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EXECUTIVE SUMMARY

The deliverable D2.3 was designed in the post-Covid 19 emergency. The PRO-RES project had planned to have two rounds of consultations with stakeholders: one before and one after preparing the Accord and the toolbox with its resources. The first phase would have informed in more detail the contents of these tools and the second phase review the actual products. All these consultations were envisaged in lively and face to face set of workshops. However, given the restrictions from March 2020, the second phase was reshaped into a list of 63 interviews online. This is the report of the second phase.

In some ways, compared to the brainstorming of the first phase, the interviews have delivered a more mature and thoughtful process where the participants had time to explore the tools in advance and dedicate time and thinking for testing and reviewing the tools in question.

As explained in the conclusions, there are four main thematic areas that have emerged clearly from the interviews and we want to highlights the "take home" messages for the Consortium of PRO-RES suggested by several stakeholders.

First of all, both the Accord and the toolbox are an important contribution to the narrative around how to assess the ethical process to provide and generate scientific evidence. As long as these remain user friendly and accessible, several practitioners will integrate these tools within their practice with the results of a crucial institutional change in their organisations.

Second, such tools are very much valuable for as long as they remain valid over time. Ensure sustainability, integrate them within large platforms and users (eg European Commission, EUA) and generate from them a service for flagging those organisations that are methodologically robust and accustomed to use such tools by default, will ensure long term success of the tools.

Third, understanding change over time and impact on users. PRO-RES has deliberately opted for something different than a long/short list of what to do, because one of the characteristics of our evidence gathering is how subject it is to time changes, including new methods of investigations (eg text mining, news crawling etc.). As long as the Accord is anchored to solid principles and the toolbox mould on teasing out how those principles are translated in the process of evidence gathering as time goes by, they will remain valid.

Finally, the Accord but especially the toolbox needs to develop a mechanism of osmosis with the users, learning from those that need the tool. So far, the list of questions is more focused on the implementation of principles. As the tool is more utilised, users must be capable to feedback their needs and how the toolbox responds (or not) to what they are looking for. It is important to integrate in time, a certain degree of adaptability to users' needs.

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1. About PRO-RES

The Promoting Research Ethics and Integrity in non-medical research project (PRO-RES) aims to contribute to the promotion of ethics and integrity in non-medical research, primarily among those organisations that provide data and gather evidence for policy makers.

The PRO-RES project is guided by a normative intellectual framework which relies on three pillars: an Accord, a toolbox and resources. All these elements work in tandem to guide and ensure people engaging in producing or gathering evidence, both within and outside the academic world, can be assured of the transparency and robustness of the data they produce, collect and reload via academic and non-academic papers, policy papers, articles, and all other forms of publication and dissemination of knowledge with an impact on society from the highest levels to the broad population. In particular, the main attention of the project is on non-medical research and evidence. Although members of the consortium agree that the frameworks for medical research (such as Oviedo and Helsinki) are not so different from other types of research and evidence gathering, for medical writing there has been a longstanding attention from all actors, from production to use of the evidence to publication. Much less attention on ethical issues is still paid to some other sectors of knowledge like engineering, covert research, surveillance, the finance sector and so on. The PRO-RES aims to expand the remit and to shed light on issues emerging in these areas of research and knowledge previously neglected or considered less concerning for ethical principles. As a stakeholder mentioned in one of the interviews: "people think that ethics is a bit a luxury item." (Ortwin Renn).

More importantly, one of the main objectives of PRO-RES has been to create a toolbox to support and guide anyone approaching a piece of research to be able to assess if the knowledge has been obtained with ethical and robust procedures. PRO-RES aims to stimulate transformational processes across European organisations involved in performing and funding research and thereby offer valuable evidence to inform policymaking.

Over the life of the project, PRO-RES is taking mixed-methods, co-creative approaches to the development and empirical validation of its intellectual framework, that is the Accord, the toolbox and the resources.

The expected end-users of the tools provided by PRO-RES are research providers and research users across very different type of organisations, e.g. universities, think tanks, policy makers and their scientific advisors, science advisors and communicators, journalists, NGOs, practitioners. The development of the PRO-RES Accord will take national, epistemic, and organisational differences into account, and the final toolbox will enable end-users to assess the knowledge they use according to the needs of their organisation and in compliance with European standards for transparency in research and evidence gathering.

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1.1. About D2.3 – Stakeholder interviews on PRO-RES Accord, toolbox and resources

The deliverable D2.3 has been modified following the difficult time created by Covid 19. The initial plan called for the running of several thematic workshops, across various communities/disciplines, in which the community stakeholders would discuss and comment on the proposed Framework. This was in line with the initial phase of the project where it received feedback on the needs of the communities regarding ethical guidelines. The second round of workshops was planned to follow up from the first round. The workshop reports would then be synthesized under this deliverable. Given the situation in 2020, the consortium partners were unable to conduct workshops. The project opted to conduct interviews instead, one (mostly) one to one basis, taking advantage of teleconference technologies.

This report presents the results of the interviews with the project's stakeholders, and also includes the feedback of other senior representatives who have chosen not to be regular stakeholders of the project but were willing to comment on the drafts of PRO-RES major outputs. To get a broad overview of the current state of affairs, the interviews included stakeholders of different scientific backgrounds and various roles regarding research ethics and integrity. Stakeholders also include representatives of non-research organisations like think tanks, NGOs, journalists, senior managers of university umbrella organisations, policy makers, publishers.

The interviews provided more in-depth knowledge of existing customs and code of conducts used in different contexts and organisations, innovative practices that some publishers are introducing, and a glimpse of practices that some stakeholders see as important to be developed in the future. Moreover, the conducted interviews recorded the experience about the implementation of ethics and integrity policies within organisations, as well as their relation to other policies, such as project evaluations, the role of donors and boards of trustees, and perceptions of ethics standard culture in general.

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2. Overview of 2nd stakeholder activities

2.1. Introduction

Given the limitations generated by the Covid-19 pandemic, the stakeholder workshops planned for collecting feedback about the Accord, the toolbox and the resources including the website could not be conducted with face-to-face meetings as previously described. Following several elaborations among the consortium, it was agreed to implement "Task 2.4 Second series of workshops" through a series of targeted stakeholder interviews. This was necessary as most partners were faced with Covid 19 related lockdowns and/or travel bans in their host country, a situation that most assuredly would have affected the intended workshop guests as well.

The initial plan called for the running of several thematic workshops, across various communities/disciplines, in which the community stakeholders would discuss and comment on the proposed Framework. This was in line with the initial phase of the project where it received feedback on the needs of the communities regarding ethical guidelines. Instead, the consortium partners contacted around 200 stakeholders with varied backgrounds, being mindful to maintain the same community distribution as in the first round, as well as focusing mostly on stakeholders with experience in policy advise (i.e interviews with SAPEA, several current and former members of the EU scientific advisors group members). Eventually, the consortium interviews 91 stakeholders. Out of these interviews, 66 distinct interviews were inserted in this analysis, as some interviews did not generate any useful data or were done too late to be included, or the stakeholders were grouped/interviewed as a team.

Comparing to the first round (workshops), the second round had a much higher response rate (~45%) that the first (~10-30%), when considering accepting to interact with the project. Additionally, the interviews were opportunities for in depth discussion and provided quite extensive feedback to the project.

2.2. Aim of interviews

PRO-RES is focused on reaching out beyond medical research in other disciplinary areas and in sectors heavily relying on evidence gathering. More importantly, the project aims to reach out into organisations that generate research (on commission or for their own aims) and that have also a strong power to influence society at large, from policy makers to citizens.

The interviews therefore aimed to provide expert and practitioner feedback on the Accord, the toolbox and the resources that PRO-RES has generated so far from a larger audience than researchers who are more accustomed to engage with topics of ethics and integrity in knowledge production. In conducting interviews, the focus was to identify novel and innovative aspects of how ethics and integrity are perceived in a wider context and finding practices that could be relevant and mirrored in the final draft of PRO-RES outputs, i.e. code of conduct in specific contexts and in different countries, different scientific disciplines, and various institutions and organisations.

Moreover, the interviews aimed to identify prominent institutional and research culture elements necessary for the further development of the project's final outputs. This includes the factors that determine successful implementation of the Accord and toolbox, both at the level of individual

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researchers and at the institutional level, and the opportunity to engage organisations very different in their practice to support or endorse the Accord. Finally, we also explored if PRO-RES outputs could be the base of training programmes for editors, journalists or science advisors.

2.3. Methodology for the interviews: Study design and description of the study

We used a qualitative approach and conducted online interviews. This method aimed to gain insight into stakeholders' opinions on practices for the promotion of research ethics and integrity. The interviews were informal and semi-structured, which allowed new ideas to be brought up during the interview and enabled a more comprehensive approach for the questions of interest.

The interviews explored the participants' knowledge of the existing practices for ethics and research integrity promotion, as well as the use and applicability of these practices in different geographical settings, disciplines, and institutions. This was important because research ethics and integrity is an intrinsic part of research but is often influenced by external factors, such as institutional rules, or research systems, and organizational standards. Moreover, the interviews explored stakeholders' knowledge on ethical principles, understanding and practices in different contexts.

Furthermore, the interviews explored the elements of the currently existing research culture at different levels, i.e. individual, institutional, and the overall research system. Besides the impact of the existing research culture, the interviews explored how the PRO-RES outputs could support daily practice and how confident stakeholders were in seeing the practical use in their daily tasks.

2.3.1 Study population and sample size

All members of the consortium were involved in the selection of the participants. To support this process, the stakeholder inventory list developed through Task 2.1 during the first part of the project was taken as a basis and further expanded to accommodate the analytical requirements of this stakeholder outreach. After the mid-term review, the consortium recognized that most attention had been paid to researchers and that consequently, for the second round of stakeholder engagement, it would be more relevant if a wider audience of research providers and users would be addressed. An in-depth discussion brought the consortium together to identify some specific groups of stakeholders and during the time of the interviews those categories have been revised several times. The main issue is that individuals have different competences and often different roles within their organisations or in their working life. Some of the individuals identified by the partners had several roles moving fluidly from researcher, to practitioner, to policy maker/regulator. Eventually, the consortium agreed on selected category groups for the advantage of the analysis, although inevitably accepting that some individuals with a highly varied role would be grouped in a single stakeholder category. However, one of the important aims of categorising the stakeholders was also to check if biases or consistent feedback across similar groups and categories could be identified.

The identified stakeholders' groups are as follows:

- 1. Policy makers, policy advisors, think tanks
- 2. Civil society representatives, funders, publishers
- 3. Researchers, researcher umbrella organisations

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- 4. Reporters, bloggers, opinion columnists, investigative journalists
- 5. University associations, research administrators

The group selection followed roughly the "scientific policy advice" chain. Thus, we were looking to interact with stakeholders with direct experience of the process of receiving/providing advise to policy makers. This was deemed important in order to understand the process and often technicalities of providing advice. This was captured in group 1.

We also wanted to understand the issues that arise from organisations that need/wish to follow codes or have certain ideals that they pursue. This was captured in group 2.

The process of conducting research, reaching consensus and generating advice was also explored from the side of the researchers (group 3).

There are undoubtfully several sources of advice that the decision makers can avail to, and media play a very important role here. We tried to capture this part of the spectrum with group 4, although admittedly it was harder than initially envisaged.

Finally, another interesting concept for us was the process of adoption of a code or set of guidelines. Thus, the inclusion of group 5.

2.3.2 Outreach strategy

Participants were identified mostly through the identified stakeholder inventory contact network from Task 2.1 which consists of personal contacts from members and organizations of the project consortium as well as contact details of participants from previous project activities.

The outreach strategy consisted of contacting participants via an invitation e-mail with a predrafted **interview schedule** document. This document consists of various collated elements intended to provide all required information and preparation support for the interviewee. The compilation of this document was undergone by the Task Force Interviews consisting of partners S2i, AcSS, EASSH and ESF. The produced interview schedule includes following elements.

An executive summary one-pager in which the aims of the project as well as the elements of the framework were presented in a succinct manner.

- 1. A structured schedule of the planned interview questions to offer interviewees the chance to prepare themselves content-wise. These structured interview questions, intended for a semi-structured interview format, were iterated through multiple discussion rounds among the consortium to guarantee a comprehensive and focused interview process. The final version included 14 interview questions clustered in four sections, namely:
 - Background on the interviewee(s)
 - Feedback on the PRO-RES Accord
 - Feedback on the PRO-RES toolbox
 - Feedback on the wider PRO-RES framework and further recommendations
- 2. The PRO-RES Accord text including the principles and rationale behind it
- 3. The PRO-RES toolbox for the assessment of ethical quality of research evidence

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Following the participant's confirmation to the invitation letter, an individual data protection form was sent on "Processing of personal data for PRO-RES interviews", which had to be signed in order to participate in the interview and offered three confidentiality options, namely full disclosure of name and organization, organization-only and anonymous-only utilization of interview content. Furthermore, in close discussion among the consortium it was decided that interview data gained through each individual interview was to be stored by each of the conducting project partner, this clause is reflected in the individual data protection form for the interviews.

Lastly, given the limitations where many people were working from home and may or may not had access to certain facilities (e.g. scanner) digital signature of the form was allowed.

The template of the invitation letter and data consent form are presented in Appendix A.

2.3.3 Conducting interviews

The interviews were all conducted online, between June and October 2020. Members of the consortium used the GoToMeeting platform thanks to a project subscription. All interviews were voice-recorded, based on the approval obtained through informed consent. The language of the interviews was English. Notes were made by the interviewer or interviewers and sent to the participants for their formal consent. The final versions have been uploaded on the Sharepoint archive of the PRO-RES project. The interviews were conducted following a prepared interview guide. For this purpose and on the basis of the produced interview schedule document, a detailed interview guideline was produced by the Task Force Interviews to facilitate the implementation of interviews by each consortium partner, regardless of previous phone or online interview experience. This document includes all the aforementioned elements (see sub-chapter 2.3.4) but expands the schedule of interview question with tips on issues to highlight and suggestions on grasping the relevant information for each question (for more details see Annex D Interview guide). The first interviews, conducted by EASSH and ESF in June, served as pilots to test whether the proposed questions provided sufficient answers that would contribute to the aim of the study. After the first interviews, all interview questions were revised to better fit to the objectives of the deliverable. The interview guide with original and revised questions is presented in Appendix B. The workload of conducting interviews was divided among all partners taking into account their personal access to experts from different stakeholder groups. The number of obtained interviews and the partner distribution according to lead interviewer is presented in Table 1 below.

Partners	No. Of Conducted Interviews
AcSS	7
CNR-ISTI	6
ESF/Donal O'Matuna	15
EASSH	9
EPC	1
ESF	15
K&I	5
NTUA	8
UT	6

Table 1: Partner distribution of conducted interviews by lead interviewer organization

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2.3.4 Ethical considerations

This study involved research with human subjects. Since many of the consortium partners are experts in research ethics appraisal, their views on ethical issues were sought and incorporated into the process. This was not a study 'of' the respondents, it was seeking their opinions about the PRO-RES Project as 'stakeholder experts' and the key consideration was data protection and their anonymity if necessary. This was covered by the aforementioned Data Protection measures.

2.3.5 Task force for feedback

Most of the interviews were conducted by two partners for consistency of feedback and to allow one of the two interviewers to collect notes. Most interviews were also recorded (with consent, see above) but these were not transcribed verbatim. Some interviews were conducted by a single experienced interviewer who touch-typed notes during the interview. All the recording has been stored in partners' personal drives and will be archived at the end of the project and destroyed after five years as per GDPR regulations.

A team of five partners (ACSS, ESF, S2i, EPC and EASSH) engaged with the feedback extracted from the interviews. EASSH and ACSS coordinated a template for collecting the information in a consistent way from all those collaborating in the analysis of the data. We also introduced a double reading of a sample of interviews for reliability of reporting and exclusion of personal biases. The interviews were assigned to those partners who have not been involved directly in setting them up and conducting, so to include a further element of objectivity in the analysis of the data.

We aim to obtain qualitative and quantitative data harvesting the information across the data analysis. This analysis is rather important as the feedback from the stakeholders will represent the final contribution to produce the last version of the main output of the project, namely the Accord, the toolbox and the resources.

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3. Results of 2nd stakeholder activities

3.1. Participants and their organizations

A total of 72 individuals from different stakeholder groups participated in the semi-structured interviews. The purposively selected participants from different stakeholder groups are described above. From 124 contacted candidates a total of 72 interviews were completed by the consortium by submission date of this deliverable. Accordingly, with a positive reply rate of 58% by contacted stakeholder participants, the conversion rate of contacted people to completed interviews can be regarded as very high. The table below reports the number of interviewed organizations per stakeholder group and their percentage distribution.

Stalsahaldan Chauma	No. Of	Percent Of
Stakeholder Groups	Stakeholders	Cases (%)
Policy makers, policy advisors, think tanks	28	39%
Civil society representatives, funders, publishers	12	17%
Researchers, research umbrella organisations	23	32%
Reporters, bloggers, opinion columnists, investigative journalists	2	3%
University associations, research administrators	7	10%

Table 2: Representation of stakeholder groups

The sex distribution in the sample was 18 females to 37 males with 17 undefined due to anonymity, a ~1:2 ratio. These participants represented stakeholder organizations from a total of 19 countries worldwide. In detail, the sample included interviewees from 16 European countries, among which 13 are European Union Member States. From outside Europe, three participating organizations are from North America and one from the African continent. The percentage country distribution of the interviewed sample (see Table 3) as well as geographical coverage (see Figure Y) is featured below.

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Table 3: Countries of residence of participants (some interviews were with multiple participants).

Country of residence	No. of participants
UK	13
Belgium	12
Italy	8
Ireland	5
Estonia	4
Greece	4
Spain	4
France	3
Switzerland	3
Canada	2
Germany	2
Netherlands	2
Sweden	2
USA	2
Austria	1
Burundi	1
Denmark	1
Norway	1
Portugal	1
Total	71

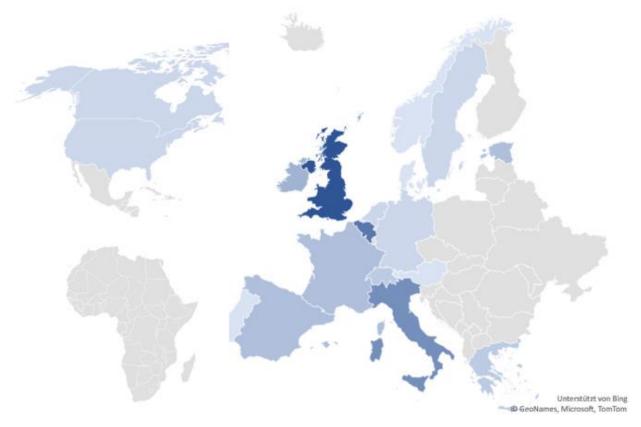


Figure 2: Geographical coverage of countries of origin of interviewed organizations

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3.2. Key findings

The analysis of the interviews identified three main focus areas: feedback on the Accord, feedback on the toolbox and resources (including the website), and possible support/endorsement of the final version of the Accord. The main focus areas were highlighted in the template designed to collect the data for the analysis and attached in Appendix C.

3.2.1 Feedback on the Accord

The first draft of Accord was prepared and presented at the PRO-RES mid-term conference on February 2019. This was the first chance to present to a variety of stakeholders the central work for the project. The presentation allowed to gauge reactions and highlight the way forward for the consortium. There were several changes after the conference, especially regarding the language used in the Accord.

Following the mid-term conference, members of PRO-RES consortium started collecting feedback via a survey among conference participants, presenting the Accord at different conferences (eg FOO Social Sciences Camp at the Facebook headquarters in San Francisco) and within their own organisations, given that several planned events had to be cancelled for the Covid 19 crisis. The main effort was to gather enough understanding of and support for the Accord to make it a real instrument applied across both geographical and disciplinary borders.

The feedback of those interviewed over four months is quite consistent and allows us to extract some important lessons which we highlighted in three categories: knowledge of existing customs and codes of conduct used in different contexts and organisations, innovative practices that some organisations are introducing, and a glimpse of practices that some stakeholders see as important to be developed in the future.

The majority of those interviewed, 47 people out of 72, showed a strong consensus towards the Accord, expressed in clear statements like "In preparing the editorial policies, had to deal with several questions and looked for resources. "I was very interested to come across the PRO-RES framework [...] it pools these resources and addresses these questions that are so important and needed" (Sabine Alam)- This is also confirmed by 22 organisations' representatives being ready to recommend it to their own organisations for endorsement or to others for support

The vast majority, about 42 interviewees appreciated three main characteristics of the Accord: it is concise, it is not just addressed to researchers and it is universal, that is it is not biased by specific disciplines or geographical contexts. Although one of those interviewed would have preferred that the Accord was only targeting researchers, the wider scope of the Accord was most welcome. In fact, these three characteristics really qualify the Accord as an overarching set of values and principles, flexible enough to be adapted to all contexts. More importantly, one of the interviewees suggested to encourage up-taking of the Accord well beyond Europe. A researcher and practitioner (who prefers to remain anonymous) mentioned that the Research Translation Networks would be a good audience for PRO-RES materials. They are intended to be translation authorities between researchers and policymakers and could do rapid reviews for policymakers for the PRO-RES outputs. These networks have been in place for several years in the Great Lakes Region, Eastern Mediterranean Region (Lebanon), South Africa, and elsewhere and some were set up years ago by the EU and are very effective. The Accord then presents itself as a truly international and

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interdisciplinary tool for ethics and integrity not just for researchers but also for evidence-gathering organisations. It proposes an umbrella methodology to include as many disciplinary approaches and standards as possible, that can be recognized across geographical borders and therefore not subject to cultural differentiations. This is one of the main important characteristics highlighted by interviewees: "Single framework approach could ensure consistency and robustness of methods and practice." and "Important to enforce standards at international levels. Also important to ensure continuous engagement. (Sabine Alam, publisher) "Establish protocols that are widely used and policy makers can take into account; have standards to identify when evidence is ethically robust; enforce protocols to discourage policy makers from using more 'convenient' evidence" (J. Wilsdon, researcher)

It was highlighted that there was some confusion in defining the Accord as a "framework for non-medical sciences," where the concept of 'non-medical' clearly states what will not be included but not what is primarily addressed. Defining something by what it is not can be confusing and is unlikely to be inclusive. Nevertheless, it is very challenging to produce a definition or even a description of all the sciences, excluding medicine, which is concise and understandable. Of course, after the PRO-RES outputs are launched, they may be used by medical as well as other researchers. Perhaps, the partners of this consortia hope that it will be simpler to drop the 'non-medical sciences' and present the Accord as a framework for science in general, while acknowledging that the medical sciences are unlikely to use or need it because they already have the Helsinki and Oviedo options.

The focus of the Accord is in fact well beyond academic research. As many researchers have reported, academic institutions have some sort of ethics training and codes of conduct, embedded in methods training, researchers aiming at delivering robust research results are usually aware of principles of transparency and issues of conflict of interests, and they are often scrutinized by institutional ethics committees and boards.

Less obvious is the connection about those doing research on commission and for organisations with specific aims and purposes, think tanks, or NGOs. Even more important, interviewees saw the Accord as a crucial element to "educate" donors, clients and funders of research beyond pure academic purposes. Our knowledge society has generated a large market of commission for research and organisations of all kinds that use evidence and scientific outputs to translate their own aims. A real market for research and evidence of any kind from engineering, to environment, to political activism sees the role of ethically robust evidence based on transparency of intention as a real leap forward to a more just society. The impact of training people with the Accord in these areas beyond academia is perceived as another crucial and unique feature of the Accord.

Ultimately, the Accord plays a role for those that gather evidence for policy makers and to the same "technocrats" who gather intelligence beyond political statements and policy papers released in abundance by local, national and international governments, political actors of any kind and also from industrial to social lobbyists. Research is key for public trust, but research must be transparent and methodologically robust, ethical in order to gain public trust and credibility.

This is where the Accord also found its first obstacle. Language of the Accord for brevity and consistency can at times be seen as "technical", more addressed to those who are experts and not for a wide public endorsement. Some values and principles seem to be fine in principle but not so

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clear in practice. One of the interviewees said "NGOs struggle with the concept of Conflict of Interest" (PM), it needs a better definition. More importantly, interviewees also suggested that the Accord must be interactively linked to the Glossary for example so that definitions and "technical language" can come to life and facilitate dissemination of concepts.

Again, linked to a mixed audience, the draft of the Accord showed another weak spot. Using the same document to address several different actors from researchers to policy makers inevitably causes some confusion among the users. Although this is a constructive criticism, the issue is more linguistic than in content. The values and the principles in fact do not fail to be universal and can be adopted at all levels just the expectations of the reader in presenting these concepts are very different. It is therefore less relevant or even redundant to construct codes for those conducting research in academia and different codes for those practicing science advisory roles or delivering evidence gathering for policy influence. It is in fact clear to the community around ethics and research integrity that there are not different measures and that providing knowledge - in whatever context – should not be subdued to the demand for that knowledge, it is not depending on a specific line of work (academia) but rather everyone who engages with such practice. In fact, in reviewing the feedback from our stakeholders, we would have expected that academics would have been more rigorous and maybe coherent with the Accord approach or being aligned with similar feedback. We realized that actually all stakeholders have engaged with the issue of delivering ethically robust knowledge and their views are not at all linked to the type of role or job they hold, even when they were talking on behalf of their organisation and not in their personal capacity.

Paradoxically, interviewees have also pointed at the Accord missing a preface about the value of adopting and endorsing such a framework. Members of the PRO-RES consortium are so clear about the value of practicing in a positive ethical environment that we did not question how beneficial it is for anyone to be engaged with a single and universal framework which define borders and potential for strong qualitative evidence. As a recent policy brief from the ENTRUST project (October 2020) shows: "Based on the findings of our preliminary research on the state of scientific research on trust and distrust in governance [it emerges] ... a decline in the rule of law and increased corruption in some EU countries affecting the freedom of the media and the capacity of civil society organisations to hold their government accountable, the impact of Covid 19 pandemic on governance, increased polarisation in our societies, spreading of fake news and unethical behaviour in science".

Such findings demonstrate how crucial it is today for those delivering evidence-based policy to ensure that their sources are of the utmost methodological and ethical soundness. The adoption of the Accord (and the tools associated with it) is a crucial step for any organisation who wants to appeal for public trust and visibility

The Accord also faces another important issue: not being prescriptive, like for example the Helsinki code was for medical science, and presenting itself as an evolution compared to the multitude of specific codes launched over the years which are still very much in use in individual disciplinary contexts, national environments and institutional settings. On the basis of the feedback from most of those interviewed, this is a real challenge which the Accord has well exceeded. The next step is to gather enough consensus and endorsement for the Accord to be adopted and used.

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In fact, to the question if people would support and endorse the code, the response rate is rather positive with 22 people out of 47 who had a defined opinion, but when the question is about implementing it in your organisation, the Accord conflicts with current uses of other codes, committee guidelines, and current practices.

The implementation of the GDPR by the European Commission which was confirmed by all the Member States has also carried a new understanding about use of data and also a much better attention and awareness to those who constitute vulnerable people. All European organisations, both public and private, had to deal with the ethical issue of data management and plan for the conservation, preservation and protection of data. People have been hired and trained to engage with the terms of the GDPR and new units and offices have been set to understand the possible consequences of lack of compliance with the data protection regulations.

However, in the context of ethics and integrity for research and evidence gathering the premises of a prescriptive framework are not appropriate. As many of those interviewed have highlighted, these are concepts in evolution and in constant development. They are also linked to context and circumstances and a prescriptive code would be obsolete as soon as it is provided. For example, the COVID-19 pandemic has changed our understanding of who constitutes vulnerable people because, in a global pandemic, anyone may be or become vulnerable due to sickness or bereavement. At the same time, there is a need to navigate across values and principles and to maintain the most robust, coherent framework, bearing in mind transparency and justice as guiding principles, independence and integrity of individuals. Other interviewees have pointed out the need to better explain missing terms like "risks, communication of scientific uncertainty, likelihood, probability, uncertainty" (Anonimus, think tank) and also at a multitude of perspectives, "acknowledgement of different approaches/views" to complement "transparency" as guiding principle" (Prof. Filipe Duerte Santos, Portuguese Council of the environment and sustainable development, University of Lisbon). This is also where values of transparency and privacy can be reconciled within the Accord narrative, because the Accord is now proposing to set these values in absolute terms but to adapt to a context. Particularly, in some disciplinary areas protecting others, being coherent with ethical values may be an issue of context and environment. This is where individual integrity becomes real and not an abstract concept.

Furthermore, in some professions there is an understanding that responsibility for ethically robust evidence gathering must be better distributed. "The responsibility for ethical compliance lies with the researcher, or the funder, or the institution where the research is published. It is necessary that the responsibility for ethics is distributed through the system, but at the same time this is a way to dilute responsibility because it's assumed that certain aspects have been dealt elsewhere in the chain" (Anonymus, journalist).

According to the views of the interviewees, the Accord presents another weak spot. Although it is capable of grasping the conditions of the process to deliver evidence and research ethically and robustly, it seems to pay less attention to the motivation of the research in the first place. It may be questionable if this needs to be addressed in the space of the values and principles of the Accord. Alternatively, intrinsically, it is assumed that there are several different motivations to commission or conduct research and gather information and knowledge and the Accord mainly

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addresses the way this process can be pursued in respect to ethical premises. It is assumed (and declared) that whatever the motivations, no one is exempted from gathering those evidence and deliver research results in the most ethical possible way, that is with honesty and transparency. Research motivation is not and cannot be considered a reason for "tempering or adapting" research methods and results.

3.2.2 Feedback on the toolbox

The second area of interest in this report based on the feedback of the stakeholders is to validate the contents of the toolbox.

The Toolbox was designed as the means to operationalise the statements contained in the Accord. It parallels the kinds of standard questions asked of any researcher making a research proposal, or asked by any science evaluator or ethics reviewer of such a proposal. Similarly, anyone wishing to 'test' a researcher and their work for its integrity should be able to ask these questions of them. The Toolbox could be operationalized in a range of ways – the first is based on a simple checklist approach. This was the format we used during the engagement with the stakeholders.

The toolbox therefore is presented in the specific format of a checklist, where those engaging with a piece of research or a policy paper for example can be provided with a series of questions to review the process according to which that document has been generated. We ask all our stakeholders to use the toolbox before the interview and to engage with it maybe to try out how it would respond to a user's demand. Although a few interviewees remained puzzled about who the toolbox is directed to the feedback of all the stakeholders interviewed was highly positive. "These questions are very good in order to think through things that otherwise would not be thought of" – (M. Tatar, SME's representative)

The main characteristics of the toolbox were seen as well identified and recognized as relevant and useful for its purpose. This means that the toolbox has fulfilled its primary purpose.

At the same time, those interviewed have highlighted room for improvement. First of all, it was widely noted that the toolbox presents far too many questions and it would benefit from several changes to be more user friendly. Starting from an intro note and how to use the toolbox, maybe in the form of a video or infographics, and generally in an interactive shape, including "a prescreening test", not a static PDF file listing instructions. More importantly, a sense of hierarchical order about importance of questions was highly advocated by researchers, policy makers, and general users. It is understood that if someone wants to validate a document, a piece of evidence, from a policy paper to a scientific article, would be looking for compliance and due diligence, as well as personal integrity and a scrupulous approach to reading. In any of these cases, time is of the essence and a long list of questions become a challenge to engage with.

A second aspect is the level of "technicality" of some of these questions. Some well experienced interviewees claim that – in spite of their knowledge on the topic – they have struggled to address some of the issues presented, or to tease out the type of information requested by some of the questions.

Another point was made in relation to: "the items sometimes aren't orthogonal with actions taken, there is a risk for repetition. This might be addressed by allowing the assessment be a plain text

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(e.g. a research study design), where elements are tagged with checklist items, and thereby making it traceable." (Per Runeson, researcher). As mentioned above, traceability of sources is not a straightforward matter and in some cases it's an issue of long and cumbersome investigations which could be time-consuming with no guaranteed effects. It is the opinion of 27 stakeholders that such a level of detail may discourage the most committed user and eventually defeat the purpose of the toolbox altogether.

The toolbox is also addressed to any type of user, from a junior policy officer preparing a brief for a European functionaire, to a researcher being accurate and working on a long-term project; from the journalist harvesting information for an article, to the National ministry science advisor. All these job profiles should be confident and comfortable in using the PRO-RES toolbox in order to pursue their tasks. As in the case of the Accord, the language of the toolbox may not always be approachable to everyone, but more importantly the outcome, the answer to some questions may not be enough to establish if the evidence was obtained with a robust and ethical research method.

There is a wide and strong consensus around the need to provide as many case studies as possible within the toolbox. There is a strong sense of uncertainty around using personal judgement, experience, sensitivity and understanding in assessing someone else's process for providing knowledge. There is also a lack of long-term experience in many users in the way some values and principles are actually being respected in practice. To complicate matters, the PRO-RES approach is Europe-wide but has also touched and is influencing individuals beyond Europe, and living in contexts where customs and ethical assessment may be also influenced by very different cultural approaches. It is crucial that the toolbox can speak a common language and deliver informed material well beyond common approaches in Europe. Case studies – presented as videos, or cartoons or infographics – could convey messages in a more direct way and offer some benchmarking for the user.

In all cases, the most challenging part of using such a toolbox is the interaction between the question raised by the tool and the user's answers. Here it is where the feedback of stakeholders is difficult to analyse. As in everything which is related to some kind of regulations and "order" some people prefer to have good questions and good examples to articulate their own thoughts, some prefer a more deterministic framework, a normative approach where implicit in the question is the "right" or "wrong" answer. About 29 out of 41 that expressed views on this issue, belong to the first group and recognize that a toolbox like this (as well as in the case of the Accord) must remain open and flexible, adaptable and need regular updates as new cases emerge and new knowledge is acquired in the field and understanding of ethics and integrity around research and evidence gathering. Those who have suggested a more rigid framework, have also suggested that it may be important to stimulate critical thinking and change attitude towards a text: "Not just a check list, although this may be useful for behavioural change, approaching the issue" (Roger Casale, policy advisor).

One thing that the toolbox though seems unable to deliver is to be a guidance for someone designing a project or preparing an ethics form or an application for an ethics committee, a new study, an article. One of the interviewees said: "Good to evaluate other people's studies not to assess what needs to be done when doing a study. For a better study, those questions should be

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integrated in the design of a research project (funders could play an important role on implementing the Accord and make future studies in line with the toolbox questions)" (Anonymous, researcher). In this quote, it emerges already that probably it should not be among the toolbox functions to guide someone designing a piece of knowledge. However, the set of questions in the toolbox should represent the active basis on which funders, or those commissioning public and private research, should adjust their requests. Questions/answers could be used as a template that researchers could state at the beginning of a study and get some sort of acknowledgement for covering the ground (Luigi Nicolais, Materials S.r.l.). This is definitely something that once the toolbox and the Accord with their resources are fully shaped, the consortium would consider pursuing although it will not be part of the PRO-RES project.

A further note on the feedback for the toolbox concerns its format. We asked our stakeholders if the format was the most appropriate. The toolbox in fact is currently a checklist. There are several reasons why we shape it with this format, but the most relevant is that this has been assessed by a first round of stakeholders' consultations as the easiest to use. Checklists are direct, simple, and familiar, although they miss sophistication in terms of in-depth analysis and complex thinking. They also present the risk of the exercise to become a simple box ticking.

PRO-RES has considered another two type of formats: decision-making tree and wiki style. The decision-making tree format will be consistent with the feedback received about the toolbox having too many questions and create a hierarchical order of importance of the questions. As it was suggested: "focus on 8-10 key questions (and eventually follow up questions, drawer questions)" (Ortwin Renn, IASS Institute of Advanced Sustainability Studies, and Mike Jones, Trinity College Dublin, Royal Irish Academy, EASAC).

Limiting the number of the first round of questions is understood as more encouraging for policy makers to approach the toolbox, but also for users less familiar with some of the technicalities of more sophisticated questions. It is inclusive and encouraging for any type of user. The hierarchical order of the questions could then satisfy all levels of requirements, regardless of the level of competence of the user. It has also the advantage to be inclusive and retain simplicity of usage. An interviewee even suggested "Needs different decision tree or route for scientists and policy makers" (Bonnie Wolff-Boenisch) or "May need to adapt the Toolbox for different audiences" (CK). However, the risk is that some people would stop at the first level of questions and never try to go any deeper or to respond to a further layer of information that may be needed to assess some kind of trust in the document or study under scrutiny. Furthermore, the main aim of the toolbox is to gather consensus around what needs to be addressed in order to assess research results being ethically sound, rather than to artificially construct different options for different users.

Finally, no interviewees were familiar with the wiki style for the toolbox, and no one really commented on it. One of them has clearly stated that she found the decision-making tree not being appropriate for ethics topics and she has been using a "honeycomb" format to show how all the parts are interdependent (AC UK researcher).

In 40 cases, interviewees show very positive feedback for the toolbox, particularly as it shows flexibility and adaptability of the tools to different users, contexts and purposes. "Valuable for editors' training. Very practical and easy to use" (Sabine Alam). This adaptability was one of the

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main aims of the toolbox and members of PRO-RES consortium feel that this feedback is really important for the effort of putting together this instrument.

3.2.3 Impact of the Accord and the toolbox on policy makers

PRO-RES has placed an important focus on the Accord, the toolbox and the resources can provide a real support to anyone who deals with providing evidence and knowledge and particularly for the large audience of science advisors and communicators who aim to advise policy makers. One question our interviewees provide very different feedback on is how the Accord and the toolbox would impact policy makers. The question was left deliberately open to allow interpretation as there are many different actors that can be labelled under the policy makers name. We wanted to explore how interviewees – some of them being policy makers themselves – could interpret the value of the outputs presented.

Generally, people responded with a direct answer indicating that if the Accord and consequently the toolbox were supported, endorsed and ultimately adopted by large umbrella organisations and by default ministries at national levels, other organisations would be more inclined to adopt it. There is no agreement as to which level of large umbrella organisation would actually make the difference. Some interviewees accepted the ALLEA code, even admitting their limits and incompleteness on certain aspects, but being issued by a large international organisation embracing many academies in Europe, it was an authority enough to gain credibility. In fact, the issue about impact is the international nature of the Accord and the toolbox and the fact that it is not issued as part of a national framework but can claim to be able to respond to the demand to engage with ethics issues beyond medical sciences and even beyond European borders. Therefore, interviewees have suggested a range of international organisations that could really trigger the wide acceptance of PRO-RES outputs, like Science Europe, the European Union's institutions or even global organisations like the OECD and the WHO. All these organisations have of course provisions and guidelines to engage with ethically sound research and none of those interviewed could identify real pathways to influence and eventually achieve support from such large international organisations.

A stakeholders in a research funder organisation said "Some ethical principles already widely covered by institutions/frameworks, need for more rigorous and clear statements to communicate applicability and added value beyond existing frameworks"; "It is also important to ensure that all people working at the interface between research and policy are trained for identifying ethically robust evidence" and made recommendations that these tools are crucial to "Address complex "research/evidence - to policy" issues (e.g. "rational policy actions" "how to achieve independence and integrity by avoiding biased evidence" (Anonymous, research funder).

This is really important feedback which the PRO-RES consortium is taking into account beyond the life of the project. More importantly, people pointed at two key issues to ensure impact of the project: "it has to influence policy planning and evaluation from the outset. When there are discussions around policy development, and new policy ideas in the civil service, this should sit in their manual as part of a good practice approach" (John Connolly, Researcher) and "The key thing for researchers when it comes to influencing policy makers is to develop ways (mean: research), consistent with ethics" (Polly Mackenzie, Think Tank). Both these recommendations aim at changing behaviour around ethics in research through addressing the science policy environment.

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This is an important approach, because policy makers as well as funders play a crucial role in encouraging a positive attitude to ethically robust evidence gathering. Evaluations and project design are two important ways to change people's attitudes and approaches to research. The science policy environment helps in shaping and supporting not just researchers but other professions that work on the basis of evidence. Of course, they do not hold an exclusive position in this, but they raise awareness particularly when funding is at the core of a project or a technical undertaking based on knowledge. As mentioned before, donors and boards of trustees, as well as those commissioning research, also play an important role in transforming people's attitude towards evidence gathering.

However, this feedback does not support how PRO-RES can encourage policy makers to do that, but shows how influencing communities is a matter of a larger ecosystem with several actors. Aiming at public trust should be a strong incentive for all actors to engage in a transparent and ethical approach to science and evidence gathering. Moreover, "Regular communications: not a single stage process but a continuous process" (Per Runeson, Researcher) is the feedback of those interviewed. It is clear that, to claim impact, the PRO-RES project must not just develop its outputs and make them user friendly and effective, not just encourage stakeholders to validate, endorse and adopt these outputs. It is of paramount importance that the tools are regularly updated and that stakeholders are consulted and supported in the use of the Accord and the toolbox over time and in different ways. For a project with limited funding this is the biggest challenge, in fact the sustainability of such endorsements must be eventually inherited by institutions which will continue evolve ethics practices.

Let's look at this question from a different perspective. All interviewees have recognized the value of both the Accord and the toolbox as international and flexible tools to appeal and impact on policy makers of any type of business. Some of those interviewed commented that the Accord may be too technical and needs clearer definitions behind some of the words used; whereas the toolbox having too many questions. However, it was generally accepted that these tools must play an important role in the development of policy making today. More importantly, interviewees have identified the toolbox as the right instrument to encourage policy advisors and policy officers preparing position papers to approach research results and evidence gathering with far more attention and awareness about how evidence was obtained. Once adapted and reviewed, the toolbox is easy to use and fit for purpose to achieve what it has been deployed for, an assessment of the quality of the process beyond the research results presented in a paper.

3.2.4 Support, endorsement, adoption of the Accord and the Toolbox

Through the interviews the partners of PRO-RES have engaged with several policy makers who have proposed to remain with the project as stakeholders and to champion the Accord for endorsement within their organisations, through boards and senior management and decision-making teams. We do not yet know how many of these organisations will eventually formally endorse, support or recommend the Accord but on a first survey of the numbers 22 out of 47 stakeholders who expressed a clear view on the issue, have confirmed that they would eventually subscribe for the Accord.

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3.2.5 Looking at the future

The feedback from the interviews with the stakeholders offers the opportunity to look ahead beyond the scope of the PRO-RES project. In fact, one of the interviewed said "If PRO-RES could turn our Toolbox into a 2-hour training workshop, that would be helpful. Then people could get accredited in this" (Anonymous, researcher). Another one suggested "[For the toolbox], it could be good if a clearer grading/scoring system in each domain was implemented, which then gives an overall score. Another interviewee suggested that "most people don't change [their behaviour] unless their emotions are raised". This is why Pro-Res should look into putting the idea and benefit of the framework into a "2-minute video with a powerful story" (Bernadette Mazurek Melnyk). "It may be to some users and definitely to people with little time and who need a quick feedback because this, it would be a simplified way to produce a relevant outcome". "It should also be used as a sign or 'seal' of quality" [Anonymus, think tank].

As discussed in other deliverables of PRO-RES (e.g. the paper on think tanks prepared by the EPC) interviewees representing organisations have often pointed out two important innovations: quality seals of publications, policy papers and organisations and use of the PRO-RES output for training programmes and open platforms of support for ethics demands beyond academia. This is especially the case for non-academic research entities, such as think tanks, which operate in structurally different circumstances than academic organisations. As there is no official definition of a think tank, every organisation can call itself as such; there are no minimum standards or code of practices. Furthermore, think tank funding usually diverges from other research organisations, being short-term and more diversified. Finally, the work of think tanks not necessarily always leads to research papers: "much of their activities take place behind closed doors", so that "the results of those conversations often remain unpublished" and "[m]isbehaviour is arguably more difficult to detect and enforce", as the EPC's analysis of the think tank sector says. The report therefore suggests the formation of a European Alliance of Independent Think Tanks which has the PRO-RES Accord at its heart. In addition to developing the framework further, the think tank alliance should "develop an independent, global hallmark/quality label for think tanks adhering to ethical principles", the author says. "It is an important aspect for some organisations that the adoption of the code could be recognised as compliance to some basic ethical standards in the evidence gathering. In turn this grows trust in some organisations which are more methodologically robust in conducting their research, studies, reports, position papers etc.)" (Carlotta Besozzi CSE)

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4. Conclusion and key points emerged from the interview

There are four main thematic areas that have emerged clearly from the interviews. This final session of the report highlights the "take home" messages for the Consortium of PRO-RES suggested by several stakeholders.

First and foremost, both the Accord and the toolbox are an important contribution to the narrative around how to assess the ethical process to provide and generate scientific evidence. As long as these remain user friendly and accessible, several practitioners like publishers and editors, journalists, NGOs and policy think tanks, as well as large research policy associations will integrate these tools within their practice with the results of a crucial institutional change in their organisations.

Second, such tools are very much valuable for as long as they remain valid over time. Ensure sustainability, integrate them within large platforms and users (eg European Commission, EUA) and generate from them a service for flagging those organisations that are methodologically robust and accustomed to use such tools by default, will ensure long term success of the tools.

Third, understanding change over time and impact on users. PRO-RES has deliberately opted for something different than a long/short list of what to do, because one of the characteristics of our evidence gathering is how subject it is to time changes, including new methods of investigations (eg text mining, news crawling etc.). As long as the Accord is anchored to solid principles and the toolbox mould on teasing out how those principles are translated in the process of evidence gathering as time goes by, they will remain valid. Adaptation of questions, review of processes and procedures, and impact on moulding new methods of research as well as practitioners' habits are key for the success of both the Accord and the toolbox.

Finally, the Accord but especially the toolbox needs to develop a mechanism of osmosis with the users, learning from those that need the tool. So far, the list of questions is more focused on the implementation of principles. As the tool is more utilised, users must be capable to feedback their needs and how the toolbox responds (or not) to what they are looking for. It is important to integrate in time, a certain degree of adaptability to users' needs.

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Annex a: Quotes

- 1. "At the moment this document seems to me a nice document, but it works only in an ideal world where a lot of additional terms are fulfilled"
 - "If you have a good tool, but you do not use this, it is of no use."
 - "If this toolbox is used to evaluate if studies are ethically conducted, it works very well".
 - (RI advisor at Uni unnamed)
- 2. A) The accord sounds good to ECS; things should be done in this way. This is the ideal ECS strives for. There is nothing lacking.
 - B) for the accord, [it is important] that this is not left in the drawer somewhere (Kai Klandorf, Estonian Civil Society)
- 3. A) Everything here seems relevant, I agree with everything. However, it is a bit difficult to understand what is needed to be done on everyday level.
 - B) These questions are very good in order to think through things that otherwise would not be thought of. But it does fall back on whether a person senses what is ethical.
 - (Merit Tatar, small industry rep)
- 4. A) [In the Accord] All the things that are important are mentioned here; I like the approach, it is not too vague or too long, but rather clear and concrete.
 - B) I think the project is very important and useful.
 - C) It is a never-ending process to talk and highlight the importance of ethics.
 - (Siim Espenberg, applied research rep)
- A lot of stakeholders have the feeling that ethics is a luxury item.
 Ortwin Renn, Scientific Director at the Institute for Advanced Sustainability Studies (IASS) in Potsdam (Germany)
- 6. "The Toolbox is very broad, and it is not clear who is expected to fill out the form". (Veronique Holloin, FNRS (RFO Belgium)
- 7. AC wants to be clear that she finds much of the PRO-RES materials great, she is not just being critical of it. From her view, it is really interesting and valuable. But when she thinks about the possible audiences, she has concerned. "Being mandated!! Unfortunately, that's often what it takes. If it's optional, it's less likely to be used, unless it becomes part of best practice. (AC, researcher UK)

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Annex b: Participant list and interview schedule

No.	Name of the organisation	Country	Key Person	PRO-RES interview partner	Scheduled interview (input date&time)
1	Civil Society Europe	EU - Belgium	Carlotta Besozzi	EASSH	29.5.20 11:00 AM
2	European University Association	EU - Belgium	Dr Alexander Hasgall	EASSH	8.6.20 2:00 PM
3	Coimbra Group	EU - Belgium	Ludovic Thilly	EASSH	8.6.20 4:00 PM
4	University of Thessaly & Foodoxys (spin-off company)	Greece	Demetrios Kouretas	NTUA	12.6.20 11:00 PM
5	Taylor and Francis	UK	Sabina Alam	EASSH	15.6.20 10:00 AM
6	International Network for Government Science Advice (INGSA)	UK	James Wilsdon	EASSH	17.6.20 10:00 AM
7	University of the West of Scotland	UK	John Connolly	AcSS	22.6.20 11:00 AM
8	Anonymized participant	UK	Anonymized participant	AcSS	25.6.20 9:00 AM
9	Anonymized participant	EU - Belgium	Anonymized participant	AcSS	25.6.20 10:30 AM
10	Anonymized participant	UK	Anonymized participant	AcSS	29.6.20 12:00 PM
11	Academia Europaea	UK	Peter Jackson	ESF	30.6.20 12:00 PM
12	ESAF - European Science Advisors Forum	Denmark	Frede Blaabjerg	ESF	30.6.20 2:30 PM
13	EARMA	EU - Belgium	Borana Taraj/Stephanie van der Burght	EASSH	1.7.20 12:00 AM
14	SAPEA - Science Advice for Policy by European Academics	Germany	Ortwin Renn	ESF	2.7.20 11:00 AM
15	EASAC - Environment Steering Panel	Germany	Mike Jones	ESF	2.7.20 4:00 PM
16	EARMA	EU - Belgium	Stephanie Van der Burght	AcSS	3.7.20 2:00 PM

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17	SciCo - Ashoka - Athens Science Festival	Greece	Theo Anagnostopoulos	NTUA	7.7.20 2:30 PM
18	Anonymized participant	UK	Anonymized participant	EASSH	7.7.20 3:45 PM
19	Austrian Institute of Technology (AIT)	Austria	Peter Biegelbauer	ESF	8.7.20 3:30 PM
20	Anonymized participant	France	Anonymized participant	NTUA	9.7.20 11:00 AM
21	European Commission	EU - Belgium	Yanaris Ortega Garcia	NTUA	13.7.20 2:00 PM
22	APRE	Italy	Margot Bezzi	K&I	14.7.20 3:00 PM
23	Scienza&Società	Italy	Pietro Greco	K&I	16.7.20 3:00 PM
24	Anonymized participant	Switzerland	Anonymized participant	K&I	17.7.20 10:30 AM
25	Materials	Italy	Luigi Nicolais	К&I	24.7.20 10:00 AM
26	Scientific Council for Government Policy (WRR)	Netherlands	Frans Brom	ESF	4.8.20 11:00 AM
27	EUA - European University Association	EU - Belgium	Alexander Hasgall	EASSH	6.8.20 12:00 AM
28	EASAC - Environment Steering Panel	Portugal	Filipe Duarte Santos	ESF	6.8.20 3:00 AM
29	Anonymized participant	UK	Anonymized participant	AcSS	12.8.20 12:00 PM
30	HealthNetTPO Netherlands	Burundi	Nawaraj Upadhaya	ESF/O'MAT UNA	22.8.20 12:00 AM
31	Dublin City University	Ireland	Pat Brereton	ESF/O'MAT UNA	25.8.20 12:00 AM
32	Anonymized participant	Ireland	Anonymized participant	ESF/O'MAT UNA	31.8.20 12:00 AM
33	ISIR - UPMC	France	Raja Chatila	ESF	1.9.20 11:00 AM
34	Fond National de la Recherche Scientifique - FNRS	EU - Belgium	Véronique Halloin	ESF	2.9.20 2:00 PM

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35	Research Integrity Officers, University of Tartu	Estonia	Andres Soosaar, Kairi Kreegipuu, Raul Kangro, Kadri Simm	UT	4.9.20 12:00 AM
36	De nasjonale forskningsetiske komiteene (ETIKKOM)	Norway	Helene Ingierd	UT	4.9.20 9:00 AM
37	Anonymized participant	Sweden	Anonymized participant	ESF	4.9.20 2:00 PM
38	Estonian Civil Society	Estonia	Kai Klandorf	UT	8.9.20 12:00 AM
39	Anonymized participant	Switzerland	Anonymized participant	ESF/O'MAT UNA	10.9.20 12:00 AM
40	McGill University and Médecins sans Frontières Ethics Review Board	Canada	John Pringle	ESF/O'MAT UNA	10.9.20 12:00 AM
41	East Carolina University	USA	Sheena Eagan	ESF/O'MAT UNA	11.9.20 12:00 AM
42	Humanitarian Innovation Fund, Elrha	UK	Anna Skeels	ESF/O'MAT UNA	11.9.20 12:00 AM
43	Anonymized participant	Estonia	Anonymized participant	UT	15.9.20 12:00 AM
44	NUI Galway	Ireland	Dr Su-ming Khoo	ESF/O'MAT UNA	15.9.20 12:00 AM
45	European Commission, Member of Cabinet	EU - Belgium	Anonymized participant (organization-only)	EPC	15.9.20 10:00 AM
46	New Europeans	Italy	Roger Casale	ESF	15.9.20 1:00 PM
47	CSIC + SAPEA	Spain	Pere Puigdomènech	ESF	15.9.20 3:30 PM
48	Anonymized participant	Italy	Anonymized participant	ESF/O'MAT UNA	16.9.20 12:00 AM
49	OECD - Global Science Forum (GSF)	France	Carthage Smith	ESF	16.9.20 4:00 PM
50	Anonymized participant	UK	Anonymized participant	ESF/O'MAT UNA	18.9.20 12:00 AM
51	Lund University	Sweden	Per Runeson	UT	18.9.20 2:00 PM

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52	Nuffield Council on Bioethics	UK	Dr Katharine Wright	ESF/O'MAT UNA	21.9.20 12:00 AM
53	Barcelona Supercomputing Center	Spain	Enric Banda	ESF	21.9.20 10:00 AM
54	Ohio State University	USA	Bern Melnyk	ESF/O'MAT UNA	22.9.20 12:00 AM
55	Policy Press	UK	Alison Shaw	AcSS	23.9.20 10:00 AM
56	Anonymized participant	Spain	Anonymized participant	EASSH	23.9.20 2:00 PM
57	University of Eastern Piedmont Amedeo Avogadro	Italy	Lina Echeverri	ESF/O'MAT UNA	24.9.20 12:00 AM
58	Anonymized participant	Estonia	Anonymized participant	UT	25.9.20 12:00 AM
59	Anonymized participant	Ireland	Anonymized participant	ESF/O'MAT UNA	29.9.20 12:00 PM
60	Royal Irish Academy	Ireland	Anonymized participant (organization-only)	ESF/O'MAT UNA	30.9.20 12:00 AM
61	Anonymized participant	Spain	Anonymized participant	ESF	30.9.20 2:00 PM
62	Sustainable Food Movement in Greece - Foodity	Greece	Vee Bougani	NTUA	8.10.20 12:00 AM
63	Anonymized participant	Switzerland	Anonymized participant	NTUA	7.10.20 12:00 AM
64	Anonymized participant	Belgium	Anonymized participant	NTUA	14.10.20 12:00 PM
65	Scuola Nazionale dell'Amministrazione/LU ISS	Italy	Maurizio Mensi	K&I	24.9.20 12:00 AM
66	Global Privacy & Security by Design Centre	Canada	Ann Cavoukian	CNR-ISTI	27.10.20 3:00 PM
67	TU Delft	Netherlands	Juan Manuel Durán	CNR-ISTI	30.10.20 4:30 PM
68	Dianeosis	Greece	Thodoris Georgakopoulos	NTUA	1.11.20 12:00 AM
69	University of Pisa	Italy	Dino Pedreschi	CNR-ISTI	2.11.20 4:00 PM

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70	King's College London	UK	Jennifer Pybus	CNR-ISTI	4.11.20 10:00 AM
71	KU Leuven	Belgium	Bettina Berendt	CNR-ISTI	5.11.20 10:00 AM
72	EDHEC Business School	France	Gianclaudio Malgieri	CNR-ISTI	5.11.20 4:30 PM

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Annex C: PRO-RES INTERVIEW GUIDE (WITH ANNEXES 1 AND 2)

ABOUT PRO-RES

PRO-RES (PROmoting integrity in the use of RESearch results - in evidence-based policy: a focus on non-medical research) aims to produce a guidance **FRAMEWORK** helping to deliver Responsible Research and Innovation (RRI). PRO-RES is a Horizon 2020 project coordinated by the European Science Foundation (ESF), involving 14 different partners across Europe. The project started in May 2018 and will run until April 2021.

Our main aim is to encourage policymakers and their advisors to seek evidence for their decisions from research that has been conducted ethically and with integrity.

THE GUIDANCE **FRAMEWORK** includes the following elements:

- 1) A statement The **ACCORD** which lays out the principles for ethical research which we hope all stakeholders can sign up to (see Annex 1).
- 2) The Accord is supplemented with a **TOOLBOX** for policy makers and advisors (see Annex 2) to help them identify ethical evidence for their decision-making processes.
- 3) Additional supportive **RESOURCES** that complement the Accord and the Toolbox are provided on the PRO-RES website (http://prores-project.eu/) and include Foundational Statements on the values, principles and standards behind ethical research, a Glossary of Terms and Concepts and a pool of supplementary information such as on other existing Ethics Codes and Guidelines, available Education/Training on ethical research practice, illustrative Case Examples, a List of Ethics/Integrity Advisors, and much more.

The entire **FRAMEWORK** aims to:

- cover the wide spectrum of non-medical research and
- offer practical solutions for all stakeholders, that will comply with the highest standards of research ethics and integrity.

In terms of post-2020 European strategic funding policy this offers a strong and sustainable contribution to RRI via a comprehensive ethics and integrity framework similar to Oviedo/ Helsinki which will have been constructed in negotiation with relevant stakeholders.

The aim of this interview is to receive input from different stakeholders on the developed draft Accord and the Toolbox. Furthermore, it aims to find ways to secure endorsement from key organisations for the PRO-RES Accord.

Please refer to the separately provided "Data processing form" on information about the data that we will collect from you and its processing according to GDPR standards.

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BACKGROUND ON THE INTERVIEWEE(S)

- 1. Please describe what your role is regarding ethics and integrity in non-medical research.
- 2. Has your organisation already endorsed any particular Codes of Research Conduct? *You could check the organisations website beforehand to find this information and be prepared for any more in-depth discussion.*
- 3. How does, or how could, a good quality guidance framework on ethics help you in your work? Make sure to understand exactly what the interviewee's role is, and their link to ethics and integrity in research. Figure out what their need is and how they could profit from the PRO-RES Framework.

The interview schedule is the same for all stakeholders. Please be aware that there will be a strong variety in the answers depending on which stakeholder group you are talking to.

FEEDBACK ON THE PRO-RES ACCORD

Please highlight that the Accord at this stage is an evolving document and that it will be further refined through stakeholder input.

Key will be to get the endorsement from as many high-level organisations/stakeholders as possible.

- 4. What are your expectations for the PRO-RES Accord?
- 5. Are there elements that are missing or need amending?
- 6. Would your organisation recommend/promote the Accord or implement it?
 - a. If yes, at what level? Different levels could be e.g. formal endorsement through letter of support, theoretical endorsement by recommending it e.g. to their members
 - b. If not, why not? If they say they cannot endorse the Accord make sure you understand why they cannot do so, whether it is because of the content of the Accord, their internal processes, the fact that they are already subscribing to something similar etc.
- 7. What are your internal procedures for putting such an Accord into place?
- 8. Would your organisation need any help in implementing the Accord? If so, what?
- 9. Do you have any suggestions on how the Accord could be best used to influence policy making?

FEEDBACK ON THE PRO-RES TOOLBOX

- 10. With regards to the different versions of the Toolbox presented in Annex 2, which option do you prefer? And why? *It might be useful to bring the toolbox up on the screen and walk the interviewee through the different options.*
- 11. In its current form, do you think the Toolbox is effective in helping policy makers and policy advisors to identify ethical evidence for their decision making?
- 12. Are you familiar with RRI? What does it mean for you/your organisation? Do you think that RRI approach and concepts should be considered in the toolbox and, more in general in the framework? FYI the RRI approach has come to propose, among other things, four dimensions of responsible research: thinking through the impacts of research (anticipation); including all concerned stakeholders (inclusiveness); reflexivity on the part of all researchers; and being responsive to societal needs and concerns (responsiveness). We are particularly interested in knowing the interviewee opinion, if any, on one or all of these dimensions. The most well-known feature of the RRI is the so-called "six keys": ethics, gender equality, open access, public engagement, science education, and governance.
- 13. Do you have any suggestions on how the toolbox could be made more effective?

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FEEDBACK ON THE WIDER PRO-RES FRAMEWORK AND FURTHER RECOMMENDATIONS

Many stakeholders, in particular policy makers or advisors will not have found the time to look at the website and might not be interested in looking at it. If that is the case, leave out the respective questions.

For stakeholders that do want to discuss the website make sure to highlight that the website is still undergoing continuous development due to stakeholder input.

- 14. Have you had a chance to visit the PRO-RES website and browse the framework? If not, what would encourage you to browse it?
- 15. What guidance or resources would help people to use the Accord and the Toolbox effectively?

 This question can be asked even if people have not had a look at the website. They might mention things that we have included already, which will be a good validation of the work carried out so far. If they mention elements we haven't included so far, it will help us to fill potential gaps.
- **16**. Is there anything else you would like to say about the Accord, the Toolbox, the work of PRO-RES, or ethics in non-medical research?

THANK YOU FOR YOUR PARTICIPATION!

If you have any questions, do not hesitate to contact us under (<u>EDETSIS@ESF.ORG</u>), and don't forget to get involved through our website (<u>HTTP://prores-project.eu/</u>) and over twitter (<u>@Prores14</u>).

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ANNEX 1 – THE ACCORD

(Annex 1 and 2 are the Accord/Toolbox versions that the interviewees saw)

THE ACCORD (on ethical evidence in non-medical research)

As signatories to this Accord:

- We commit to only use research/enquiry that is undertaken ethically.
- We recognise that an underpinning by high quality research, analysis and evidence, including policy appraisals and evaluations, is a pre-condition for evidence-based policy-/decision-making, and hence rational policy actions and outcomes.
- We will seek to employ high quality evidence that has been gathered, collated and analysed using sound, robust and ethical methods.
- We will attempt to ensure that the funding, management, conduct, dissemination and governance of research meets high standards of ethics and integrity.
- As individuals and institutions involved in collecting and/or using evidence in policymaking, we aim to be transparent on how the high quality of that evidence is assured and will flag up any potential conflicts of interest.
- We agree that the independence and integrity of individuals responsible for the gathering of research evidence and its use in policymaking must be respected and supported in ways that ensure the evidence they produce is neither biased nor misleading.

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THE PRINCIPLES AND RATIONALE BEHIND THE ACCORD

The following points explain the rationale behind the Accord and supply links to supportive resources that will help in seeking to promote ethics and integrity in the evidence produced in all non-medical research:

- Under a commitment to evidence-based policy, all evidence should be based as far as possible on ethically sound research and analysis.
- There are many forms of research and evidence. They include not just formal research projects and programmes, but a range of actions relating to investigation, collation, discovery, exploration, practice, and disciplinary development. Every kind of research and analysis needs to be done ethically.
- Research should be beneficent (or at least non-maleficent) in its aims, its substantive focus, in the process of research, and its application.
- Ethical issues can arise at every stage of research: conception, development, proposal, process, conclusion and dissemination. It follows that ethical consideration cannot be a single-stage process; it has to be continuous.
- Researchers and analysts have to be aware of, and sensitive to, the ethical dimensions of their work. That awareness depends on engagement in ethical discourse as an integral aspect of engagement in research and analysis. Ethical conduct cannot adequately be guaranteed by a fixed number of pre-set rules.
- All researchers and analysts should aim to develop a culture of ethical enquiry, based on continuous discursive engagement. To achieve this, there has to be engagement of everyone responsible for the process, including researchers, analysts, stakeholders, peers and the users of research.
- Research, enquiry, analysis and policy advice should not be based on pre-formed prejudicial ideologies or biased political or financial interests.
- Conflicts of interest should ideally be avoided in the production of evidence and in the provision of policy advice. If this is not possible, all conflicts of interest should be openly disclosed.
- Whenever possible, all sources of information used to formulate evidence should be acknowledged, with exceptions being well-justified and, if feasible, noted (for instance in the case of confidential information or views).
- In order to produce high quality evidence, research and analysis must be methodologically robust.
- Only research and enquiry that has also been conducted ethically and with integrity can be considered 'high quality'.
- All research should be funded, managed, conducted and disseminated ethically and with integrity.
- The processes and institutions involved in the selection of evidence, including research, to inform policy should be independent, open and transparent.
- The effectiveness and impact of all policies should be honestly and transparently assessed or evaluated using high quality research and analytic methods.

To achieve these ends:

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- The Accord is supported by statements that clarify the values, virtues, principles and standards applicable the production of evidence used in policymaking. http://prores-project.eu/the-foundational-statements-for-ethical-research-practice/
- Clear and agreed definitions of terms and concepts are required so that policymakers can be able to recognise high-quality evidence in their field. http://prores-project.eu/glossary-of-terms-and-concepts/
- Ethical research practice can often only be understood and explained in context. Illustrative case studies are made available for insights offered by complex cases. http://prores-project.eu/case-examples/
- A repository of resources must be made available to guide and support the interpretation and application of the Accord. http://prores-project.eu/framework/

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ANNEX 2 – THE TOOLBOX

A TOOLBOX FOR ASSESSING THE ETHICAL QUALITY OF RESEARCH EVIDENCE

The following questions are addressed in the toolbox:

WHO did the research/conducted the enquiry/provided analysis or advice? [this will link to: WHO were the researchers and the research agency?]

HOW did they do the research or what did they base their advice and analysis on? [this will link to: HOW was the research conducted?]

WHOM/WHAT was being studied? [this will link to: WHOM/WHAT was the prime focus of the study?]

WHY was the research/analysis conducted? [this will link to: WHY was the research conducted?]

WHEN/WHERE was the research/analysis conducted? [this will link to: WHEN & WHERE was the research conducted?]

Was the research REVIEWED in advance for quality considerations? [this will link to: Was the research REVIEWED for its scientific or analytic 'quality' and its adherence to ethics?]

What were the OUTCOMES of the research/analysis? [this will link to: What were the OUTCOMES of the research?]

WHO were the researchers and the research agency?

For the individual researcher:

- What are the credentials of the researcher?
- What is/was their competence; experience; track record?
- Who do/did they work for?
- Do they have any vested/conflicts of interest?
- Do they adhere to any specific professional/ethical codes and/or guidelines?
- How was the specific project that generated the evidence in question funded?

For the research agency:

- What are the credentials of the research agency?
- What is their competence; experience; track record?
- Who do/did they work for?
- What kind of research/data-gathering agency are they?
- How is the agency funded/by whom?
- How is the agency governed how was it founded and with what purpose?
- Does the agency commit to adhere to certain codes/guidelines does it have a 'mission statement'?
- Does the agency have any vested/conflicts of interests?

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- How does it manage data protection regulations?
- How was the specific project that generated the evidence in question funded?

EXPLANATORY NOTES: It is important to note that – given the range of evidence employed in policymaking – we are adopting a very broad definition of 'research' – to include all forms of data gathering intended to supply evidence for policymaking. As a result the agencies gathering the data might include academic researchers, think tanks, lobbying agencies, PR consultants, advocacy agencies, civil society organisations, early adopters/influencers (bloggers, etc.); these criteria do not 'rule out' novice researchers, citizen scientists, members of the public, journalists etc. There is no explicit requirement for only experienced researchers to be treated as 'legitimate'. The key is to be transparent about exactly who the researcher/agency is and who they are working for – even if it is for themselves. It is to be expected that researcher CVs/resumés would be supplied together with any agency track records, details about the RPO/Agency's background and its main funding sources – which could be large corporations with heavily vested commercial interests or crowd funding schemes in which the interests might be more diverse. Mission statements or adherence to codes guidelines and/or professional association memberships would be appropriate here. A key question for the evidence-gathering agency would be how does it fund itself? Does it have a diversity of funding or is it dependent on a particular stakeholder and with what contractual commitments?

HOW was the research/data-gathering and analysis conducted?

- What exactly was done to gather and analyse the data?
- What research plan or analytical 'design' was used?
- What specific methods were employed both to gather data and to analyse it?
- Was there an original protocol made available publicly? (If so, did the research deviate from this? If so, was this justified?)
- What kinds of data were gathered? (Were there checks for validity, reliability, authenticity of sources etc.)
- How were data managed and analysed?
- Is there any evidence of bias? If so, where and what?
- Were other stakeholders (community members, research participants, general public, etc.) involved in any part of the research or data-gathering? If so, why and how?
- Were relevant personal identities protected and, if so, how?
- Was the process transparent? If not, why were there limitations on transparency?

EXPLANATORY NOTES: There is no implicit judgment of the 'ethical quality' of the variety of methods that can be employed. What matters is, again, the transparency of those conducting the research, and their offering of clear justifications/rationale for any methods used. Thus covert research, deception, community/societal engagement, social engineering etc. are not to be regarded as inherently unethical – the judgement of whether they are or not might depend upon the context in which they are used and, whether a policymaker/advisor considers evidence derived from a particular method is justifiable. Neither is there any implication that only primary research is of evidential value – all forms of secondary data analysis can be subjected to these questions: from meta-analyses of controlled experimental studies to simple frequency counts of questionnaire responses. The 'validity' of primary research data depends upon the rigour of the research design and its accurate execution; the validity of most forms of secondary data analysis depends upon access to/availability of raw source data. Even documentary or archival analyses are valid to be tested against accurate use of source materials.

WHOM/WHAT was the prime focus of the study?

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- Who or what were the subject/objects/participants of the study?
- Could these 'subjects' or 'objects' have been considered vulnerable in any way or made more vulnerable by the enquiries being conducted?
- How was the welfare of the subject/objects/participants ensured?
- How was the welfare of the researcher(s) (if appropriate) ensured?
- Can any risks of harm be foreseen/anticipated and mitigated as a consequence of engaging in enquiries/research about/with the 'objects' of this study?

EXPLANATORY NOTES: These elements concern the relationship between researcher and researched and how the researcher treats the researched. The subjects/objects/participants could have been humans, animals, organisms or parts of such, material objects, ecosystems, organisations, communities, societies etc. — or any combination of the aforementioned. Thus research by economists might be a study of banking 'systems' without references to bankers per se. Research enquiries related to public health might be concerned with the public and not individual members of that 'public'. Researcher welfare issues are likely to arise out of their relationships with the subjects/objects of study — so researcher health and welfare needs to be considered and any forms of reflective practice they adopt encouraged and disclosed. Once more these questions are not just related to primary research, nor simply to research with humans or live animals — they apply equally to any form of secondary research/data gathering and to material objects or places. Thus, for example, a volcanologist is unlikely to be able to cause undue harm to the objects of their study, but is likely to put themselves at risk when engaging with the primary objects of their attention. On the other hand, if they adopted some physical engagements with volcanoes(bombs?) — the possibility of harm to other aspects of the ecosystem and communities has to be envisaged.

WHY was the research/enquiry/analysis conducted?

- What was the purpose of the research enquiry?
- For what reason was it conducted?
- Who supplied the funding?
- How was it funded?
- What were/are the funder's intentions?
- What were/are the researcher's intentions?
- What were/are the research agency's intentions?
- Were participant communities involved in determining the need for this research?
- Were potential impacts evaluated and appropriate actions planned?

EXPLANATORY NOTES: Motive and intent are key ethical issues. They go to why the research was conducted in the first place and what outcomes were hoped for and by whom. Impacts could be environmental, social, psychological, political etc. Hence the question of who commissioned and funded the research/enquiry is doubly important – details on the funding agency is key to full transparency.

WHEN and WHERE was the research/analysis conducted and/or policy advice provided?

- In what context was the research/analysis/enquiry carried out?
- What was the nature of the research site/setting?
- When was the research/analysis conducted?

EXPLANATORY NOTES: Most ethical judgements rely upon a full understanding the context in which the action under consideration occurred – the place and the time. This requires a comprehensive understanding of place and time: geographical, institutional, organizational etc. and diurnal, annual, chronological,

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historical and so on. Thus, there are wide variations between a laboratory site, urban settings entailing risk and threats, libraries, and high- and low-resource countries. Laboratories can vary in licensing levels, while field sites vary in the kinds of permissions required. Historical archival research varies considerably in terms of ethical risk from the study of more contemporary documentation but engaging in historical enquiry may still entail risks to the present in terms of societal or communal stigmatisation and/or reputation. For example, knowledge of how and why a particular organisation was established may 'taint' its current reputation.

Was the research REVIEWED in advance for its scientific or analytic 'quality' and its adherence to ethics?

- Is any form of pre-project review of the approach provided for within the institutional/sectoral set-up?
- Was there independent review/appraisal by a competent body for the ethical issues raised by this research/enquiry?
- Who reviewed the research methodologically/scientifically for quality issues prior to its implementation?
- What regulatory approvals were granted for the research if any?
- What additional permissions were necessary/granted for the research?

EXPLANATORY NOTES: There are many stages/steps in terms of approval and/or appraisal processes to assess the quality of and risks (ethical etc.) for research projects. In some countries/institutions these processes are absent, but the increase of multinational, interdisciplinary approaches to research implicates researchers in ensuring some formal reviews are conducted. Reviewing standards and standard operating procedures are increasingly shared internationally and across institutions. In addition, novel citizen science evaluation methods are emerging such as crowd reviewing. It may be difficult for all forms of research/analytical agency to secure independent assessment for the ethics of their work. Increasingly organisations do strive to establish their own in-house system with a degree of independence provided by some external memberships. There is no 'best' or single way of doing this, the importance again is for transparency – clarifying if any form of assessment of quality and ethics is done prior to the commencement of research and/or enquiry.

What were the OUTCOMES of the research?

- How were the research/analysis findings reported, shared and/or disseminated? What policy advice was derived and given?
- If parts/all of the analysis were not published, what was the reason for this?
- How 'selective' were the reporting of findings?
- Were the research findings implemented in practice i.e. 'applied' or used?
- What were the consequences of the findings being, or not being, implemented?
- Were there any limitations on what could be accomplished with the findings dissemination and/or application?
- Could any form of 'impact assessment' be performed?
- Was any evaluation of the outcomes conducted or planned for?

EXPLANATORY NOTES: The research findings could be disseminated in a range of different ways – in academic publications, peer-reviewed scholarly publications, in-house technical reports, commissioned reports, independent white papers, official policy documents, policy briefings, participant feedback, social media, news media and so on. What was done with the 'outcomes' links back to the original 'why?' question, or what was hoped for/intended for the research. The researchers might not be in a position to directly

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apply the findings, but they might be better able to guide and assist those who can -i.e. the policymakers. A decision might be made to withhold publication of findings -i.e. justifications for such an action would have to be clear and strong.

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