Disclaimer:

This deliverable has not yet been reviewed by the European Commission. Its content might therefore change as a result of the review process.

SOPs4RI

D6.1: Protocol for survey study

Authors: Abigail Reid, Nick Allum
Reviewer: Giuseppe A. Veltri
Editor: Nick Allum

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

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

D6.1: Protocol for Survey Study

Editor:	Nick Allum
Version:	1.0
Dissemination Level[1]: PU	PU
Author(s):	Abigail Reid, Nick Allum
Reviewer:	Giuseppe A. Veltri
Due date of deliverable:	30 November 2020
Actual submission date:	30 November 2020
Start date of project:	01 January 2019
Duration:	48 months
Organisation name of lead contractor for this deliverable:	UoEx

[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	31.08.2020	First draft	Abigail Reid / Nick Allum
0.2	01.10.2020	Response to comments provided to circulated first draft / general meeting	Abigail Reid / Nick Allum
0.3	11.11.2020	Additional text on sampling and power added	Abigail Reid / Nick Allum
0.4	26.11.2020	Response to reviewer comments	Abigail Reid / Nick Allum
1.0	27.11.2020	Incorporating RFOs in response to further reviewer comment	Abigail Reid / Nick Allum

Table of contents

EXECUTIVE SUMMARY 5
1. INTRODUCTION 6
1.1 ABBREVIATIONS 6
1.2 TERMINOLOGY 6
1.3 ABOUT SOPS4RI 7
1.4 ABOUT THIS DELIVERABLE 7
2. THE SURVEY 8
2.1 AIM 8
2.2 STUDY DESIGN 8
2.2.1 STUDY POPULATION 9
2.2.2 SAMPLING FRAME 10
2.2.3 SAMPLING METHOD 12
2.2.4 RECRUITMENT STRATEGY 13
2.2.5 INCLUSION AND EXCLUSION CRITERIA 14
2.3 METHODOLOGY 14
2.3.1 DESIGN AND ANALYSIS 14
2.3.2 CONCEPTUAL FRAMEWORK 18
2.3.3 SURVEY STRUCTURE 24
2.3.4 PRACTICAL IMPLEMENTATION 25
2.4 CONTRIBUTION OF WORK PACKAGE PARTNERS 26
2.5 ETHICAL CONSIDERATIONS 28
2.5.1 PARTICIPANT BURDEN & RISK 29
2.5.2 BENEFITS OF PARTICIPATION 30
2.5.3 DATA USES 30
2.5.4 DATA MANAGEMENT AND PRIVACY 30
2.6 EXPECTED OUTPUTS 32
2.7 EXPECTED SCIENTIFIC AND SOCIAL BENEFITS OF THE RESEARCH 32
3. DEVIATIONS FROM DOA 33
4. REFERENCES 34
5. APPENDICES 35

5.1 INFORMED CONSENT TEXT 35
5.2 WP6 PRIVACY POLICY 37

List of tables

Table 1 Research Integrity Topic Areas RPOs 15
Table 2 Research Integrity Topic Areas RFOs 16
Table 3 Rationale and example items for Survey Topic Areas 19
Table 4 Contribution of partners 26

Executive Summary

This work package consists of the design, implementation and analysis of a large-scale cross-national survey of researchers in all EU member states and selected OECD countries. The purpose is to test the feasibility of the prototype SOPs developed in other WPs by gathering perceptions and behavioural reports from researchers. In order to do this, the survey instrument will accomplish several aims. Firstly, the survey instrument will test the extant explanations, from the literature and previous studies, from various EC supported SwafS projects, as well as from the preparatory work in earlier WPs regarding QRPs and research misconduct across the study population. This will include, inter alia, publication pressure, the use of bibliometrics, promotion criteria, lack of awareness and/or training etc. Secondly, the survey will provide data on attitudes and beliefs about a set of proposed SOPs in order to estimate the barriers and opportunities likely to flow from their implementation, including the comparison of several alternative sets of possible procedures, taking account of national and field-specific variation. The effectiveness of different forms of encouragement and of potential sanctions will be amongst the perceptions measured by the survey. Thirdly, the analysis of the survey data will lead to a set of recommendations that provide guidance for the crafting of the final SOPs, based on a combination of the likely costs and benefits for SOP elements derived from survey results.

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

DPO – Data Protection Officer

WP – Work Package

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

The Standard Operating Procedures for Research Integrity (SOPs4RI) project aims to contribute to the promotion of excellent research and a strong research integrity culture aligned with the principles and norms of the European Code of Conduct for Research Integrity. The overall objective is to create a toolbox to support and guide research performing organisations (RPOs) and research funding organisations (RFOs) in fostering research integrity and consequently preventing, detecting and handling research misconduct. The project focuses on providing Standard Operating Procedures (SOPs) and guidelines that enable RPOs and RFOs to create and implement Research Integrity Promotion Plans (RIPPs). SOPs4RI will thus stimulate European organisations involved in performing and funding research to foster responsible conduct of research by organizational measures and policies. SOPs4RI takes a mixed-method, co-creative approach to the identification, development and empirical validation of SOPs and guidelines. The expected end-users of the tools provided by SOPs4RI are decision makers within RPOs and RFOs, e.g. university senior management (vice chancellors, deans, heads of administration), university academic councils, boards and directors of funding agencies, and their extended administrations. The identification, modification and development of SOPs and guidelines will take national, disciplinary, and organisational differences into account, and the final toolbox will enable RFOs and RPOs to create Research Integrity Promotion Plans in accordance with the needs of their organisation.

1.4 About This Deliverable

Deliverable 6.1. is the protocol of the survey in SOPs4RI. It includes an introduction to the survey and provides a description of the methodology, study participants, inclusion and exclusion criteria, recruitment strategy, analysis plan and relevant ethical considerations. The appendix section details all other relevant documents (invitation letter, privacy policy). This study protocol will be pre-registered with OSF.

2. The Survey

2.1 Aim

ACTION

This work package aims to gather information from researchers across Europe plus selected OECD countries and across disciplines about the feasibility and effectiveness of version 3.0 of the SOPs and guidelines as identified by WP4.

Specifically, it will:

- Check the content of the toolbox
- Identify and account for national / organisational and disciplinary differences.
- Test issues for implementation of SOPs as identified by WP4
- Analyse costs/benefits and identify potential barriers to implementation (using model chosen in co-creation workshops) for use by RPOs and RFOs

It will do so by doing the following:

- Defining and identifying the most appropriate study populations
- Developing viable population frames from which to draw samples of respondents
- Generating a survey instrument in Qualtrics that is adaptable to different disciplinary fields and national contexts
- Fielding survey and collecting data
- Analysing data to feed into next iteration of SOPs
- Analysing cost-benefits according to model chosen in co-creation workshops (WP4)

A version 4.0 of the toolbox with guidelines and SOPs will be developed by WP4, informed by results of the survey carried out by this work package. While the main focus is on RPOs, the survey will also produce results that inform RFOs about the priorities of researchers for support in different areas of RI.

2.2 Study Design

The survey by WP6 will be conducted online and will be coded using Qualtrics, a leading online survey platform to which UoEx has subscription-based access. We will generate a survey instrument that is adaptable to different disciplinary fields and national contexts. Screening questions at the start of the survey will trigger several survey branches containing field-specific questions, for example questions relating to statistical methods will only be asked of researchers carrying out quantitative analysis. The questionnaire

language will be English, based on the reasonable assumption that the majority of sample members will have published in English in WoS and should have sufficient facility to respond in English.

Survey questions will be developed in consultation with partners from across work packages. Subsequently, an expert review will take place within the wider SOPs4RI team, resulting in a draft instrument that will be subjected to formal cognitive testing. A sample of participants from the focus groups covering different native language speakers and fields of study will be selected to carry out the survey in the presence of interviewers across work packages. Due to Covid restrictions, these interviews are likely to take place online. These cognitive interviews will serve as a sense check, confirming the usability of the survey and ensuring that key terms are understood. Results will be analysed by the team at Essex with assistance from project partners.

In considering a suitable sample size for cognitive interviewing, it is noted that significant new and unique problems can continue to be uncovered at the point that a sample size is large with additional interviewees continuing to identify additional issues varying in severity and potential prevalence (Blair & Conrad, 2011). This must be weighed however against the cost of continuing to increase the sample size when a high proportion of high impact problems can be uncovered by using a small sample size and new issues are unlikely to be exhausted as the sample size increases (ibid.). Given that topic and survey experts will review the questions, and the survey will be subjected to subsequent pilot testing before being launched, it is considered that a sample of 8 participants from across four fields of study will be suitable for this part of the process.

Further to the cognitive testing the instrument will undergo piloting in selected countries. A pilot sample will be selected using the sampling method outlined in section 2.2.2, taking care not to exhaust potential access to smaller sub-populations. The piloting process will be used to test different methods for increasing survey response; to check the sampling procedure itself; to identify any routing or other practical errors; and to assess the statistical properties of the variables. The pilot survey will also provide insight into expected response rate, following which sample sizes may need to be adjusted.

Best practices for web survey research will be followed in the survey design. (Callegaro et al. 2015).

2.2.1 Study Population

The study population is active researchers in the humanities, social sciences, natural sciences (including technical science), and medical sciences (including biomedicine), who

hold a doctoral level degree and produce research for commercial or academic institutions within the EU, U.K., Canada, Australia and the U.S.

2.2.2 Sampling Frame

The principal source for drawing our sample will be Web of Science, an online directory of published journal articles covering physical and life sciences, health sciences, social sciences, and arts and humanities.

Metadata records will be harvested for all articles registered in Web of Science (WoS) for the period 2016-2019, in which at least one author is affiliated to an institution in one of the included countries. The time period is selected to ensure we capture active researchers. The following information will be gathered:

- Record ID (UT)
- DOI
- Corresponding author name
- Corresponding author email
- Corresponding author country
- Web of Science journal subject categories categories (SC)
- Publication year

To create stratified samples, we will use these records to compile per-author information with the email-address as the identifying information.

Country

For each author, we will count the number of publications, the most frequent country as well as the most recent. All EU countries will be represented, as well as selected OECD countries for comparison. These countries will be Australia, USA, Canada and the UK where research integrity issues are currently to the fore (e.g. National Academies of Science currently constituting a committee on research integrity in US).

Discipline

We will also count the (weighted) frequency of subject categories, apportioning a value of one if the journal relates to one field of study, 0.5 each if it spans two subjects and so on. The most frequent subject category will be used to designate a "most likely field of research" for the researcher. Subject categories (of which there are approximately 260) will be reclassified to match the fields of science in the Frascati manual. These six fields will

then be merged into four Fields of study: humanities; social sciences; natural sciences (including technical science); and medical sciences (including biomedicine).

a. Natural Sciences => Natural sciences (including technical science)
b. Engineering and technology => Natural sciences (including technical science)
c. Medical and health sciences => Medical sciences (including biomedicine)
d. Agricultural and veterinary sciences => Natural sciences (including technical science)
e. Social sciences => Social sciences
f. Humanities and the arts => Humanities

The information we will hold for each unit on the sampling frame will be as follows:

- email address
- number of papers as lead author
- most frequent country of publication
- most recent country of publication
- most frequent subject category/field

Coverage error

We know that some fields have more representation than others in WoS. Humanities has relatively fewer entries than other scientific fields. If we find that it is not possible to mitigate this with oversampling (mindful that this does not in itself solve under-coverage per se), we will explore the possibility of automated scraping of email addresses and other information from a sample of university websites. We will also explore the use of other databases that contain more humanities or other under-represented fields.

We will only be able to obtain the count of publications for which the person is the corresponding author, rather than papers they have contributed towards during the specified period. It is possible that we will therefore reach a more established stratum of the population and junior researchers will be under-represented. We will capture academic rank as part of the questionnaire and will be able to mitigate some of this problem with the use of weighting or covariate adjustment.

An author potentially could have supplied different email addresses over time. Our assumption is that it is unlikely the author will actively use multiple email addresses, however it is possible that in a small number of cases, the author will have had a higher probability of selection on these grounds.

We will oversample poorly represented countries and use weighting when calculating overall estimates, with appropriate adjustments to the estimation of standard errors due to any variance inflation attributable to the use of weights.

Sample size and power

Our aim is to obtain an achieved sample of sufficient size to permit us to make estimates with the reasonable precision within subgroups. These subgroups are field (4) and country (31). There are few studies that provide evidence of likely group differences between countries or fields in the area of research integrity. If we therefore take the approach that a standardised effect size of 0.2 is a minimum effect of substantive interest, we find that assuming a simple random sample, a cell size of around 400 respondents would yield 80 percent power to detect such an effect. This implies an achieved sample size of 4 x 31 x 400 = 49,600. For full population estimates, the assumption of an SRS is not realistic as we will need to apply weights to correct for oversampling of some countries and fields, which in turn will likely introduce design effects, but the effective sample size in this case will still be easily large enough to make estimates adequately precise.

We will attempt to maximise response rates given the constraint that we cannot offer an monetary incentive. Previous smaller scale studies (John et al. 2012; Necker 2014) have achieved 25-30 percent response rate. The PRINT survey achieved 22% in its home country Denmark but only around 5 percent internationally. If we assume a 10 percent response rate, we will need to issue around 500,000 survey invitations. Initial analysis of WoS indicates that this is a realistic proposition.

2.2.3 Sampling Method

Email addresses will be organised according to subpopulation as defined in 2.2.2. (Survey items will later be used to confirm that pre-survey subgroups were allocated correctly). Where the sampling frame for a subpopulation is no larger than the required number from which a 10 percent response rate would provide sufficient power to detect group difference, a census approach will be taken. Where subpopulations are larger than this, a sampling fraction will be calculated on the basis of the number required as a proportion of the number of possible participants. A census approach will not be taken in these cases in adherence with the data minimization principle of the GDPR and to avoid contributing to wider survey fatigue through oversampling. Additionally, while it might seem there is no additional cost in surveying additional respondents, there is potential additional administrative burden in correspondence with an increased sample size and the addresses take some effort to extract from WoS. Email addresses will be randomised and every nth

address will be selected. Given that the sample is not EPSEM (probability of selection is not equal for all countries), weighting will be used when calculating overall estimates.

2.2.4 Recruitment Strategy

The survey will be conducted online, in English, using the Qualtrics platform, which is fully GDPR compliant. One email will be sent prior to data collection, informing sample members of our intention to invite them to participate, with an explanation of the project and its aims, along with information regarding how the participant has been selected and instructions on how to opt out if they choose to do so. For those who have not opted out at this stage, an invitation email will be sent a few days later.

The data collection period will last for 3 months. The sample will be issued in stages, with pre-notifications sent out. Non-responders will be followed up with a minimum of 4 reminders. Those sampled will have the option not to be re-contacted and will be removed from the mailing list.

To consider any impact of recruitment methods on response rates, we will use the pilot study to analyse the impact of reminder emails and test the length of time between pre-notification and invitation email as well as the invitation wording and location of key information about the project. We will use this to help inform the subsequent recruitment process.

Increasing response

Our approach to increasing recruitment will draw on theories of social exchange for increasing survey response as introduced to survey design methods, where the likelihood of responding, and doing so accurately, is increased when perceived benefits outweigh costs (Dillman, 2012). In line with key recommendations we will incorporate the following design choices:

- Ensuring that it is convenient for the participant to respond
- Reducing survey length
- Designing the survey in a respondent-friendly manner
- Asking interesting questions
- Reducing complexity by asking only what is absolutely necessary
- Minimising requests for personal or sensitive information

Drawing further on Dillman's recommendations, we will encourage response by asking for assistance, by emphasising how individual contributions will be more broadly beneficial and by stressing that opportunities to respond are limited. Each subsequent communication will contain new information to encourage interest.

Further, we will acknowledge the role of trust in facilitating response, with a commitment to ensuring stated benefits are upheld. University sponsorship should be advantageous, adding legitimacy to our request for information, accompanied by contact details, should respondents have additional questions or concerns.

Although they are shown to increase response, it is not possible to offer incentives given budget constraints, however it is anticipated that the nature of the survey content will in itself incentivise researchers to respond.

The outcomes at each contact attempt will be recorded for each sample member. Response rates will be calculated using AAPOR standard typology for final disposition codes (AAPOR, 2016).

WP2 will support recruitment through promotional activities.

2.2.5 Inclusion and Exclusion Criteria

Inclusion criteria

Corresponding authors featured in the Web of Science bibliographic database, between 2016-2019, stratified by country and by academic field. Authors should also already have a PhD/doctorate.

Research active members of university departments selected for web-scraping of addresses (if this method is used).

Exclusion criteria

Corresponding authors of articles published prior to 2016. Authors without a PhD.

2.3 Methodology

2.3.1 Design and Analysis

The survey will provide data on attitudes and beliefs about a set of proposed SOPs in order to estimate the barriers and opportunities likely to flow from their implementation, taking account of national, organisational and field-specific variation.

One of the primary goals of WP6 is to account for differences between countries and institutions. The survey will help us identify similarities and differences across countries and organizations and build on the findings of previous work packages in confirming differences between disciplinary fields. The resultant analysis will lead to a set of

recommendations that provide guidance for the crafting of the final SOPs, based on a combination of the likely costs and benefits for SOP elements derived from survey results.

As the co-creation workshops are yet to take place and the third version of the tool box is due after completion of this initial protocol document, the exact analysis plan will evolve over the next few months.

A pilot study will analyse distributions on variables, stress test the Qualtrics script and gather information on length of time to complete the survey, response rates and which of several recruitment options will be most successful in increasing engagement. We will request feedback on how worthwhile the survey experience was and how easy it was to complete. This information will be used to finalise the design of the survey.

Revised interim plans and the finalised analysis plan will be pre-registered with OSF prior to fielding the survey.

9 key topic areas for RPOs have been identified by previous work packages and are presented in Table 1 below.

Table 1 Research Integrity Topic Areas RPOs

Topic Area	*Description*
Research environment	Ensure fair assessment procedures and prevent hypercompetition and excessive publication pressure.
Supervision and mentoring	Create clear guidelines for PhD supervision (such as on meeting frequency); set up skills training and mentoring.
Integrity training	Establish training and confidential counselling for all researchers.
Ethics structures	Establish review procedures that accommodate different types of research and disciplines
Integrity breaches	Formalize procedures that protect both whistle-blowers and those accused of misconduct.
Data practices and management	Provide training, incentives and infrastructure to curate and share data according to FAIR principles.

Research collaboration	Establish sound rules for transparent working with industry and international partners.
Declaration of interests	State conflicts (financial and personal) in research, review and other professional activities.
Publication and communication	Respect guidelines for authorship and ensure openness and clarity in public engagement.

Additionally, 11 key topic areas for RFOs have been identified and are presented in Table 2 below.

Table 2 Research Integrity Topic Areas RFOs

Topic Area	*Subtopic*
Dealing with breaches of RI	RI bodies in the organisation Procedures for breaches by funded researchers By review committee members By reviewers By staff members Protection of whistle-blowers and the accused Sanctions/other actions Communicating with the public
Declaration of competing interests	Among review committee members Among reviewers Among staff members
Funders' expectations of RPOs	Codes of conduct Assessment of researchers Education and training for RI Processes for investigating allegations of research misconduct

Selection and evaluation of proposals	RI plan Methodological requirements Plagiarism Diversity issues
Research ethics structures	Research ethics requirements Ethics reporting requirements
Collaboration within funded projects	Expectations on collaborative research Research that is co-financed by multiple funders
Monitoring of funded applications	Financial monitoring Monitoring of execution of research grant Monitoring of compliance with RI requirements
Updating and implementing the RI policy	No subtopics
Independence	What counts as an unjustifiable interference? Preventing unjustifiable interference by the funder Preventing unjustifiable interference by political or other external influences Preventing unjustifiable interference by commercial influences
Publication and communication	Publication requirements Expectations on authorship Open science (open access, open data, transparency)
Intellectual property issues	No subtopics

2.3.2 Conceptual Framework

A key project aim is to support organisations in facilitating good research practices without causing unnecessary burden or alienation of researchers themselves. The survey will help to ensure that steps taken to promote RI will be both beneficial to and perceived as beneficial by the researcher, in producing work that is of the highest standard. By gaining insight into measures that are currently in place and providing an overview of perceived need, plus the personal values and beliefs of the researcher, the survey will support organisations in identifying obstacles that might exist in adhering to proposed procedures for ensuring research integrity.

A priority expressed by participants in the focus groups was to avoid additional "box-ticking" exercises. We will explore perceived legitimacy of proposed policies through various survey items, including attitudes towards the institutional role in enhancing research integrity.

Results of a previous work package have highlighted disciplinary differences in importance given to these defined research integrity areas. The survey will further unpick the different dimensions of importance, such as perceived need, relevance to field, confidence in ability to uphold RI principles, and personal values. In addition, it will expand to explore cross-national and organisational differences.

For each of the nine RI topics for RPOs shown above, we will report on the level of demand, support for and potential barriers to implementation as part of an institutional RIPP, using descriptive statistics. We will also report on levels of awareness and satisfaction with RI policies in respondents' current institutions, stratified by discipline, role and nationality. We will report on a limited number of RI topics applicable to RFOs, in the same way.

In gathering this information, the survey will include the following five broad conceptual areas:

STRUCTURAL VARIABLES - a set of objective structural variables, on which we will distinguish differences between organisation type, job role, field, subfield and nationality.

VALUES & BELIEFS - respondent's basic adherence to scientific norms (in the broadest sense) as well as the personal relevance, both in general and more specifically for the respondent's field of work, of the specified research integrity areas. Further, we will consider levels of investment in one's institution as well as beliefs around the role of the institution in enhancing RI.

PERSONAL EFFICACY /BEHAVIOUR - respondent confidence in meeting research integrity norms in their current work. Need and favourableness towards additional support, or potential motivations for resistance.

LANDSCAPE - the survey will be used to establish a general sense of what research integrity arrangements are already in place, in relation to the specified R.I. areas. This information will be established through asking what understanding, awareness and knowledge respondents have of institutional policies as well as their levels of engagement in the current policies of their organisation. Understanding the current landscape will identify gaps, judgements and personal beliefs. It will reveal how effective those policies are, as well as degrees of confidence in the institution to manage these procedures.

RECEPTIVITY - Underlying propensity of European researchers to be receptive to mandatory institutional measures introduced to ensure RI in the defined RI areas. Understanding how likely researchers are to welcome the proposed procedures and why (or if not, why not), gauging levels of enthusiasm and likelihood of adhering to the proposed measure.

The rationale for each topic area along with example concepts and survey items are shown in Table 3 below. Actual survey items will be created through period of survey development with partners across the project.

Table 3 Rationale and example items for Survey Topic Areas

Topic	*Description*	*Rationale*	*Example concepts and items*
Structural variables	Field and subfield of study Rank Job role Age Sex Time since gaining doctorate Country where doctorate was obtained	These variables will be used to describe country, field, rank and organisational differences which will support organisations in understanding how they may need to adapt to meet the differing needs/preferences most suitable to their own environment. To assess profile of the sample against known benchmarks of researcher	We will draw on existing survey questions from other Research Integrity surveys (PRINT, ARCA, NSRI, Wellcome Trust) to define categories. An example from NSRI: Which disciplinary field do you identify most strongly with? Natural Sciences & Engineering

	Country where researcher is based now	population from other sources. It will also be used to branch respondents through the survey where certain questions are field-specific for example.	Social & Behavioral Sciences Arts & Humanities Life & Medical Sciences
Values & beliefs	Norms are collective expectations for and understandings of appropriate and desired behavior within a given social system. Robert Merton (1942) sought to give shape (literally, "structure") to the normative system of science overall by specifying norms that fairly and uniquely characterize the system: communality, universalism, disinterestedness, and organized skepticism (Anderson et al 2010) _____ Legitimacy of institutions in enhancing RI (as opposed to individual researchers' responsibility)	By establishing the respondent's scientific norms and values and beliefs regarding RI we will be able to understand the reasons for why they may be more or less receptive to potential RI policies at their institutions and set a context for how relevant they feel are each of the RI topics to their own work. _____ This is so that we can distinguish philosophical vs practical resistance to proposed policies and their mode of implementation	Scientific norms scale items. E.g. *Communality norm: Scientists should openly share new findings with colleagues.* *Secrecy counternorm: Scientists should protect their newest findings to ensure priority in publishing, patenting, or applications.* *Universalism norm: Scientists should evaluate research only on its merit, i.e., according to accepted standards of the field.* _____ What is the proper role of the institution in overseeing RI? Researchers are responsible for ensuring the quality of research..? Institutions have a responsibility for ensuring high quality research

	Relevance structure The extent to which each of the RI topic areas are perceived as relevant to the respondent's own work Attitude to institutional RI policies in general	We want to know how relevant is each area to the respondent in order to know how to interpret their receptivity to new potential RI policies that may be implemented. It is also of interest in its own right to compare relevance structures across, inter alia, organisation type, fields and countries. We want to know what respondents' perception of RI policies usually consist of so we that we can contextualise what they think of specific policy proposals.	[perhaps choose on a scale between personal and institutional responsibility] How important are these RI areas for you (for each of the stated areas) Which two are the most important for your research? How relevant are they for your field of work (for each of the stated areas) which two most relevant? Which two least? "RI policies are usually box-ticking exercises" "RI policies just waste my time" "RI policies do nothing for the quality of my research"
Landscape	Awareness and engagement in RI policies at work- What level of understanding, awareness and knowledge respondents have of institutional policies as well as their levels of engagement in the current policies of their organisation.	The survey will be used to establish a general sense of the perceptions of what research integrity arrangements are already in place, in relation to the specified R.I. areas. We need this to assess potential demand for new or more policies, and to understand receptivity to such policies	Have you heard of (each) policy, have you used it, have you been involved in implementing or delivering it? Have you received training? When? (phd/post phd) Given training (formal, informal)? Have you heard of ECOC? - (maybe the national

		(which will be measured elsewhere in the survey).	framework for non-eu too, e.g. USA)
	_____ Satisfaction with current RI policies What researchers believe about their institution's current arrangements over several dimensions - how effective in enhancing research, how easy to comply with, how burdensome, overall satisfaction	_____ The purpose of these questions is to understand how current institutional arrangements are perceived to be working (possibly in terms of the individual topics separately, possible overall judgments We want to know how effective researchers think extant policies for RI are already	_____ How effective are policies in institution in enhancing research? Do they make a real difference? How well is it working now? Do you think more needs to be done to make it better? How satisfied are you overall with your organisation's RI policies? "Overall, how much confidence do you have in xxxx[institution] in ensuring RI?"
Personal efficacy and behaviour	How confident in own capabilities. How much put into practice principles of ECOC and selected RI areas _____ Challenges in meeting requirements of RI	Measuring research self-efficacy and behaviour will allow us to see where the most important deficits are in current research practice _____ Understanding where the greatest challenges are will	How much do you think that your current research practice conforms to ecoc (set out four pillars in question) or in (toolbox RI areas) (always, sometimes, never etc) How much could an appropriate policy in this area improve your research? Would you welcome more guidance in this area? _____ Which are the two most challenging areas for you?

	_____ Questionable research practices	help target and tailor new RI policy _____ Capturing some behavioural reports of QRPs will help to understand the current consequences of non-compliance and aid targeting of new policies. It also allows a more concrete assessment of each respondent's performance vs perceived challenges and self-efficacy	And which are the two least challenging? _____ Some QRPs from PRINT or NSRI survey, tailored for field or those that work across field
Receptivity to policies, both general and specific	General receptivity, enthusiasm, positivity, about enhancing policies in own institution in each of the stated RI areas _____ Reactions to selected specific toolbox items	These are critical variables for assessing resistance or enthusiasm for enhanced RI policy. Would be used as topline findings and as dependent variables in predictive models _____ Drawing on previous WP and toolbox content we will provide discipline-specific examples of concrete policies for respondents to evaluate. Rationale as above.	How much would you welcome enhanced policies on [selected RI topics]? How much colleagues would welcome? How helpful would it be? How difficult would it be to implement? free text on how difficult or develop closed ended from focus group info) _____ How likely is it that you would do this/engage in this? How useful would you find it? How difficult to implement in your department?

			(free text or closed ended follow-up -- why and how difficult)

Responses from different conceptual sets of questions will be used to shed further light on motivations for accepting or rejecting the proposed procedures. For example if we understand that a researcher upholds certain scientific values, believes that the organisation has a role to play in ensuring RI and that there is a gap in a particular policy area that is relevant to the researcher's field of work, yet they would display resistance to a specific policy suggestion, then the information gathered will help us unpick that the policy itself is problematic.

2.3.3 Survey Content and Structure

The survey structure will evolve as more detailed understanding of the content is developed in partnership with other work packages. Where relevant, survey items from existing surveys may be used for comparability. Ease of respondent participation as well as the importance of reducing measurement error will be considered in design choices. It is envisioned that the structure will be broadly as follows:

1. Introduction to the project. The bulk of information will have been given in the initial invitation email. A short overview outlining the survey purpose and ethics arrangements will be provided again at the start of the survey.

2. Structural variables will be asked before subsequent questions on the basis that the information provided will be used to branch respondents according to field and disciplinary differences.

3. Respondents will be asked a set of questions relating to values and beliefs prior to any subsequent questions that may influence their responses to this section.

4. Subsequent sections will ask questions relating to the current institutional landscape as experienced by the respondent, levels of engagement with existing arrangements, and personal efficacy in terms of confidence in upholding good working practices across the pre-defined research integrity areas. Depending on the survey flow and question style, these questions will not necessarily be presented as distinct sections on the survey. When asking questions about the 9 or 11 defined research areas for RPOs and RFOs respectively, we will randomise

the order they are presented in to reduce the possibility of satisficing (Krosnick & Alwin, 1987).

5. Having introduced respondents to RI more generally, the survey will drill down more specifically into the predefined subtopics, drawing on items identified by previous work packages as being most important to consider. Question format will be specific to the particular policy. To reduce respondent burden it is likely that a small number of subtopics will be randomly allocated. This final section will include a ranking task to choose the two most important and two least important areas for having policies to enhance the integrity of the respondent's work.

   Survey items will require mainly closed-ended responses. For instance, rating or ranking scales assessing perceptions of the importance and benefits of a particular proposed SOP for data transparency protocols, beliefs about the potential difficulties or costs of implementation. We may also draw on free text where additional clarification would be helpful. Free text will be analysed using automated text analysis. We may include vignettes, or worked examples relating to specific topics.

   In order to adhere to the ethos of the project we will focus on positive expectations, using responses to infer any resistance that might exist. We will maintain awareness about the potential for instrumental responding, for example using responses in an attempt to prevent additional policies being introduced.

The survey will be designed to ensure that it will take no more than 15-20 minutes to complete.

The full set of survey items and data analysis plan will be made publicly available via OSF prior to fielding the survey.

2.3.4 Practical implementation

October 2020 – November 2020

Define and identify study populations, informed by analysis from previous work packages

November 2020 – December 2021

Design and construct sampling frame

October 2020 - January 2021

Generate survey content in consultation with work package partners

February 2021

Cognitive testing, revision of content

Import Sampling Frame database into Qualtrics

March 2021 – April 2021

Carry out pilot study, test properties of key variables, analyse results of experiment, revision of survey content and recruitment methods

Pre-register a fully detailed study protocol, the full set of items and a completely detailed data-analysis plan.

May 2021 – July 2021

Field survey

Clean, anonymise and prepare dataset and accompanying documentation to be openly available via OSF following completion of SOPs4RI report on results (deliverable D6.3)

Initial analysis of results

August 2021 – November 2021

Analyse survey results and produce report (deliverable D6.2)

2.4 Contribution of Work Package Partners

University of Essex (UoEx) will lead the work of WP6. Other SOPs4RI partners will contribute as outlined below:

Table 4 Contribution of partners

WP Partner	Description of contribution	Months
UoEx	WP lead. Responsible for designing, testing and fielding survey; creating a dataset of survey results, analysing survey results to produce a final report and set of recommendations.	26.00

AU	Provide support to UoEx in the following tasks: - Define and identify study populations - Design and construct sampling frame - Generate the survey instrument - Data analysis & reporting	14.00
STICHTING VUMC	Help to validate and implement a procedure for a CBA (Cost Benefit Analysis) of the implementation of SOPs and guidelines. Provide toolbox v 3.0 to inform survey questions Flag specific issues for implementation that can be tested in the survey and account for organisational, interdisciplinary differences and major differences between countries Provide support to UoEx in the following tasks: - Define and identify study populations - Generate the survey instrument	8.00
UL	Assist with piloting. (Cognitive interviews/ writing up pilot results)	4.00
UNITN	Survey content development and piloting	4.00
MEFST	Provide support to UoEx in generating the survey instrument.	3.00
NTUA	Provide support to UoEx in the following tasks: - Generate the survey instrument - Assist with stakeholder engagement	3.00
UoT	Provide support to UoEx in the following tasks: - Generate the survey instrument - Data analysis and reporting	
LSE	Provide support to UoEx in the following tasks:	

	- Generate the survey instrument - Translate the cost-benefit model they have developed into the survey - Data analysis and reporting	

2.5 Ethical Considerations

WP6 will respect and strictly adhere to national and international regulations and laws while conducting research involving human participants and when collecting and processing their personal data. We will uphold the requirements of the following legislation:

- The General Data Protection Regulation (GDPR)
- Directive 2002/58 on Privacy and Electronic Communications.
- UK Data Protection Act 2018

In addition, we will respect and strictly abide by the ethical principles expressed in:

- Charter of Fundamental Rights of the European Union (2012)
- European Code of Conduct for Research Integrity (2016)
- The Belmont Report (1979)
- Declaration of Helsinki (2013)

Research practices will be carried out in adherence to the standards laid out in the 2019 Universities UK Concordat to Support Research Integrity and the University of Essex Guidelines for Ethical Approval of Research Involving Human Participants.

This study involves research with human subjects. Therefore, ethical approval will be obtained for conducting the study from the ethics committee of the Faculty of Social Sciences, Essex University.

Before carrying out the survey, the leader of WP6 will submit a statement of Research ethics to the Project Co-ordinator who will ensure that the research practices are in line with the European Code of Conduct for Research Integrity and Aarhus University's Research Ethics Policy.

All data for the SOPs4RI project will be dealt with on the basis of two key principles, informed consent and privacy.

Consent will be sought for participation in all parts of the study along with the provision of information such that consent can be given on an informed basis. This information will be included both in the invitation email and on the survey landing page. The exact text is reproduced in the appendix.

The invitation email will provide information on the DPO of the WP6 leader (UESSEX) and clearly address the data protection procedures in alignment with the European Union Law, specifically Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data – General Data Protection Regulation (applicable as of 25 May 2018 in all European Union member states).

The invitation email details that informed consent is given by the individual choosing to participate in the survey, specifically by clicking on 'Take the survey'.

Participants will be informed of the following:

- The scope and purpose of the research for which personal data about them will be collected;
- How they were selected;
- How their personal data will be used;
- Who will have access to their data;
- That participation is made on a voluntary basis;
- The length of time their data will be retained;
- Their right to withdraw themselves and their data at any time;
- The degree of risk and burden involved in participation;
- The benefits of participation;
- The procedures that will be implemented in the case of incidental findings.

It is not the intention of WP6 to collect sensitive data, although it is possible that the survey may reveal unintended sensitive information. Respondents will be asked not to provide information that could identify individuals or organisations.

All participants will be ensured anonymity and confidentiality.

There will be no commercial exploitation of this research.

2.5.1 Participant burden & risk

The study poses a small risk of discovering sensitive information, for instance about research misconduct cases or problems with how specific institutions deal with research integrity issues. We will take all steps necessary to minimise this risk by asking all participants not to provide names of people/institutions in the survey, and by anonymising all data before sending it to others. The burden of participating includes 15 minutes of time completing each survey. Missing by design methods will be incorporated where appropriate to reduce respondent burden.

2.5.2 Benefits of participation

There are no direct personal benefits of participation in this study. Financial or other incentives will not be used. Respondents will benefit more broadly by contributing to the development of effective standard operating procedures (SOPs) and guidelines for research integrity, which will help research organisations, including their own institutions, to foster research integrity and avoid and handle research misconduct.

2.5.3 Data uses

Data from the cognitive interviews will be used to enhance and finalise survey questions. Data from the pilot study will be used to test recruitment methods, distribution of variables, response rates, length of survey and ease of use.

Data from the WP6 survey study will be used to inform the development of a final toolbox of standard operating procedures for research integrity.

An anonymised version of the data will also be available for outside actors to perform additional research via the Open Science Framework.

2.5.4 Data management and privacy

Data will be managed with strict adherence to the guidelines laid out in the University of Essex Information Security Policy.

Data will be labelled in accordance with SOPs4RI naming conventions as outlined in document D2.2_Data-Management-Plan, section 2.1.3, ensuring accurate version control.

Full documentation, including contact details for the data responsible partner will be made available alongside all data. Data will be accurate, well-maintained and managed in accordance with the FAIR principles guiding scientific data management.

Data Storage

Cognitive interviews to test survey questions will be conducted via GPDR compliant Microsoft Teams and will be recorded using Amolto software. Recordings will be stored securely at the University of Essex, promptly analysed, then destroyed.

Non-anonymised survey responses for both the pilot and the final survey will be gathered and stored on GDPR compliant platform, Qualtrics.

In the first instance data gathered via the Qualtrics survey will be stored locally at the University of Essex and safely handled for the purposes of data collection / cleaning / analyses.

Data will be deleted from local University of Essex systems and transferred to a secure SOPs4RI Sharepoint platform, as soon as is practically possible at the end of the data collection period. The Sharepoint platform has been established for the SOPs4RI project and is hosted by the lead beneficiary, Aarhus University. This will be used as the primary storage for WP6 data, including non-anonymised data. The dataset will be stored and encrypted, with a decoding key supplied to permitted parties upon request.

Long-term data preservation on Sharepoint and Qualtrics will comply with GDPR regulations. Collected non-anonymised data will be stored for a period of five years after the last SOPs4RI publication and then deleted from both the Sharepoint and Qualtrics platforms. It is the responsibility of the WP6 leader, Nick Allum, to ensure that all non-anonymised data is deleted at this point. Participants will be informed of this in the consent information provided at the start of the survey.

Transfer of Data

All internal transfer of sensitive data will be done though secure pathways, specifically, the secure Sharepoint work-space.

Data Access

Access to the Sharepoint portal is managed by the SOPs4RI team at Aarhus University. All partners have access to the collected data. Partner organisations have confirmed they meet GDPR regulations and have taken required data protection measures. Data Protection Officers from each partner organisation have provided statements of compliance.

Sensitive data will not be made publicly available. Anonymised data will however be made openly available through the Open Science Framework. In addition to statistical software packages (Stata and SPSS) quantitative data will also be provided in non-restrictive formats (.csv or .txt).

Anonymisation of data

Data will be anonymised according to standard protocols. Personal identifiers are in the form of email addresses supplied with the survey responses which will be removed and replaced with an anonymous id. No sensitive data is expected to be recorded. In preparation for release of anonymised data for the public domain, the data will be

examined carefully and subjected to statistical disclosure controls, such that combinations of variables or small numbers within a subpopulation for example, cannot be used to identify individuals or groups of individuals.

Only anonymised data will be used for analysis.

In case of a data breach, affected participants will be contacted and data will be temporarily removed from the compromised storage.

2.6 Expected outputs

The expected output of this study is:

- This deliverable
- A final report and recommendations from the survey comprising of an assessment of the preliminary SOPs for feasibility and effectiveness as well as recommendations for the final construction of SOP.
- Data for the cost-benefit analysis in WP7
- A cleaned, anonymised dataset in SPSS/Stata and .csv, error checked and with accompanying documentation.
- A series of articles in scientific journals.

2.7 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 survey study is to build on the previous work of focus groups and co-creation workshops to further understand what kinds of research integrity topics are important for researchers and stakeholders across different nationalities and disciplines and what obstacles may exist in implementing policies and procedures for ensuring research integrity. This knowledge will ensure that the final toolbox for RPOs and RFOs will be sensitive to different stakeholder needs and that cross-national and disciplinary differences are taken into account.

3. Deviations from DoA

No deviations from WP6 activity, as stated in the grant agreement, have occurred or are currently anticipated.

4. References

Blair, J., & Conrad, F. (2011). Sample Size for Cognitive Interview Pretesting. The Public Opinion Quarterly. 75. 636-658

Callegaro, M., Manfreda, K. L., & Vehovar, V. (2015). Web survey methodology. Sage

Dillman, D.A., Smyth, J.D., & Christian, L.M. (2014) Internet, phone, mail, and mixed-mode surveys : the tailored design method. 4th ed. Hoboken: Wiley (19-55)

Gopalakrishna, G., Wicherts, J.M., Bouter, L., Behrad, S., Van den Akker, O., (2020). National Survey on Research Integrity [WWW Document]. URL osf.io/7hwxt

John, L. K., Loewenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. Psychological science, 23(5), 524-532

Krosnick, Jon & Alwin, Duane. (1987). Satisficing: A Strategy for Dealing with the Demands of Survey Questions.

Necker, S. (2014). Scientific misbehavior in economics. Research Policy, 43(10), 1747-1759

OECD. (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris [WWW Document]. URL https://doi.org/10.1787/9789264239012-en.

Schneider, J.W., (2018). PRINT - Practices, Perceptions, and Patterns of Research Integrity [WWW Document]. URL osf.io/75g3d

The American Association for Public Opinion Research. (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th edition. AAPOR

5. Appendices

5.1 Informed consent text

You are invited to participate in a web-based online survey about your views on how you conduct your research and how your institution can best promote excellent research and a strong research integrity culture that aligns with the European Code of Conduct for Research Integrity. This is a project being conducted by Professor Nick Allum, University of Essex as part of a project called SOPs4RI (www.sops4ri.eu) It should take approximately 15 minutes to complete.

Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

If you would like to participate, please click on the 'Take the survey' button found at the bottom of this page. If you initially decide to participate but change your mind later, you are free to withdraw by sending an email to Nick Allum, principal investigator (nallum@essex.ac.uk). You do not have to provide us with reasons for the termination of your participation. When you withdraw from the study, all your non-anonymised data will be destroyed. If your data has already been analysed, the results will be used but the source of the data will not be retrievable.

There are no direct personal benefits of participation in this study. By participation, you will contribute to the development of effective standard operating procedures (SOPs) and guidelines for research integrity, which will help research organisations, including your own institution, to foster research integrity and avoid and handle research misconduct. The study poses a small risk of discovering sensitive information, for instance about research misconduct cases or problems with how specific institutions deal with research integrity issues. We will take all steps necessary to minimise this risk by asking all participants to not provide names of people/institutions in the survey, and by anonymising all data before sending it to others.

Storage and use of the data collected during the study will be in alignment with the data protection procedures contained in the European Union Law, specifically Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation - applicable as of 25 May 2018 in all European Union member states.

All data collected through the online survey will be stored on the Qualtrics platform and on SharePoint, a web-based collaborative platform, administered by the project coordinator, i.e. Aarhus University. The access to the stored data will be enabled only for the partners of the SOPs4RI consortium. This data will be deleted from both Qualtrics and SharePoint five years after the final publication.

The ethics approval for conducting interviews has been obtained from the ethics committee of the Faculty of Social Sciences, Essex University.

In line with the open access movement, we will make the anonymised data publicly available on the Open Science Framework. If you have any complaints about your use of data in this study, regarding privacy issues, you can always file a complaint to the University of Essex Information Assurance Manager, Sara Stock (infoman@essex.ac.uk).

By clicking on 'Take the survey', I indicate that:

-I have read the information provided about the study. I 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 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 collection and use of my data as described in the information on this page.

-I give consent to having my anonymised data publicly available. I understand that this means that the anonymised data can be used for research purposes other than the ones described in the information leaflet. 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 want to participate in this study.

If you have questions at any time about the study or the procedures, you may contact the principal investigator, Professor Nick Allum via email at nallum@essex.ac.uk

5.2 WP6 Privacy Policy

This document describes the privacy policy that all research activities conducted in work package 6 are committed to follow.

Collection, storage and use of the data collected during the online survey will be in alignment with the European Union's General Data Protection Regulation.

The ethical approval of the survey in Work Package 6 will be obtained from the from the ethics committee of the Faculty of Social Sciences, University of Essex.

Before taking part in the online survey, all participants will be presented with email 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. Consent will be indicated by agreeing to click on the survey link.

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 encrypted and stored at SharePoint for 5 years after the last publication from the study. Data is also stored on GPDR compliant platform Qualtrics and the WP6 coordinator will ensure this data is also destroyed at this point. The findings from the online survey 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 WP6 research coordinator, Nick Allum (nallum@essex.ac.uk) to ensure that sensitive data is secured and deleted in accordance with the GDPR regulations. Each participant in the online survey may at any time demand removal of his/her survey data by a simple request to the coordinator of the study, Nick Allum (nallum@essex.ac.uk), or to University of Essex's Information Assurance Manager (infoman@essex.ac.uk). 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 identifiers 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.

University of Essex's Information Assurance Manager (infoman@essex.ac.uk) can be contacted for questions regarding data protection, privacy issues and use of data in the SOPs4RI project. Research coordinator Nick Allum (nallum@essex.ac.uk), also welcomes any questions about this study.

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.