PRO-RES

PROmoting integrity in the use of **RES**earch results in evidence based policy: a focus on non-medical research

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VERSION LOG

Version	Date	Author/reviewer	Change Details
0.1	**January 2020**	**Ron Iphofen**	**Amendments made from tracked changes: when possible incorporated – if more needed listed in ACTIONS at the end of the document.**
0.2	**April 2020**	**Ron Iphofen**	**Explanatory 'NOTES' have been added, the question items expanded further.**
0.3	**April 2020**	**Ron Iphofen**	**Original 'guidance' from D3.2 now included. TEXT in black is proposed 'final' text – for public consumption.**
0.4	**May 2020**	**Ron Iphofen**	**Additional edits after detailed comment from EPC related to ensuring think tanks (etc.) can be included**
0.5/0.6	**October 2020**	**Emmanuel Detsis**	**Edits from Ron, Robert, John and Fabian based on feedback from interviews and stakeholder comments. Structural changes made by Ron.**
0.7	**October 2020**	**Ron Iphofen**	**Incorporating suggestions from Sharepoint. Wording of Accord and sequence of statements changed after comments from Fabian.**
0.8	**November 2020**	**Francesco Duranti (Policy Officer for Ethics Unit) and Roberta Manarchello (Project Officer)**	**Suggestions to produce a 'DO's and DON't's list based on existing materials. And to clarify that the Framework is normative. A third 'illustrative example' for the Toolbox was supplied by epc (Fabian Zuleeg and Johannes Greubel)**
0.9	**Final Version November 2021**	**Emmanuel Detsis - Addition of all new elements from website, editing and re-arrangement of sections. Removal of color code.**	

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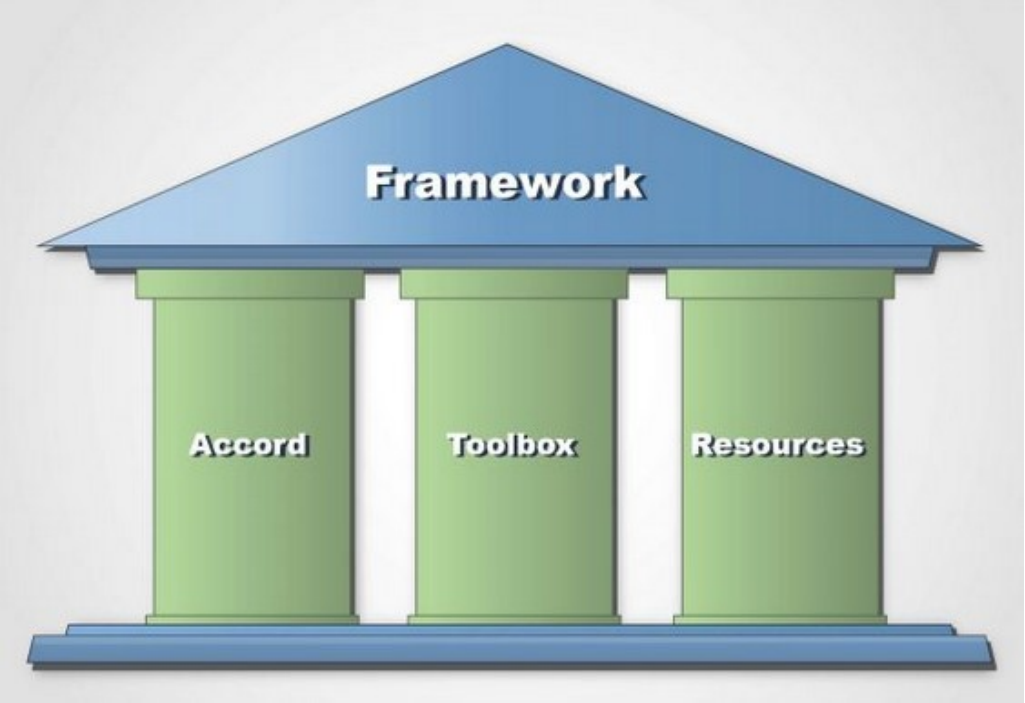
INTRODUCTION

The PRO-RES Project has produced a guidance FRAMEWORK that encourages policymakers and their advisors to seek evidence for their decisions from research that has been conducted ethically, responsibly and with integrity. The Accord is accompanied with further tools and information/resources, together constituting "The STEP (Scientific, Trustworthy, and Ethical evidence for Policy) ACCORD".

The Accord is a statement of principles to encourage the use of ethical evidence from non-medical research to inform policy. It needs to be short, clear, succinct and actionable.. The potential for this approach has been explored with the appropriate constituencies and across the range of stakeholders. These include the producers of research, disseminators and intermediaries, influencers, policy advisers, decision-makers and implementers.



This normative framework includes the following elements:

- ✓ A statement – The Accord – which lays out the principles for ethical research which we hope all stakeholders can sign up to and endorse. The statement is for all who are concerned to ensure policies are based upon ethical evidence.
- ✓ A Toolbox to supplement the Accord for policy makers and advisors to help them identify ethical evidence for their decision-making processes.
- ✓ Additional supportive Resources that complement the Accord and the Toolbox.

Together these three 'pillars' comprise a **normative** FRAMEWORK that will support policies constructed on ethical evidence, cover the wide spectrum of non-medical research and offer practical solutions for all evidence-seeking stakeholders, that will comply with the highest standards of research ethics and integrity. The Framework has been explored and tested with

the appropriate constituencies and across the full range of stakeholders. These include the producers of research, disseminators and intermediaries, influencers, policy advisers, decision-makers and implementers.

A normative framework is a collection of principles, values and standards for right action that is seen as *morally binding* upon the members of a group and serves to guide, control, and/or regulate proper and acceptable behaviour. That is, such a framework contains advice and guidance on how one 'ought' to behave in producing ethical evidence. The framework constructed by the PRO-RES Project is based upon principles of normative ethics which refers to the grounds of meaning or acceptance of decisions about why certain behaviour is right or wrong. The varieties of normative ethics are typified as primarily deontological or teleological. This is about the way one ought to behave as a researcher. Normative principles have been established over time from considering moral choices at an abstract level in ethical theorising, from the codes of behaviour established by professional institutions and from the observation in practice of what happens when research is done for the 'wrong' reasons or in 'incorrect' ways as well as observing the benefits from doing research the 'right' way. Thus, theorising about ethics can never be divorced from the application of principles in practice[1]. The central point about normative ethics is that it entails value judgements and how one chooses to behave as a researcher can never be proven right or wrong by appealing to empirical facts. The role of normative ethics is *not to recommend any particular course of action but to set out possibilities, help to assess values and assist in the making of informed, thoughtful choices*.[2]

To answer the "**Who is this for**?" question: it is for policymakers keen to use ethical evidence; it is for policy advisors seeking to offer advice based on responsible sources; it is for researchers and their funders wishing to make sure that policies will be based upon their ethically produced evidence; it is for think tanks wishing to enhance their legitimacy by demonstrating that their reports have been produced with integrity and it is also available for citizens to make their own assessment about the evidential sources of the policies that directly affect them.

The rationale behind the Accord is that good research will help produce better policies. Decision takers and policymakers should be seeking evidence to support their work from the range of expertise on offer. Sound, reliable, transparent research, not driven by ideology or subservient to it and undeclared vested interests, produces robust evidence that can benefit social wellbeing and societal progress.

[1] La Follette, H. (ed.) (2002) Ethics in Practice: An Anthology, Oxford: Blackwell.

[2] Thompson, M. (2000) Ethics (Teach Yourself Series), London: Hodder Headline.

It is in the interests of the scientific community to ensure the evidence produced is reliable and trustworthy and ethically generated. It is in the interests of those who make policy to be able to assure the decision takers (and the general public) that evidence has been generated in the best possible way.

THE STEP ACCORD

The final version of the STEP ACCORD can be seen in the following paragraphs:

- **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 effective outcomes.**
- **As individuals and institutions involved in commissioning, funding, sponsoring or conducting research, collecting or using evidence for policymaking, we aim to be as transparent as possible on how the high quality of that evidence is assured and will flag up any potential conflicts of interest.**
- **We agree that to a reasonable degree the independence and integrity of individuals responsible for the conducting and/or gathering of research evidence and its use in policymaking must be respected and supported in ways that ensure that the evidence they produce is neither biased nor misleading.**
- **We will communicate, employ and/or apply only high quality evidence, research or enquiry, in other words evidence that has been undertaken, gathered, collated and analysed using sound, robust and ethical methods appropriate to the task.**
- **We will ensure that the commissioning, funding, management, conduct, dissemination and governance of research meet high standards of ethics and integrity.**

The following section came from two 'simpler' sets of bullet points which were combined after many suggestions and rewording from partners and stakeholders. It aims to explain more fully what lies behind the Accord statements.

THE PRINCIPLES AND RATIONALE BEHIND THE ACCORD

Most of the codes and guidelines for research ethics and integrity are constructed on the basis of a normative prescription or a 'duty-based' as opposed to a 'rights-based' morality. Although one could conceive of an alternate guidance structure based on rights, it would be much harder to apply since rights are more difficult to define and operationalise and, in practice, are more inclined to conflict with each other. It would certainly be confusing (as it is with the current mix of rights and duties in European law) to try reconcile a 'rights' approach with 'duties' under the law, to ethics and to the research professions. The comparison of rights-based and duty-based moralities brings out the problem of all ethical principles being in tension. The writers of codes and guidelines are constantly trying to reconcile such tensions – any right to be informed will always be contradicted by a right for data not to be disclosed. It would only take one respondent in many datasets to seek anonymity for the rest to have to be anonymised – thus

restricting its availability – even perhaps for tests of validity and reliability to be conducted by other researchers. The PRO-RES approach was always based on resourcing reflective practice rather than on formal bureaucratic compliance. And this approach was vindicated in all the work done with stakeholders. The framework was constructed by drawing upon the views and ideas of the full range of key stakeholders in an iterative process. It has built upon previous foundational research ethics codes, guidelines and frameworks in an assessment of what elements of these foundations have 'worked' in influencing and informing policymaking in the past. We advocated from the outset that the framework should come in the form of advice and 'guidelines' rather than a prescriptive or sanctionable code together with a practical toolbox both to identify best practices (checklists) and to provide models in order to measure the impact of non-deployment of such best practices. This must be promoted as a 'what works' approach. Experience suggests that the more regulatory a code, the more malpractice is encouraged if the institutional and/or infrastructural pressures not to behave 'well' remain unaddressed. This represents a pragmatically-oriented 'virtue ethics' approach; one that encourages and rewards responsible conduct in researchers and their employing and/or funding institutions. This too was endorsed in our interactions with the full range of stakeholders. It is always possible to construct prescriptive codes if the power to apply sanctions, such as restricting access to funds or delegitimising the ability to offer research services. Examples of such constructions can be seen in the section for the TOOLBOX.

The following sections will explain the rationale behind each Accord statement.

Statement 1: 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 effective outcomes.

Under a commitment to evidence-based policy, all evidence should be based as far as possible on ethically sound research and analysis. This applies to all who are paying for the research to be conducted, those who do the research and those who make use of the research findings.

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.

Research and analysis, in order to be seen as conducted ethically, should be beneficent (or at least non-maleficent) in its aims, its substantive focus, in the process of research, and its application.

High ethics standards in research can be found in the range of ethics codes and guidelines that are available and to the statements established as part of the PRO-RES Project.

Research, enquiry, analysis and policy advice should not be based on pre-formed prejudicial ideologies or biased political or financial interests.

Conflicts of interest[3] 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.

Statement 2: As individuals and institutions involved in commissioning, funding, sponsoring or conducting research, collecting or using evidence for policymaking, we aim to be as transparent as possible on how the high quality of that evidence is assured and will flag up any potential conflicts of interest.

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'.

It is clear that there may be limits to 'transparency'[4] which may depend upon varying commitments, say, to funders and/or to research subjects. Recognition and declaration of those limits is consistent with a commitment to transparency.

Similarly, all participants to the research process (stakeholders) are likely to have some 'vested' interests, although such interests will not necessarily be 'in conflict'. Interests should be declared (made transparent as much as possible) and any potential conflicts of interest declared.

Statement 3: We agree that to a reasonable degree the independence and integrity of individuals responsible for the conducting and/or gathering of research evidence and its use in policymaking must be respected and supported in ways that ensure that the evidence they produce is neither biased nor misleading.

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).

The processes and institutions involved in the selection of evidence, including research, to inform policy should be as independent, open and transparent as possible. Thus the phrase 'reasonable degree' acknowledges the difficulty of complete independence of action – for all stakeholders. This recognises

[3] Conflicts of interests occur when personal, financial, political and academic concerns co-exist and the potential exists for one interest to be illegitimately favoured over another that has equal or even greater legitimacy, in a way that might make other reasonable people feel misled or deceived. Conflicts of interest reside in a situation not in behaviour and may arise even when there has not been research misconduct. Researchers caught in a conflict of interest risk appearing negligent, incompetent or deceptive. There is little clear guidance of when to declare and how to manage competing interests. Conflicts of interest also exist at an institutional level, where research organizations accept funding from sources that may appear to compromise the independence and integrity of their research.

[4] A lack of hidden agendas and conditions associated with some action, accompanied by the open availability of all the information required for collaboration, cooperation, and collective decision making. Agreements, dealings, practices, and transactions are open to all for verification. The implication of transparency is that every action should be scrupulous enough to bear public scrutiny. This includes clarity about the rules and reasons behind regulatory measures. In practice, transparency may need to be balanced against confidentiality and stigmatization to protect research participants and their legitimate Privacy and commercial interests.

that 'independence'[5] is difficult to define and that inevitably has limits. No participant in the research and evidence-gathering process can be truly considered completely independent. Where constraints on independent action exist the nature and extent of such constraints need to be declared.

The effectiveness and impact of all policies should be honestly and transparently assessed or evaluated using high quality research and analytic methods.

Statement 4: We will communicate, employ and/or apply only high quality evidence, research or enquiry, in other words evidence that has been undertaken, gathered, collated and analysed using sound, robust and ethical methods appropriate to the task.

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. Ethical research practice can often be understood and explained only in context.

All researchers and analysts should aim to develop a culture of ethical enquiry, based on continuous discursive engagement. There needs to be an ethical discourse to be sure that researchers are 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. To bring about a cultural change in research activity, there must be engagement of everyone responsible for the process, including researchers, stakeholders, peers and the users of research. This engagement needs to be continuous. Ethical consideration cannot be a single-stage process.

Statement 5: We will ensure that the commissioning, funding, management, conduct, dissemination and governance of research meet high standards of ethics and integrity.

All research should be funded, managed, conducted and disseminated ethically and with integrity. All those involved in the research process – from original idea to findings and applications of results – share responsibility for ethical practice and outcomes.

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[5] The European Code of Conduct for Research Integrity (All European Academies 2017) states that research should ideally develop 'independently of pressure from commissioning parties and from ideological, economic or political interests'. For research to be independent, decisions about research questions, methodologies, analyses, results, conclusions and dissemination must not be influenced by the views of funders (public or private) or host institutions. The ability to assert independence may depend on the existence of a diversity of funding sources, collaborators, institutional hosts, sources of data, methodological and theoretical approaches. Inevitably, the degree of independence of research falls along a continuum. This reflects the terms on which the research is conducted rather than the source of funding. It should not be assumed that public or NGO funding is necessarily independent and corporate or defence-related funding is necessarily compromised. Each case must be considered on its own merits.

THE PRO-RES TOOLBOX

A toolbox for assessing the ethical quality of research evidence, namely helping answering the question:

"How do you assess that evidence has been ethically produced?". The key ethical questions to be asked about any research output, scientific finding, evidence-based policy advice or similar are really simple:

- WHO did WHAT to WHOM, WHEN, WHERE, HOW and WHY?
- AND how were the findings PUBLISHED, DISSEMINATED &/or APPLIED?
- AND what were the CONSEQUENCES of the use to which the findings were put? (i.e. an EVALUATION)

By seeking the answers to these questions, it is possible to make a judgment about how ethically the research/analysis was conducted and if the researchers/analysts/advisors behaved with integrity. Anyone wishing to 'test' a researcher and their work for its integrity should be able to ask these questions of them. The questions are applicable to all forms of enquiry seeking to gather data and analyse it for evidential purposes. The sets of questions could appear in any order, although the 'WHO' category often comes first. These questions inevitably overlap to varying degrees – but answering them all offers the most comprehensive articulation of the quality of a research engagement. These are questions that can be asked of any Evidence Generating Organisation to judge how ethical their work is.

This Toolbox is designed to be straightforward and easy to use. It operationalises 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. A good Toolbox contains a variety of 'tools' which can each be used for a specific purpose. We hope to add further tools to our Toolbox as suggested by our stakeholders. Here we suggest some tools which we have tested with our stakeholders or have been suggested by them.

If you think that another community tool would make a good addition to the toolbox, please send an email at edetsis@esf.org , with the details. We will review the proposed tool and include it to our toolbox if appropriate.

Tool 1: CODE BUILDING – Recommendations for Code Builders, Adopters and Users

Whether at national or professional association level the first key decision is whether to 'adopt' a code or guidelines that have already been established and used, or to construct a code of one's 'own' from the start. This should only be decided after a thorough consideration of the appropriateness of existing codes/guidelines. The case studies in this report demonstrate that constructing a new code is laborious and time-consuming, however so is the process of reviewing existing codes/guidelines and gaining agreement to use one or other of them. Thus before any such undertaking, appropriate resources need to be assigned.

If 'adopted' the code/guidelines must be assessed for their 'fitness for purpose' – if at national level they must adapt to all circumstances, settings and disciplines; at professional level they must suit all the situations the professional is likely to confront.

If the code/guidelines are to be written afresh, the construction process must be established at the outset. These include: assigning lead author with editorial control; forming a working party to support the lead author (one person alone cannot/should not take on the responsibility); establishing a decision making process for accepting content; conducting desk research that includes decisions about how much of existing codes/guidelines should be incorporated; open acknowledgment of authorship – for credit rather than accountability (the latter being a governance issue – the organisation/institution 'requiring'

the code takes responsibility for the final version, its application and use). Organisations may indeed feel the need for their own code for reasons of identity.

Buy-in for the code/guidelines is partly dependent upon its 'useability': substantive content and ease of use. The former relies upon the perceived relevance of the content to the users' situation. (Both an adopted code or a freshly written one must be seen to take account of the pragmatics for using it by the primary stakeholders.) Ease of use is governed by length and technical detail – thus it is clearly valuable to have the code/guidelines operating at distinct 'levels' of access:

- L1 – a simple set of statements based upon the key values and principles that can easily be 'signed up to' by the user;
- L2 – a more detailed explanation of the background to the simple signatory statements; and, possibly,
- L3 – an even more detail background to the content and rationale for its existence.

Commitment to the code/guidelines is also dependent upon the wider stakeholder community having the opportunity to contribute to its development and (regular) periodic updating. The code/guidelines need to be adequately broadly disseminated such that the user community has full opportunity to contribute suggestions for its improvement. It must remain clear who takes and how they take the final decision on the completed code/guidelines.

Whether the code remains at a normative level (advising as to use) or prescriptive (requiring/mandating use) will depend upon the availability of sanctions/punishments for failure to observe the code. If the agency/institution cannot apply sanctions for whatever reason then, for pragmatic reasons, the code should be seen as normative. If sanctions can be applied then they should be proportionate to the failure of observance.

Examples of ethical issues which are more difficult to regulate include the ethics of research using social media and the ethics of data analysis. It is important for any code/guideline to offer guidance on the more challenging issues as well as on those that are easier to regulate.

Training/education in the content of ethics codes/guidelines should be part of the formal training of all 'evidence-gathering' professionals – researchers, journalists, public relations agents, science advisors and so on. Remaining aware of the key elements of ethics and integrity in practice must remain key to the socialisation process of evidence-gathering professionals. Given the nature of the potential for contextual change, of topic and method, then continuing professional development (CPD) in ethics/integrity in research should be an acknowledged part of career development and rewarded accordingly.

Personal data protection (PDP) offers a clear example of an ethical issue that can be regulated more formally. Its effectiveness depends upon: clear regulatory/legislative requirements; the ability to monitor all actions related to PDP (from national to professional levels); adequate penalties for non-observance; the availability of expertise in individuals able to apply the regulations, advise and warn others about their application (hence the key role of data protection officers (DPOs) for the application of the EU's General Data Protection Regulation (GDPR)). The importance of the DPO role for the effective application of personal data protection should be recognised in clear career trajectories, training and professional rewards. The same should be available for individuals involved in the awareness-raising of ethics and integrity in research – such as in helping to write and develop codes and guidelines, in running training events and in serving on ethics/integrity appraisal panels.

Formal adoption by the evidence-gathering institution/agency of the final constructed or adopted code or set of guidelines must be established as a key element of its mission.

Tool 2: EVALUATING RESEARCH EVIDENCE: A comprehensive prose account of a research/evidence generating activity

This tool is essentially a compilation of succinct guidance statements emanating from the Accord Principles, which will show users:

- How to conduct research ethically and with integrity (for researchers, managers and funders).
- How to ensure research is conducted ethically and with integrity (for reviewers in research ethics appraisal)
- How to supply evidence for effective policymaking (for researchers, managers, funders)
- How to select good quality research (for science/policy advisors and policymakers)
- How to evaluate the ethical impact of policies (for ALL above stakeholders)

The key ethical questions to be asked about any research output, scientific finding, evidence-based policy advice or similar are: WHO did WHAT to WHOM, WHEN, WHERE, HOW and WHY? AND how were the findings PUBLISHED, DISSEMINATED &/or APPLIED? AND what were the CONSEQUENCES of the use to which the findings were put? (EVALUATION).

By seeking the answers to these questions, it is possible to make a judgment about how ethically the research/analysis was conducted and if the researchers/analysts/advisors behaved with integrity. PRO-RES has created a Toolbox that covers all of these elements. These are questions that can be asked of any Evidence Generating Organisation (EGO) to judge how ethical their work is.

This Tool is designed to be straightforward and easy to use. It operationalises 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 questions are applicable to all forms of enquiry seeking to gather data and analyse it for evidential purposes. The sets of questions could appear in any order, although the 'WHO' category often comes first. These questions inevitably overlap to varying degrees – but answering them all offers the most comprehensive articulation of the quality of a research engagement. The Toolbox could be operationalized in a range of ways – the first is based on a simple checklist approach. Any organization with the power to apply sanctions, such as restricting access to funds or delegitimising the ability to offer research services can turn these questions into 'prescriptions' – we offer one such suggestion here.

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. (All these 'agencies' could be regarded as 'Evidence Generating Organisations' (EGOs).) 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/EGO/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?

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

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

- 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?

WHOM/WHAT was the prime focus of the study?

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.

- 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?

WHY was the research/enquiry/analysis conducted?

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. Thus who the funders are and what interests they represent is a key question which also goes to motive and intent as much as why the researcher/agency conducted the study. 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.

- 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?

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

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, 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.

- 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?

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

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.

- Is any form of pre-project review of the approach provided for within the institutional or sectoral set-up?
- Was there independent review/appraisal by a competent body for the ethical issues raised by this research or 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?

What were the OUTCOMES of the research?

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 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 – justifications for such an action would have to be clear and strong.

- 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?

Tool 3: GENERATING EVIDENCE CHECKLIST

This tools takes the form of a simple checklist of 'DOs and DON'Ts' for those generating evidence for policymakers to make use of:

For **a researcher** who wishes to supply policymakers with ethically sound, robust evidence; OR …**a think tank** keen to supply policymakers with ethically sound evidence, then fully completing the elements of the Toolbox will supply any interested parties with enough information to judge their ability to supply ethical research evidence.

For **a funder** or **commissioner of research** seeking to make sure that the research evidence they are supporting is reliable and trustworthy, then checking if those they fund have completed the Toolbox adequately will allow them to judge their 'worthiness' for support.

For those **generating evidence** (researchers, RPO's and think tanks):

DO…

1) …clearly identify the researchers/research agency conducting the research.

2) …fully demonstrate your ability to conduct the research: your competence, credentials, education

and training.

3) …indicate your track record: outline the nature of your previous work.

4) …state all your funding sources.

5) …declare any vested interests or conflicts of interest you may have.

6) …state the ethical codes and guidelines you follow.

7) …sign up to the PRO-RES STEP Accord.

8) …be clear and transparent about the ideological and/or theoretical bases for your work and how

they could affect your products/services.

9) …specify fully your data management procedures and legal compliance.

10) …detail the specific research methods or data gathering procedures you are able to employ.

11) …detail the methods adopted in any specific research project and/or report you conducted.

12) …explain exactly how you gathered and analysed the data in each research report delivered.

13) …outline how you deal with any potential biases to address issues of reliability, validity and trust in your outcomes.

14) …with regard to any specific research action, study or investigation – detail the nature of the 'subjects' that you studied.

15) …give full details about how you mitigated the risks of any harm coming to the subjects, yourself or any co-researchers.

16) …outline what you see as the benefits of your work.

In addition to all points above, for each specific research project/analysis you conduct:

17) …explain why it was done – the goals that were sought.

18) …indicate all funding sources.

19) …outline the outcomes of the work and if any impact evaluation was conducted.

20) …supply full details of the research site/setting and effects of your work on the environment (e.g. social, psychological, economic and physical).

21) …give information on any appraisal conducted on the study in terms of ethics and/or scientific methods. Disclose outcomes/reports on such appraisal.

22) …detail how the findings of the work were reported, communicated or disseminated.

DON'T

1) …be vague about any of your responses so that there can be no ambiguities or misunderstandings.

2) …name/claim researchers/research agency who are not directly involved in your work.

3) …claim any skills, credentials, education or training which you do not have.

4) …make unsubstantiated claims for your previous work.

5) …hide any of your funding sources.

6) …disguise vested interests or conflicts of interest you may have.

7) …state support for ethical codes and/or guidelines in a tokenist manner. (They should be codes you are familiar with and can demonstrate your endorsement for.)

8) …claim to be a signatory to the PRO-RES STEP Accord or any other code if you are not.

9) …hide any ideological and/or theoretical bases for your work which could affect your products/services.

10) …claim data management procedures and legal compliance that are not demonstrable.

11) …omit any details concerning the research methods or data gathering procedures you employ

and which are stated in reports.

12) …omit details about how you gathered and analysed the data in each research report delivered.

13) …attempt to hide any potential biases to the reliability, validity and trust that could emerge in your work.

14) …leave out any details about how you treat and relate to the 'subjects' that you study.

15) …leave out any details about how you minimise any harm coming to your research subjects, yourself or any co-researchers.

16) …overclaim about what you see as the benefits, consequences and/or impact of your work.

Tool 4: Using Evidence Checklist

This tool was created for policymakers or advisors who are looking to ensure that the evidence they use to support and guide their policies has been generated ethically and with integrity. These are the simple DOs and DON'Ts that can help them make a judgement. Any responsible evidence-generating organisation should be able to readily address these.

DO

1) …ask for details about the researchers/research agency conducting the research.

2) …check the researcher/agency's ability to conduct the research: competence, credentials, education and training.

3) …review any track record: look at their previous work.

4) …clarify their funding sources.

5) …identify any vested interests or conflicts of interest they may have.

6) …check the ethical codes and guidelines they claim to follow.

7) …check if they are signatories to the PRO-RES STEP Accord or other statements of research integrity.

8) …explore their ideological and/or theoretical bases and how that might influence their products/services.

9) …examine their data management procedures and legal compliance.

10) …check out the specific research methods or data gathering procedures they employ.

11) …examine their methods of data collection and analysis for any specific evidence they are offering.

12) …discover how they dealt with potential biases.

13) …ask for detail about how they treated any subjects they studied.

14) …seek an account of what they see as the benefits and/or impact of their work.

15) …check out how they deal with any unintended consequences of their work.

16) …look at how they report or disseminate their work.

DON'T

1) …allow any vagueness in their responses so that there can be no ambiguities or misunderstandings.

2) …avoid checking on their skills, credentials, education or training.

3) …forget to look at the outcomes of their previous work.

4) …permit them to hide or not disclose funding sources.

5) …ignore vested interests or conflicts of interest you suspect they may have.

6) …neglect their stated support for ethical codes and/or guidelines.

7) …forget to check if they are a signatory to the PRO-RES Accord or any other codes of integrity.

8) …ignore their ideological and/or theoretical bases.

9) …allow vague claims to data management procedures and legal compliance.

10) …forget to check the research methods/data gathering procedures they employ.

11) …ignore any potential biases that could emerge in their work.

12) …neglect to request details about how they treat and relate to their 'subjects'.

13) …neglect checking on the claims they make about the benefits and impact of their work.

Tool 5: Ethical Issues in Covert Research, Security and Surveillance: Guidance Notes for Reviewers and Policymakers

This tool was compiled from contributions by project partners Ron Iphofen and Dónal O'Mathúna, with the contribution of external authors Simon Kolstoe, Kevin Macnish, and Paul Spicker. The project is grateful for their contribution. This tool is the only discipline specific tool of PRO-RES, a decision taken after struggling to identify resources and tools that deal with covert research.

PRO-RES publications

The tool 5 is part of a concluding chapter in Iphofen, R. & O'Mathúna, D., eds (2021) **Ethical Issues in Covert, Security and Surveillance Research**[6], Vol. 8 in the series Advances in Research Ethics and Integrity, Emerald Publishing. This is an open access volume funded as part of the PRO-RES Project from the European Union's Horizon 2020 research and innovation programme under grant agreement No 788352. Link to the publication can be seen in the **PRO-RES website**[7]. The other two volumes are:

1. **Ethical evidence and policymaking: Interdisciplinary and International Research** [8]
2. **Ethics, Integrity and Policymaking: The Value of the Case Study** (in print in time of writing, but you can find the executive summaries of the chapters here[9])

The chapters of these volumes are not tools, but resources that discuss particular topics in ethics and integrity. A tool should be succinct, well targeted and pragmatic. The chapters are very discursive (by necessity). We have always seen the chapters as a resource rather than a tool. However, they will help in further understanding the knowledge needed to utilise the toolbox and provide test case examples that can be useful to the reader.

[6] https://www.emerald.com/insight/publication/doi/10.1108/S2398-6018202108
[7] https://prores-project.eu/deliverables/
[8] https://policy.bristoluniversitypress.co.uk/ethical-evidence-and-policymaking
[9] https://prores-project.eu/wp-content/uploads/2022/04/CSS-Exec-Summaries.pdf