders from, e.g. research integrity offices, academies of science, journals, RFOs, governmental bodies, industry, and researcher unions.

In your capacity as a researcher [or stakeholder] within the field of x [replaced by field specific information], we would like to invite you to participate in one of these focus group interviews.

We are interested to learn more about how RPOs (e.g. universities) and RFOs can help researchers within your discipline to conduct research in the best and most responsible way. In the focus group, we thus wish to learn from the participants' needs for research integrity procedures and guidelines. Your valuable perspectives and knowledge will help us to identify best practices and develop a novel and practice-oriented set of useable research integrity guidelines that RPOs and RFOs can use to create institutionally tailored research integrity promotion plans.

The focus group interview will involve 5-6 researchers from related research disciplines [or 3 researchers and 3 stakeholders] together with two SOPs4RI members. Your personal information will be kept strictly confidential throughout this process, and all written and processed interview material will be anonymised. Please see our privacy policy for more information (https://osf.io/ycakg/).

The interview will take place **at x on x**and will last for two hours. We would be very grateful if you could indicate whether you would like to participate in the focus group discussion.

If you have any questions concerning the project and/or the details of the focus group study, please contact [the person recruiting + email + telephone]

Kind regards,

3.7 Appendix VII. Documentation for Ethical Approval

AARHUS UNIVERSITY

To
Senior Researcher Mads P. Sørensen
Department of Political Science –
Danish Centre for Studies in Research and Research Policy
Aarhus University

The Research Ethics Committee

Date: 5 December 2019

Direct Tel.: +45 8715 2139
E-mail: tbj@au.dk

Journal no.: 2019-0015957
Serial Number: 2019-29

Sender's CVR no.:
31119103

Page 1/2

Re the 'Work Package 5 in SOPs4RI: The Focus Group Study research project'
Person in charge of the project: Senior Researcher Mads P. Sørensen
Contact/project manager: Assistant Professor Tine Ravn
Project period: August 2019 – August 2020

Aarhus University's Research Ethics Committee (Institutional Review Board) discussed the project at its meeting on 5 December and came to the following decision:

Decision

The project *is approved* in accordance with Aarhus University's guidelines for the university's Research Ethics Committee (IRB) and the considerations listed in the guidelines.

The approval is granted with reference to the following documents:

- Information sheet with appendices:
  - Project description/protocol
  - Participant information
  - Declaration of consent
  - Interview guide
  - Roadmap
  - Privacy Policy
  - CV of the person in charge of the project

Legal Support
Aarhus University
Nordre Ringgade 1
DK-8000 Aarhus C
Denmark

Tel.: +45 8715 0000
E-mail: legal@au.dk
Web: www.au.dk/en

AARHUS UNIVERSITY

The person or persons identified as being in charge of the project guarantee that the project is carried out as described in the referenced documents and is otherwise in compliance with applicable research ethics and data protection regulations.

As a result of the approval, subsequent academic publications which are based on the findings of the project may be provided with the endorsement that 'the project was approved by the Institutional Review Board at Aarhus University' (indicating the approval number).

The following Committee members participated in the discussion of the project:

- Palle Bo Madsen, professor (chair)
- Claus Højbjerg Gravholt, clinical professor (HE)
- Vivi Schlünssen, professor (HE)
- Jette Kofoed, associate professor (AR)
- Nina Javette Koefoed, associate professor (AR)

Kind regards,

Tove Bæk Jensen
Chief consultant

3.8 Appendix VIII. Consent Form

H2020-SwafS-03-2018. "Standard Operating Procedures for Research Integrity" (SOPs4RI) Grant Agreement no. 824481

Informed Consent for Participation in SOPs4RI Focus Group Interview Study

Description of the Project

SOPs4RI aims to promote excellent research that aligns with the principles and norms of the European Code of Conduct for Research Integrity, and to counter research misconduct. Through the development and empirical validation of standard operating procedures (SOPs) and guidelines, the project intends to cultivate research integrity and reduce detrimental practices across European research performing organisations (RPOs) and research funding organisations (RFOs). SOPs4RI is funded by the European Commission as part of the SwafS (Science with and for Society) program within Horizon 2020.

Aim of the focus group interviews

In the focus group interviews, we wish to learn from the participants' various experiences with the kinds of research integrity procedures and guidelines that are seen as beneficial for researchers and stakeholders from different fields and organisations. This valuable knowledge will help us identify best practices and develop a novel and practice-oriented set of useable research integrity procedures that RPOs and RFOs can use to create institutionally tailored research integrity promotion plans. The 32 European focus group interviews in this study will include researchers from the humanities, social science, natural science, and medical science together with main stakeholders from, e.g., research integrity offices, academies of science, journals, RFOs, governmental bodies, industry, and researcher unions.

The study poses a small risk of discovering sensitive information, for instance concerning research misconduct cases or problems with how specific institutions deal with research integrity issues. In the focus group introduction and debriefing, we will emphasise that participants are not to repeat what is said in the focus group interview to others. By signing this informed consent form, participants agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group session. Participants will have the opportunity to view, and if relevant, comment on their own transcription.

Use of data and dissemination of research findings to participants

The focus group interviews will be audio recorded and the subsequent interview transcripts will be made fully anonymous. Informed consent forms will be stored separately from the audio files and interview transcripts. All data material will be stored encrypted and safely at SharePoint, a web-based collaborative and GDPR compliant platform, for 5 years after the last publication from the study. SharePoint will be administered by the project coordinator, Aarhus University.

Each participant in the focus group interview may at any time demand removal of his/her interview data by a simple request to the coordinator of the study, Mads P. Sørensen (mps@ps.au.dk), or to Aarhus University's Data Protection Officer (DPO@au.dk). Data, which have already been published, cannot be removed.

The findings from the focus group interviews will be analysed, published and made publically available. The project report detailing the findings of the study will be send to all participants when the report has been finally approved by the European Commission. No personal identifiable information will be mentioned or disclosed at any point. To promote open science and avoid research waste, anonymised data from the focus group interviews will also be made available on the project's OSF (Open Science Framework) site: https://osf.io/49fbk/. Here all names and other identifiers (information on country, university etc.) will be removed to ensure full anonymity.

Data breach

In case of a data breach, affected participants will be contacted and data will be temporarily removed from the compromised storage. All internal transfer of sensitive data will be done though secure pathways. Specifically, the secure Sharepoint workspace established for the SOPs4RI project will be used for data transfer.

Supervision

Aarhus University's Data Protection Officer (DPO@au.dk) can be contacted for questions regarding Data Protection in the SOPs4RI project. Research coordinator Mads P. Sørensen (mps@ps.au.dk) also welcomes any questions about this study.

Consent

Participation is voluntary and participants are free to withdraw from the study at any time and without giving any reason for withdrawing by contacting Mads P. Sørensen (mps@ps.au.dk) or Aarhus University's Data Protection Officer (DPO@au.dk).

By signing the consent form, you indicate that you are in agreement with all of the statements below:

- I have read the information provided about the study. I have had the opportunity to ask questions and my questions have been sufficiently answered. I have had enough time to decide whether I would like to participate.
- I am aware that participation in the study is voluntary. I also know that I can decide at any moment to not participate or to withdraw from the study. I do not have to provide any reasons for not participating or terminating enrolment in the study.

- I give consent to the audio recordings of the focus group interview.
- I give consent to the collection and use of my interview data in line with established data protection guidelines and regulations (GDPR).
- I give consent to having my interview data safely stored for five years on SharePoint after the last publication from the study.
- I give consent to having my anonymised transcribed interview data made publicly available on OSF. I understand that this means that the anonymised data can be used

for research purposes other than the ones described above. I am also aware that this means that my anonymised information may be used in countries outside of Europe and that the regulations for data processing and storage in those countries may not comply with those of the European Union.

- I agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group interview.
- I want to participate in this study.

Participant's signature: Contact's signature:

Name in Block letters:

Day/month/year

3.9 Appendix IX. Information Letter for the Participant: *Information about the Focus Group Study (attachment to the confirmation email)*

Background for the Focus Group Study

SOPs4RI (Standard Operating Procedures for Research Integrity) is a four-year (2019-2022), multi-partner project funded by the European Commission. SOPs4RI aims to stimulate transformational processes across European Research Performing Organisations and Research Funding Organisations (RPOs &RFOs). Specifically, SOPs4RI will establish an inventory of relevant Standard Operating Procedures (SOPs) and Guidelines that RPOs & RFOs can draw on when developing governance arrangements promoting strong research integrity cultures.

In the new research framework program in the EU – Horizon Europe – that kicks off in January 2021, the European Commission wishes to strengthen its commitment to Research Integrity by requiring that organisations that receive EU funding, not only formally declare compliance with the European Code of Conduct for Research Integrity (ALLEA), but also do this in practice by implementing so-called Research Integrity Promotion Plans (RIPPs). A RIPP is a plan for how the organization will ensure, foster and promote responsible research practices, avoid detrimental practices, and handle misconduct.

The SOPs4RI project has been asked by the commission to deliver a document describing which topics that should be covered in the RIPPs. The research group behind the SOPs4RI project consists of 13 organisations in 10 different European countries. We are working towards creating an online, freely available toolbox with Standard Operating Procedures (SOPs) and Guidelines that Research Producing Organisations (RPO, e.g. universities) and Research Funding Organisations (RFO) can use in their work with the RIPPs.

The Focus and Approach in the Focus Group Discussion

In order to make the toolbox useful for different organisations, it is important that it is sensitive towards national, organisational and disciplinary differences. In different work packages, we look into different aspects of this. The purpose of the focus group study is to help us gain a better understanding of different disciplines'/main research areas' needs for research integrity support from RPOs and RFOs in the form of SOPs and/or guidelines.

In previous work in SOPs4RI, we have identified a number of topics that influence research integrity, and that are important for universities and other research producing or funding organisations to address. Such topics could for instance be education and training in RI; research ethics regulatory procedures; publication and communication issues and dealing with breaches of RI, among other topics.

In the focus group interview, we will present the focus group participants with some of the topics in order to learn more about their understanding of them – and the par-

ticipants' needs for SOPs or guidelines for these topics within different areas of research. In all, we are going to discuss two or three different topics in-depth. We also have an exercise where participants will be asked to sort a longer list of topics into three different groups, depending on their relevance and importance for the field of research. The interview will last for 2 hours including a short break.

In a focus group interview, there are fewer questions than in a standard interview, and the conversion in a focus group takes place among participants rather than between the interviewer and the interview person as in a standard interview. We wish to learn from the participants' experiences and perceptions, and it is therefore important that the participants talk together and discuss the issues presented by the moderators of the focus group. The moderators' role is therefore primarily to be mediators for a conversation between the participants.

All issues discussed in the focus group interview are confidential. The interview will be audio recorded and the subsequent interview transcriptions will be anonymized and handled in alignment with the European Union's General Data Protection Regulation as outlined in the project's privacy policy and in the consent form that participants will receive prior to the interviews.

3.10 Appendix X: Privacy policy

SOPs4RI – WP5: Focus groups

Privacy policy

This document describes the privacy policy that all research activities conducted in work package 5 are committed to follow.

Data collection, processing, storage and usage

Collection, storage and use of the data collected during the focus groups interviews will be in alignment with the European Union's General Data Protection Regulation and Danish Ministry of Higher Education and Science's recommendation in the Danish Code of Conduct for Research Integrity, section II. 2.1.i.

The ethical approval of the focus group study in Work Package 5 will be obtained from the Research Ethics Committee at Aarhus University.

Before the interview, all participants in the focus group interview will be presented with an information letter and an informed consent form, which includes information on the project's purpose, funding, recruiting processes, methodologies, expected risks/adverse effects, beneficiaries of research results, communication of research results and all matters concerning collected data as described in this document.

In order to be able to transcribe and analyse the interviews, the focus group interviews will be audio recorded. The subsequent interview transcriptions will be anonymised. Informed consent forms will be stored separately from the audio files and transcripts. All data material will be stored safely

at SharePoint, a web-based collaborative and GDPR compliant platform, administered by the project coordinator, Aarhus University. All data will be stored encrypted at SharePoint for 5 years after the last publication from the study. The findings from the focus group interviews will be analysed, published and made publicly available. No personal identifiable information will be mentioned or disclosed at any point. Data preservation will comply with GDPR regulations, and it is the responsibility of the WP5 research coordinator, Mads P. Sørensen (mps@ps.au.dk) to ensure that sensitive data is secured and deleted in accordance with the GDPR regulations.

Each participant in the focus group interviews may at any time demand removal of his/her interview data by a simple request to the coordinator of the study, Mads P. Sørensen (mps@ps.au.dk), or to Aarhus University's Data Protection Officer (DPO@au.dk). However, data, which have already been published, cannot be removed.

To promote open science and avoid research waste, anonymised data from the focus group interviews will also be made available on the project's OSF (Open Science Framework) site: https://osf.io/49fbk/. Here, all names and other identifiers (information on country, university etc.) will be removed to ensure full anonymity.

In case of a data breach, affected participants will be contacted and data will be temporarily removed from the compromised storage. All internal transfer of sensitive data will be done through secure pathways. Specifically, the secure SharePoint workspace established for the SOPs4RI project will be used for data transfer.

Questions about the Privacy Policy?

Aarhus University's Data Protection Officer (DPO@au.dk) can be contacted for questions regarding data protection, privacy issues and use of data in the SOPs4RI project. Research coordinator Mads P. Sørensen (mps@ps.au.dk) also welcomes any questions about this study.

3.11 Appendix XI Topics for the sorting exercise

The following two topic lists are identical with the final lists of topics for the first version of the toolbox (cf. D.4.2.)

Topics for the ranking exercise – for the 16 researchers only/RPO groups.

Rank	Topic	Subtopics
1	Education and training in RI	a. pre-doctorate b. post-doctorate c. training of RI personnel & teachers d. RI counselling and advice
2	Responsible supervision and mentoring	a. PhD guidelines b. supervision requirements & guidelines c. building and leading an effective team
3	Dealing with breaches of RI	a. RI bodies in the organisation b. protection of whistleblowers c. protection of those accused of misconduct d. procedures for investigating allegations e. sanctions f. other actions (including mobility issues)
4	Research ethics structures	a. set-up and tasks of ethics committees b. ethics review procedures
5	Data practices and management	a. guidance and support b. secure data storage infrastructure c. FAIR principles
6	Declaration of competing interests	a. in peer review b. in the conduct of research c. in appointments and promotions d. in research evaluations e. in consultancy
7	Research environment	a. fair procedures for appointments, promotions and numeration

		b. adequate education and skills training c. culture building d. managing competition & publication pressure e. conflict management f. diversity issues g. supporting a responsible research process (transparency, quality assurance, requirements)
8	Publication and communication	a. publication statement b. authorship c. open science d. use of reporting guidelines e. peer review f. predatory publishing g. communicating with the public
9	Collaborative research among RPOs	a. among RPOs inside/outside the EU b. with countries with different R&D infrastructures c. between public and private RPOs

For a description of the topics/subtopics, click here.

Topics for the ranking exercise – for the 16 mixed groups/RFO groups.

Rank	Topic	Subtopic
1	Dealing with breaches of RI	a. RI bodies in the organization b. procedures for breaches by funded researchers c. by review committee members d. by reviewers e. by staff members f. protection of whistleblowers and the accused g. sanctions/other actions h. communicating with the public
2		a. among review committee members

	Declaration of competing interests	b. among reviewers c. among staff members
3	Funders' expectations of RPOs	a. Codes of Conduct b. assessment of researchers c. education and training for RI d. processes for investigating allegations of research misconduct
4	Selection & evaluation of proposals	a. RI plan b. methodological requirements c. plagiarism d. diversity issues
5	Research ethics structures	a. research ethics requirements b. ethics reporting requirements
6	Collaboration within funded projects	a. expectations on collaborative research b. research that is co-financed by multiple funders
7	Monitoring of funded applications	a. financial monitoring b. monitoring of execution of research grant c. monitoring of compliance with RI requirements
8	Updating and implementing the RI policy	*NONE*
9	Independence	a. What counts as an unjustifiable interference? b. preventing unjustifiable interference by the funder c. preventing unjustifiable interference by political or other external influences d. preventing unjustifiable interference by commercial influences
10	Publication and communication	a. publication requirements b. expectations on authorship c. open science (open access, open data, transparency)
11	Intellectual property issues	*NONE*

For a description of the topics/subtopics, click here.

AARHUS UNIVERSITY

VUmc

SVEUČILIŠTE U SPLITU
MEDICINSKI FAKULTET

University of Essex

ÖSTERREICHISCHE AGENTUR FÜR WISSENSCHAFTLICHE INTEGRITÄT

Universiteit Leiden

Health Research Board

KATHOLIEKE UNIVERSITEIT LEUVEN

LSE The London School of Economics and Political Science

EARMA

UNIVERSITAS VARSOVIENSIS

SOPs4RI

www.sops4ri.eu @sops4ri SOPs4RI Project @sops4ri

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824481.