# "Integrity in Research
# -
# A Rationale for Community Action"

# Expert Group meeting
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# Final Report

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# "Integrity in Research – a Rationale for Community Action"

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## I. Introduction

This paper outlines the issues considered by the expert group on Integrity in Research invited to provide guidance on the key issues, and a Rationale for Community Action. The subjects addressed in this document are the main areas, as seen by the Expert Group, where the Commission might act or where the Commission might lead or work to promote wider discussion. There are also some areas where the Commission might consider funding research within the RTD L3 or through other Directorates. Misconduct in research, in all its forms, is highly damaging and undermines public confidence in research and the use of research evidence in decision making in all fields. Public bodies leading policy for, and providing funding for research, have responsibility to ensure that they are investing in activities of the highest standards. The Commission should make a firmer commitment to ensuring that the research undertaken under its programmes is conducted with integrity. It should also seek to be informed that the work it funds is conducted to the highest standards and that any failures to meet those standards are investigated appropriately and the Commission informed of the outcome of those investigations. This work is relevant to all those Directorates General, which fund research.

## II. Background

### II. a) Definitions and Status Quo

National governments, the European Commission and a number of other bodies make large investments in research through national and international programmes. Much of this research is conducted in European universities and institutions as well as work co-sponsored with the private sector and with countries outside Europe. The European Commission has a responsibility to the European public to manage the funds assigned for research in a way that achieves the aims and objectives set out in the plans, allocating funding to accrue benefit to society. As an established funder of research, the Commission acting on behalf of the European Community and the Governments of member states has responsibility for oversight and management of a significant research budget. Commission policies and procedure are in place to achieve effective use of this funding, which should include standards in probity and integrity.

Europe has a reputation for high standards, timeliness and innovation in research. Member states and European organisations have a vested interest in protecting and where possible enhancing that image. It is perhaps not sufficient to believe that high standards in research are being applied in European institutes and universities but to demonstrate that this is the case through rigorous quality control and research audit. The Commission could contribute to international development and harmonisation of norms and standards. Towards the longer-term, the debate on standards might be initiated though the Social Accountability 8000 initiative (1).

Integrity in research concerns the standards by which research activities are performed. The New Oxford Dictionary defines integrity as *the quality of being honest and having strong moral principles*, alternatives are that, to have integrity is to be Steadfast in adherence to strict codes of conduct. For researchers this might be defined as the quality to conduct research worthy of the trust of others. Research integrity is a fundamental value for any and all research, for researchers and those who host or fund research activity.

There is a need to differentiate between the moral and the profession aspects of integrity in research. Although interrelated, for the purposes of differentiating matters handled under research integrity from those under research ethics, the distinction is helpful. Matters which require a researcher to be guided by moral principles could be argued fall within the domain of research ethics, those responses which can be defined within standards and codes as issue of research integrity. Defining integrity in terms of morals and virtue opens situations in which researchers might apply value judgements according to their moral principles, rather than resolve them by reference to standards and protocols (2).

### II. b) Focus

Integrity in research can also be considered at a number of levels (individual, project, organisation, national) and controls and standards instituted to guide activities. In developing the rationale the Commission should explore the level at which it is most appropriate to provide direction in this area which is compatible with the principles of

subsidiarity. Consideration of the role and integrity at the systemic and institutional levels, including organizational, governance and legal issues has been explored in a number of disciplines (3). Promoting integrity in research at all level is of considerable importance and worthy of further discussion and research.

Although conduct in research can be defined in the most part by standards and rules, moral principles and ethical values cannot and should not be wholly removed or overlooked in such consideration. This work acknowledges the importance of these dimension to the way research is developed and conducted but does not attempt to explore or address these issues which are covered elsewhere (e.g. 4,5).

### II c) National Mechanisms within Europe

#### Denmark

Three Committees on Scientific Dishonesty (DCSDs) investigate allegations of misconduct in research brought to their attention by a whistleblower with involvement in the case. The DCSDs have jurisdiction over those involved in public institutions and with respect to staff who have had academic training. The DSCDs are supported by a secretariat from the Danish Research Agency and have national responsibility. The Committees have legal standing with a High Court Judge as joint Chair.

#### France

France has no standing national body with responsibility to investigate or have oversight of allegations of misconduct in research. The Committee for scientific ethics or COMETS (*COMité d'ÉThique pour les Sciences*) acts in a consultative capacity including writing out 'recommendations about the definition, vindication and implementation of rules related to research deontology such as fraud, capture of scientific results, plagiarism and about the researcher's liability to CNRS and society. COMETS charter states it does not deal with individual situations, as those are the Director General's responsibility.

INSERM, has an Integrity Office with a Scientific Integrity Officer (*Délégué à l'Intégrité scientifique*) and nine regional mediators. The Integrity Officer requests the Director General to appoint an Investigation Committee that may include foreign experts. Conclusions reached by the Committee are passed to the Director General, who decides on the consequences. Universities have access to the same investigation and support services through INSERM.

#### Finland

Finland established a decentralized system to handle allegations of misconduct in research with the Finnish National Research Ethics Board handling appeals. The Committee published guidelines for the prevention, handling, and investigation of misconduct and fraud in scientific research. Although the composition and mandate of the Board are based on law, the effectiveness of the guidelines will depend on the voluntary commitment of the research community to comply with it.

#### Germany

The German Research Science Council (Deutsch Forschungsgemeinschaft DFG) set up an independent committee of scientific research ombudsmen. Universities have primary responsibility to investigate allegations and concerns in the conduct of research. DFG recommended universities and institutes appoint independent mediators who work to resolve situations of suspected misconduct in research. DFG also established a national Ombudsman service to advise and assist in questions of good conduct and on matters of misconduct. Receipt of public funding would be conditional upon adopting the mediator and ombudsman functions.

#### Netherlands

The Association of Universities in the Netherlands (VSNU), brought in the Code of Conduct for Scientific Practice from 2005. The Royal Netherlands Academy of Arts and Sciences (KNAW), together with the Association of Universities in the Netherlands and the National Research Council (NWO) issued a Memorandum of Scientific Integrity which all abide by. A National Committee on Scientific Integrity, which provides an advisory service to universities and the institutes of NWO and KNAW and has oversight of investigations, being able to require an institute to reinvestigate.

**Portugal**

The Portuguese Science and Technology Foundation, as the major agency for public funding and evaluation of R&D activities in Portugal, has clear rules against fraud and misconduct and utilises peer evaluation to assess individual grants, projects and institutions. Policy measures taken to foster research integrity in Portugal have been associated with strengthening scientific institutions and fostering their internationalization. The FCT (Science and Technology Foundation - Fundação para a Ciência e a Tecnologia) have established Associate Laboratories with consortia of research centres through long-term contracts.

**Sweden**

The Swedish Research Council´s working group on misconduct in research investigates suspected irregularities in research at the request of universities and colleges. The judgment is limited to scientific issues only and it does not rule on other areas of misconduct, which remains the role of the University or Institute. .

**UK**

The UK has set up the UK Panel for Research Integrity in Health and Biomedical Sciences. The Panel has an advisory role providing advice and guidance in the investigation of allegations in UK universities and institutions. It also provides advice and guidance to those raining concerns about the conduct of research. Although it does not have investigatory powers it can maintain oversight of investigations by agreement.

Table 1 Summary of National systems for the investigation of Misconduct in research

| **Country** | **National Office** | **Type of role** | **Limitations** | **Linkage to research funding** |
|---|---|---|---|---|
| Denmark | Committees on Scientific Dishonesty (DCSDs) | Investigatory | All public sector institutes and universities and academic staff | National legal jurisdiction |
| France | No standing National office (Ad-hoc arrangements through INSERM and COMETS | Advisory and investigatory | Investigatory in cases of public funding | State control of institutions |
| Finland | Finnish National Research Ethics Board | Advisory and appeals | Universities voluntary | Voluntary sign up |
| Germany | DFG Ombudsman service<br>DAAD role? | Advisory and investigatory | Investigatory in DFG funding | State funding conditional upon accepting |
| Netherlands | National Committee on Scientific Integrity | Advisory and oversight of investigations | All Universities and Institutes of NWO and KNAW voluntary | Agreement to work with the NCSI |
| Portugal | No standing National office | N/A | N/A | N/A |
| Sweden | Swedish Research Council´s working group on misconduct in research | Advisory and investigatory on scientific issues | Universities voluntary | Agreement to work with the SRC |
| UK | UK Panel for Research Integrity in Health and Biomedical Sciences | Advisory | Advisory | No current linkage to funding |

National independent organisations and academies with a commitment to the promotion of standards in research, particularly in scientific arenas such as European Federation of National Academies of Sciences and Humanities

Alliance (ALLEA) and other international research organisations, such as the European Molecular Biology Organization (EMBO), might take part in the dialogue toward the promotion of integrity in research. The process might also engage with the professional regulatory bodies of member states, where appropriate.

**II d) Links to other Commission activities**

The Bologna Declaration recognised the central role universities played in developing European cultural dimensions and in particular promoting the concept of a Europe of Knowledge. The Bologna principles include statements on the promotion of European cooperation in quality assurance and the development of comparable criteria and methodologies. It recognises also that research is a component of the education process.

The Lisbon Council objective is for the European Community, and the European Research Area, to become the most competitive and dynamic knowledge economy in the world by 2010. These aims will be aided by demonstrating that the European Research Area operates to the highest standards of integrity. Promoting the integrity of research which takes place in European universities and institutes should be a fundamental component of the process of strengthening the European research education base.

This process will strengthen the competitiveness of European universities through the guarantee of quality and integrity of the data and outputs generated. Europe is facing considerable competitive pressures from the developing educational and research giants of Asia, China and India. The strength of European research lies in high standards of integrity and rigour, and in the well-established mechanisms and principles that go to the core of academic activity. European research should capitalise on these strengths. A mechanism of quality standards might be adopted to indicate that an institute supports the Commissions ideals. The European Commission might endorse such standards and promote *European Research Integrity.*

This would also enable Europe to provide world leadership in standards for integrity in research and promote European institutes as centres which can lead international programmes and take on commercial research contracts to exacting standards.

Mobility of researchers will be assisted through the adoption of universal standards for integrity in research, with researchers across the European Research Area all operating to the same basic standards and having a common expectation of leadership and for reporting concerns. The promotion of research integrity should facilitate discussion of harmonisation in research leadership and management issues and professional development across member states, which should have a positive impact on mobility.

The rationale should also guide the principles of the European Research Council (ERC).

**II e) The Role of the Research Host (institutes/universities)**

There is considerable diversity amongst member states with respect to the agency responsible to promote integrity in research and for the investigation of misconduct in research. In many member states this is the institutions/employers role. Some member states have national offices with responsibilities to investigate allegations. Other states have national offices with responsibility for the funding arising from a particular government department or agency. Other member states have national advisory bodies. There are member states without national bodies for research integrity. In most member states the institute or employer has responsibility to investigate and apply sanctions to those employees against whom allegations of misconduct or concerns about behaviour are upheld. Employer sanctions are typically those of the disciplinary procedure. In most member states institutes/universities (employers), are answerable to some grant awarding bodies and in other respects self-regulate. In many respects there are relatively few mechanisms to address corporate, condoned or concealed misconduct within institutes/universities. Most national bodies with responsibility for research integrity work with institutes/universities through cooperation and are not regulatory and have little influence in terms of sanctions to apply. National funding bodies liaise with institutes/universities and exercise varying degrees of involvement in and responsibility for investigations. They can impose sanctions on institutes/universities (typically for non-compliance with standards) and on individuals (for misconduct).
The Commission might promote discussion of standards and codes used by Institutions with a view to promoting best practice and harmonising requirements for funders and any national bodies involved in promoting research.

**II f) Misconduct in Research**

Misconduct in Research takes many forms and damages the whole research community, is a misuse of public funds, and undermines the trust of the public and decision makers in research results as a basis for policy. Research has a very prominent profile and advances through research are often central to economic competitiveness, health, national security, and environmental protection.

Member states are strongly motivated and determined to eliminate misconduct in research in their national programmes and to cooperate with international agencies and bodies to ensure the highest possible integrity in research.

The European Commission as an international body sponsoring a programme of research of €50.521 billion (FP7 – 2007-2013) (6) has a responsibility to ensure that the:

- Research funds it manages on behalf of member states is conducted to the highest standards of integrity
- Commission sets high standards and principles which members states can share and emulate.

Misconduct in research is not, as is sometimes said, a victimless crime. The belief that, through repetition by other researchers, falsified or incomplete data will be revealed may be misplaced. Repeat studies may not be conducted and may not have the power to overturn published data based on manipulated or fraudulent practice.
In reality misconduct in research has many victims, including:

- Patients treated in or as a result of fraudulent clinical trials
- The public, whose faith in research of all types is undermined by misconduct
- The decision-maker, with doubts whether the data before them can be relied upon
- The tax-payer or company whose money is wasted
- The reputation of research diminished in the opinion of all
- The research record contaminated with fraudulent data which may be difficult to eradicate.

Research has suggested that misconduct in research may occur at level of between 0.1 to 0.3%, (2) which is not rare and may be increasing, although there is little hard evidence for this figure, and it might reflect a greater willingness to report its occurrence. Although this rate of occurrence might appear small it is considerable impact in national, European and global terms. Misconduct occurs at between 1:1000 to 1:333, which by most definitions would not be considered rare. The European workforce of (EU-25) 1.2 million Full Time Equivalents (2004) (7) then at the lower level or 0.1% of researchers in Europe involved in misconduct this could mean 1200 researchers with a track record of misconduct across the EU25 states. This is not rare, but a level of occurrence which would require action in most circumstances.

**II g) Research Integrity and Misconduct in Research**

Misconduct in research is not new. It comes in many forms, is pernicious and invariably destructive. Definitions of the main forms of misconduct usually feature: falsification, fabrication and plagiarism, with a range of other forms of misconduct often summarised under the title of questionable research practice.

Plagiarism; the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work, is a common form of misconduct in research.

Example - Galileo Galilei reportedly claimed the work of others to be his own in the design of telescopes and the discovery of spots on the surface of the sun.

Falsification: manipulation of research data and processes or omitting critical data or results

Example – It has been suggested that Gregor Mendel, the Augustinian priest and scientist often referred to as the "father of modern genetics", manipulated his data to give ratios with less variation than he might have observed. The prominent statistician Fisher, analyzed Mendel's data and found the ratio in the F1 (first filial) generation to be implausibly close to the exact ratio of 3 to 1. It is perhaps hard to accuse Mendel of misconduct, as it is possible to

reproduce his experiments and demonstrate the accuracy of his hypothesis. It may be more appropriate to term this as an example of confirmation bias.

Fabrication: the act of intentionally falsifying research results and recording and reporting them in a journal article, in some jurisdictions, fabrication may be illegal.

Example – A more recent case; Jon Subdø, consultant oncologist and medical researcher at The Radium Hospital in Oslo published an article in the Lancet, which suggested that non-COX2-NSAIDs, like ibuprofen, reduced the risk of oral cancer in smokers. However, it turned out that the whole patient material was fictional with 250 of the invented patients having had the same birthday.

There is a wide range of other forms of misconduct in research, which are often summarised as Questionable Research Practice (2). It has been suggested that QRP might be considered as "less serious" but as QRP has a higher frequency (8) the impact on the research record might be of greater significance.

The Commission may choose to adopt a zero-tolerance of misconduct in research and require evidence that all those in receipt of public funds through Commission Research programmes are committed to adherence to national codes of practice for research and such international codes as might apply.

## III Issues and Potential Way Forward

### III a) Codes of Practice for Research

The Commission may wish to consider work to establish the principles that recipients of Commission funding should abide by. Minimal expectations would be the national standards in place in member states and recipient countries. The Commission may wish to specify some basic principles for those countries that do not have standards in place. The Commission may wish to work with member states to review the standards in place in member states and other states participating in Commission programmes.

The Commission could raise its profile in promoting integrity in research. It could build on existing work (European Charter for Researchers) to ensure that the issue of integrity features in all the Commission procedures including;

- the development of policy for research and research education
- the development of the research programme priorities
- the review of funding applications
- review of reports and outputs.

The Commission might take a leading role in the development of standards across Europe and bring together the lead offices in member states to promote debate of:

- the definitions of misconduct in research
- principles around the conduct of research
- standards for the conduct of research and for the investigation of misconduct
- the options for sharing information on case outcomes and those subject to sanctions
- the issues that arise in trans-national research projects

This would recognise that adoption of standards by universities and institutes is voluntary; as they are independent bodies the Commission may make recommendations and promote the adoption, development and harmonisation of standards, as a funding body it can set minimum standards for eligibility.

Such a Code of Practice for Research and other standards for the effective conduct and management of research should set standards for leadership and management of research. Standards for effective management might make reference to maximum student and researcher numbers under the management of a research leader. Loss of contact with a supervisor is a frequent factor in poor performance and misconduct. It could also make specific mention of minimum standards for those considered to be in positions susceptible to pressure (such as on commercially

sponsored projects?). It could also consider some more specific markers for the approach to mentoring (what might be expected – this might have to be a national annex).

In developing the Code it should be clear which components are the responsibilities of the institution and which are the responsibility of the individual.

**III b) Codes of Practice and Trans-national Research**

Variations in codes and standards in countries engaged in International research projects raise a wide range of issues including:

- Different standards and definitions - what might constitute misconduct in one country might be acceptable in another
- Primacy in investigations – which country or organisation should take the lead
- Role of the funding body
- Role of the National body
- Potential for a trans-national (European) body holding misconduct data

The might be potential for the Commission to take a leading role in the exploration of trans-national issues and the harmonisation of standards across Europe through the coordination of offices in member states as in III a above.

**III c) Standards and Harmonisation**

At the same time, the Commission may wish to assist the work of bodies responsible for research standards, regulatory bodies and member states to investigate where it might be possible to identify common standards in research across member states. There are examples of international standards in the field of research including the Helsinki Declaration (9), and update, and the EC directive on the management of clinical trials in member states (2001/20/EC) (10). Such an approach might accommodate local cultural codes and traditions (which might equate to greater tolerance or flexibility), where these do not compromise the principles in the standards.

Standardisation across member states, and beyond, would prevent practices generally accepted as misconduct in the international arena having no consequences for a researcher within a member state. Discussions on harmonisation might also provide the mechanism for such anomalies to be addressed.

By the same token the standards applied in the European Research Area should be promoted in developing countries, particularly those participating in Commission programmes. There might be a requirement for developing countries to provide certain assurances to the Commission. The Commission might take a more proactive role and promote European input into the development of Global *norms and standards*, engaging and sponsoring (with other interested bodies) in a global debate, facilitating input from all research active countries, to explore the evolution of standards in research.

**III d) Minimum Standards of Eligibility to Receive Commission Funding**

The Commission might consider making it a condition of involvement in Commission programmes that recipient organisations commit to certain standards of integrity in research. This could include the conduct of the institution, the systems it applies to the management of research and the standards of leadership and integrity it expects of its researchers, including students. The relationship between institute and student in the member states is often different to that of its employees. *There is scope for development of codes and principles on the work of students that the Commission might stimulate*.

This should apply to all those wishing to take part in Commission-sponsored or Commission-endorsed research programmes. Private sector partners would be required to commit to the same standards. The dividing line between sharing data and the need to protect intellectual property arising from Commission research programmes would need to be addressed in agreements between parties. This might be an area for wider discussion across member states.

In promoting a structured approach to professional development (as part of an institutional quality assurance mechanism), the Commission should ensure that this includes reinforcement of national and international standards in the conduct of research featured throughout.

Further work should be considered to review options for the harmonisation of certain legal variations and obstacles operating in different member states preventing closer cooperation in the field of research.

**III e) Involvement of Member States**

The Commission might wish to promote the proposal that all member states adopt a Code of Practice for Research (where this is not already in place). This should include the adoption of:

- a set of standards and principles for research (including reference to those established principles – this could be a list)
- a robust programme of integrated education to emphasise responsibility and leadership in the promotion of good conduct and prevention of misconduct reinforced through continuing professional development
- a national mechanism for investigation of allegations of misconduct
- formal adoption of the national standards by institutes and universities
- involvement of appropriate professional bodies
- regular review and monitoring of progress in the field (could include data on the incidence of misconduct).

Failure of research institutions to adopt the national standards (within a certain period of time), should involve those institutions being subject to sanctions. The Commission should investigate options for the application of sanctions at the institutional, company and individual level. Sanctions many include exclusion from receipt of new funding for a period of time or restriction in the type of award for which applications can be made.

Problems may arise for large multi-centre projects should one institute be under sanctions which might prevent a worthwhile project proceeding. There might need to be contingency actions which enable the Commission to fund a specific project operating under a monitoring regime in a sanctioned organisation?

The introduction of such sanctions would require agreement with all members states for the adoption of standards and systems. Requirements may be phased in to member states, reflecting their ability to achieve compliance with the systems.

The Commission may choose to recommend that the management of decision-making and advisory committees and procedures abide by the principles and standards of research integrity and the Code of Practice. In so doing and in setting an example for the European Research Area the Commission might promote the adoption of such standards to the government committees and systems of member states. The UK has developed the Universal Ethical Code for Scientists which is promoted across government laboratories.

**III f) Transparency and Access**

The Commission should endorse transparency in research. The aim should be to make the processes of research, including the data collection and analysis, accessible to all. While the process of peer-review provides rigorous scrutiny of research in manuscript and application, transparency in research should provide readers access to:

- the complete data, its analysis and explanations
- details of the methodology and an explanation.

The goal is to make research accessible, understandable (to the non-expert), and facilitate replication.

Funders might increase the pressure for research data to be made available through open access. Journal editors could be invited to work within a set of research standards and principles, and move to serve the research record rather than secure high-profile publications in their journal.

**III g) Security issues**

Codes of Practice for Research should make reference to the Biological and Toxic Weapons Convention requirements and other aspects of bio-security and mechanisms to protect dual-use materials, equipment and knowledge.

**III h) Intellectual Property**

Codes of Practice for Research should also recognise the growing need to protect intellectual property from plagiarism, theft, copying and fraudulent use. This could present an interesting area for discussion. There could be linkage to transparency and the freedom to access data. In addition declaration of interests in an area of research which might conflict with other roles in this and other areas of activity could be explored.

**III i) Peer Review**

Although peer-review has a fundamental role to play in quality of research, the identification of misconduct in research is not the goal of the peer review process as it is currently practised during assessment of applications for publication or funding. Reviewers' primary role is not specifically to look for the fraudulent or the fabricated. It is therefore possible for reviewers to be misled by authors. Electronic systems exist that can aid the peer review process to identify misconduct (particularly plagiarism but also implausible raw data). Those who use peer review, such as research funders and journal editors, should reconsider the role of peer review in the detection of forms of misconduct. This could include an overt standard check for misconduct as part of the review process for funding or publication. The Commission could stimulate discussion and research in this field. Moreover the debate on the role of editors in publishing and oversight of the research might be encouraged.

**III j) Measuring the Incidence of Misconduct in Research**

As a funder of research the Commission should implement a requirement that the Commission Offices are informed of all projects where there is a *prima facie* case of misconduct. This should be introduced prospectively on all grants awarded after a certain date. The Commission should maintain information on those institutes where misconduct has occurred and on those individuals found to have committed misconduct. The Commission should make this information available to the Research Integrity Offices of member states and consider how this information is made available to the European public.

The Commission may also consider a retrospective survey of grants, enquiring of grant-holding organisations for details of any misconduct reports. This could include requests for details of allegations made, whether upheld, nature of any sanctions applied, issues faced in terms of international dimensions and impact on the project. A contemporary survey of recently completed awards could be conducted to explore whether project coordinators have received notice of concerns that they have not been able to act upon.

**III k) Prevention**

Emphasis should be placed on prevention through mechanisms to promote best practice and leadership. This should be reinforced through education and continuing professional development and an audit and inspection programme. The research culture should accept that rigour, inspection and review are part of quality assurance and assist credibility rather than challenging it. The aim would be to lead by example, placing emphasis and responsibility for promoting research integrity and adherence to its principles and standards on research leaders and the institute/university heads. A programme of research and debate could be encouraged to assess the best approaches in education and training to encourage integrity in research and prevent/eliminate misconduct.

**III l) Sanctions**

The Commission might consider whether it is appropriate to apply sanctions. Sanctions could be applied to those individuals, organisations or nations that do not have meet standards set for receipt of funding from the Commission. Sanctions might take the form of restrictions on receipt of funding or participation in programmes or

making participation in programmes conditional upon enhanced monitoring regimes. The standards might apply for an individual could be the training levels (skills and experience) necessary to conduct a proposed piece of research. In the case organisation the requirement could be for a commitment to defined standards for research integrity, including:

- a mechanisms for the investigation of allegations of misconduct in research,
- a systems to promote a code of practice for research including regular formal training in agreed and or national standards
- a commitment to regular audit of research projects

At a national level there might be the expectation of a national commitment to promote certain standards for the management of research and the handling of allegations of misconduct in research.

The Commission might expect universities and other research organisations not to support applications for Commission funding from individuals proven to that have committed misconduct in research. The Commission might promote discussion of approaches that member states might adopt to promote good conduct in research and maintain public and confidence in research evidence.

**III m) Protection Against False Allegations**

Research reputations are very vulnerable. Accusations and the investigations of evidence that are not soundly based damage the standing and reputation of those involved to a considerable extent, particularly if they are in the media spotlight. The mechanism to investigate allegations and concerns needs to be sufficiently robust, objective, fair and sensitive to discern the *prima facie* from the mistaken, frivolous or malicious. Such a mechanism need to protect the confidential information of all the parties involved. The investigation system would be a component of the Code of Practice for Research. The Research Integrity Offices should share best practice of such systems through networking which should include the approaches used to protect against and handle false allegations, and deal with those who make wholly frivolous, malicious and vexatious allegations.

**III n) Potential Initiatives**

In supporting the harmonisation of principles, standards and systems for the promotion of good conduct in research, the Commission might consider liaison with national research integrity offices, which could extend to a network of European Research Integrity Offices (EuRIOs) similar to the Forum of NECs (link). This might extend to the Commission convening a conference or meeting of RI Offices in member states to address some of the more challenging issues, harmonisation of definitions, principles and systems, sharing best practice and consideration of some of the legal issues. A workshop on peer review might also be productive. In addition, the Commission might consider how to promote best practice in the developing world.

The Commission might review the potential to strengthen the audit of research performance of projects it funds. This could include individual interviews with those conducting the research, not just those leading the project. The proposal is to strengthen the research audit to the rigour of the fiscal audit.

The Commission might consider sponsoring a European Research into Research Integrity programme to address some of the issues raised above (including peer review, Conflict of Interest, transparency sanctions etc.), and others which might arise through the proposed workshops. The research programme could be run in conjunction with the national offices of member states. As much of the work would be based on survey or secondary data, the funding requirement would be low and it would facilitate cooperation and comparison of systems across member states and with other partners in Commission projects.

A further area for research could be into a study of the best approach for the support of education and training towards the full integration of research integrity within professional development and training programmes (graduate to retirement) and the appropriate use of research audit.

**IV Recommendations**

1) The Commission might consider initiatives to promote the widespread adoption of standards and definitions by eligible institutions in member states;
2) The Commission might consider making the adoption of agreed national standards a condition for eligibility to receive commission funding ;
3) The Commission might consider promote the discussion of integrity in research at the level of public policy.

**V References**


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**VI National Body Websites**

| **Country** | **Websites** |
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| Germany | http://www.dfg.de/en/dfg_profile/structure/statutory_bodies/ombudsman/index.html |
| Netherlands | http://www.knaw.nl/english/index.html |
| Portugal | http://www.fct.mctes.pt/ |
| Sweden | http://www.vr.se/mainmenu/researchethics/organisation/theswedishresearchcouncilexpertgrouponresearchmisconduct.4.ad4587110fa0c3e8ca80003546.html |
| UK | http://www.ukrio.org.uk/home/index.cfm |

**VII List of experts**

| **Country** | **Names** |
|---|---|
| Bulgaria | Viara Barakova, Milray |
| France | Michelle Hadchouel, INSERM |
| Netherlands | Dirk de Hen, Secretary, Landelijk Orgaan Wetenschappelijke Integriteit (LOWI - National Council on Research Integrity) |
| Portugal | Prof. Doutor João Lobo Antunes, President Portuguese National Council for Science, Technology and Innovation |
| UK | Prof. Michael Farthing, Pro-Vice Chancellor for Medicine, University of London |
| UK | Dr Andy Stainthorpe (Rapporteur), Head of the Research Integrity Office |