National systems for handling cases of research misconduct

Report based on a survey conducted in the fall of 2012 with 15 respondents from various countries

Executive summary

The Danish Agency for Science, Technology and Innovation conducted a quick survey among 15 nations in the fall of 2012 to gain an overview of different national systems for handling cases on research misconduct.

An analysis of the results in the survey can be found in this report. Annex A presents a schematic overview of participants' answers to selected topics.

The following bullets summarize the outcome of the analysis:

- Central for the definition of research misconduct is fabrication of data, falsification of data and plagiarism.
- Documents concerning research misconduct in various nations range from national or institutional guidelines to legally binding documents.
- > 53 % of the countries participating in the survey have legislation concerning research misconduct in place.
- Research institutions, i.e. universities, other research and higher education institutions, are involved in handling cases on research misconduct in all countries participating in the survey except for Luxembourg.
- All countries participating in the survey has some form of research misconduct body outside individual research institutions except for Ireland and Belgium/Flanders.
- Research misconduct bodies outside individual research institutions have different roles ranging from solely advisory to supervisory to being able to make decisions/recommendations in cases of research misconduct.
- The possibility for appeal in cases of research misconduct varies among the countries participating in the survey:
 - Appeal at the institutional level 33 %
 - Appeal to an external body 40 %
 - No formal appeal system 27 %
- In general the possibility for imposing sanctions in cases of research misconduct rests with the research institution or funding agency in question.
- Decisions in cases of research misconduct are generally not made public in approximately half of the countries participating in the survey.
- > 54 % of the countries participating in the survey have some form of 'whistle blower' protection.
- There was general consensus among the participants in the survey that research institutions should be involved in handling cases of research misconduct, as they have the expertise, the motivation and the initial responsibility for assuring the quality of the research carried out. In addition the participants put emphasis on the advantage of also having a permanent independent body for handling cases of research misconduct, as this would ensure the presence of an un-biased authority ready to act.

Table of contents

1. Background
2. Definition of research misconduct
2.1 The sources for national definitions of research misconduct
3. National legal instruments regarding research misconduct
3.1 Countries with legislation on research misconduct
3.2 Countries without legislation on research misconduct
4. Institutions involved in handling cases on research misconduct
4.1 Committees and similar bodies involved in handling cases on research misconduct
5. Procedure for handling cases on research misconduct
5.1 The possibility for taking up cases of research misconduct
5.2 The hearing process
5.3 The possibility for appeal
5.4 The possibility for sanctions in conclusions of research misconduct
6. Transparency and confidentiality in cases on research misconduct
6.1 'Whistle blower' protection
7. Positive elements and challenges in systems for handling cases on research misconduct
Annex A - Schematic overview of participants' answers to selected topics
Annex B - Questionnaire regarding national mechanisms for handling cases on research misconduct23

1. Background

Over the course of the past few decades there have been a number of comprehensive and serious cases of research misconduct in various countries. As a result politicians, research communities and funding agencies have undertaken different initiatives to try to promote the honesty, accountability and reliability of research in all subject areas. As part of these initiatives there has been a focus on the establishment and operation of effective mechanisms/systems for handling cases of research misconduct.

To gain an overview of individual countries' systems for handling cases of research misconduct, the Danish Agency for Science, Technology and Innovation conducted a quick survey among nations in the fall of 2012.

The purpose of the survey was to try and map selected national systems for handling cases of research misconduct in order to determine – and learn from – the composition of different national systems.

The survey was carried out by sending a simple questionnaire prepared by the Danish Agency for Science, Technology and Innovation (see Annex B) to colleagues working with research misconduct in various countries.

It has to be stated clearly that the report in no way represents a full overview of systems for handling cases of research misconduct. The questionnaire was sent to colleagues in (only) 21 countries using the European Network of Research Integrity Offices (Enrio) as a starting point. In addition, the questionnaire was sent to colleagues in USA, Canada, Australia and Singapore. The Danish Agency for Technology, Science and Innovation received responses from 15 countries including Denmark:

Figure 1 – Overview of participants in the survey

Participant's country	Participant's institution(s)
Austria	Austrian Agency for Research Integrity
Australia	Macquarie University
Belgium/Flanders	KU Leuven (University) and Research Foundation Flanders
Canada	Secretariat on Responsible Conduct of Research
Croatia	Agency for Research and Higher Education
Denmark	Danish Agency for Science, Technology and Innovation
Ireland	Health Research Board
Luxembourg	National Research Fund
Norway	The National Commission for the Investigation of Research Misconduct
Poland	National Committee for the Cooperation with the European Network of Integrity Offices, Polish Academy of Sciences

Switzerland	Swiss Academies of Arts and Sciences
Sweden	Department of Education and Research
The Netherlands	National Board for Research Integrity
The United Kingdom	UK Research Integrity Office
The United States of America	University of Michigan and the National Science Foundation, Office of the Inspector General

The report is solely based on the responses from the participating individuals. As a consequence, the report may not include all details and information on all aspects of research misconduct systems in each country.

The report presents in general terms the results of the survey based on an analysis of the responses to the questionnaire.

2. Definition of research misconduct

While there is no officially or universally accepted definition of the term research misconduct, there is some international consensus on what the basic elements of research misconduct are.

Central for the definitions of research misconduct provided in the survey for this report is FFP, meaning:

- Fabrication of data
- Falsification of data
- Plagiarism

Even though the wording of each national definition does not contain literal reference to FFP, the notion of this concept can be found in almost all the national definitions.

In addition some national definitions contain provisions on behavior that constitutes research misconduct outside the scope of FFP. Such behavior includes, but is not limited to:

- · Questionable research, data and publication related practice
- Peer-review or leadership abuse
- Misappropriation of and false information on authorship
- Conflict of interest
- Obstruction of the research of others
- Concealment or facilitation of research misconduct of others

Variations and differences between national definitions of research misconduct

The composition and form of each national definition can vary quite a lot from one country to another.

For example the Belgian/Flemish definition is partly based on a 'moral' document describing guidelines for researchers on how they should behave in order to conduct responsible research, whereas in many other countries (like Denmark) the definition of research misconduct has a more 'legal' form describing what kind of behavior is unacceptable as a researcher.

Another area in which the national definitions of research misconduct differ is the level of detail in the various definitions. For instance the Austrian definition is quite detailed when listing behavior that constitutes research misconduct (including provisions on joint responsibility), whereas the US definition is limited to FFP.

Austria, Sweden, Switzerland, Norway, Denmark and to some extent Luxembourg include a subjective requirement in their definition, meaning that the perpetrator of the misconduct must have committed this intentionally, grossly negligent or negligent.

In addition some national definitions exclude honest errors and scientific discussions from behavior which constitutes research misconduct.

2.1 The sources for national definitions of research misconduct

The legal basis of research misconduct differs substantially across the countries participating in the survey, and accordingly the sources for the national definitions of research misconduct range from legally binding documents to national/international reports and guidelines.

Figure 2 gives an overview of the sources for the different countries definitions of research misconduct.

Figure 2 - sources for national definitions of research misconduct

Country	Source	Type of source
Australia	The Australian Code for the Responsible Conduct of Research	National guidelines/ joint declaration (governmental order)
Austria	Rules of Procedure of the Austrian Commission for Research Integrity	Agency/commission guidelines (not legally binding)
Belgium/Flanders	Code of Ethics for Scientific Research in Belgium and the ESF Code of Conduct	National and international guidelines (not legally binding)
Canada	The Tri-Agency Framework: Responsible Conduct of Research	National/agency guidelines (not legally binding)
Croatia	The Ethics Code of the Committee on Ethics in Science and Higher Education	National guidelines (not legally binding)
Denmark	Consolidated Act on the Research Advisory System and Executive Order on the Danish Committees on Scientific Dishonesty	Legally binding documents
Ireland	Agreed policy approach drafted by the National Research Integrity Committee (under creation)	National guidelines (not legally binding)
Luxembourg	Research Integrity in the Framework of FNR Funding/FNR Procedure in Case of Alleged Scientific Misconduct Committed by Researchers Applying for or Benefitting from FNR Funding	Agency guidelines (not legally binding)
Norway	The Act on Ethics and Integrity in Research	Legally binding document
Poland	Law on Higher Education	Legally binding document
Sweden	CODEX website operated by the Swedish Research Council	National reports/ guidelines (not legally binding)
Switzerland	Swiss Academy of Arts and Sciences, Integrity in Scientific Research, Principles and Procedures and Regulation of the National Research Council on the treatment of scientific misconduct by applicants and grantees	National reports/guidelines (not legally binding)

The Netherlands	LOWI Regulation	Agency guidelines (not legally binding)
The United Kingdom	UKRIO Code of Practice for Research and the Concordat to Support Research Integrity	National guidelines/joint declaration (not legally binding)
The United States of America	The Federal Policy on Research Misconduct	Legally binding document

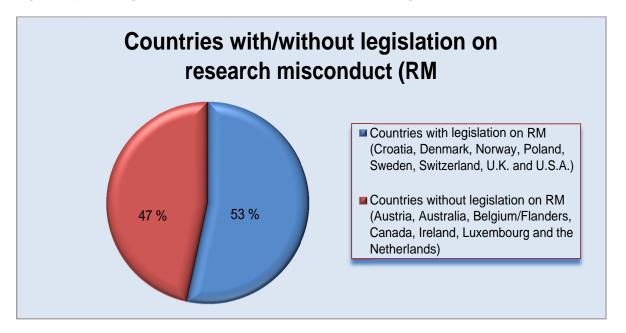
3. National legal instruments regarding research misconduct

As previously mentioned the legal basis and national legislation on research misconduct varies across the countries participating in the survey.

Some countries have no legislation on research misconduct; others have legislation in some areas of research and some have legislation covering research misconduct in all fields of research.

In addition universities, other research institutions and funding agencies in most countries may have their own institutional set of rules on research misconduct committed at the institutional level.

Figure 3 - percentage-wise overview of countries with/without legislation on research misconduct



3.1 Countries with legislation on research misconduct

Poland, Norway, USA and Denmark have legislation aimed at research misconduct in general identifying the behavior that constitutes research misconduct across all fields of research. These four countries also have legislation on the establishment of national committees for handling cases of research misconduct.

Croatia has legislation aimed at the establishment of the Committee on Ethics in Science and Higher Education. The Croatian legislation also requires that research institutions have an ethics code.

Sweden has legislation according to which universities are obliged to perform investigations if they are informed of possible research misconduct, and legislation stating that an expert group on research misconduct shall exist at the Central Ethical Review Board.

Switzerland has legislation stating that research funding institutions must ensure that research funded by them is carried out according to rules of good scientific practice.

The UK has a wide variety of legislation aimed at proper conduct in different fields of research, such as the proper use of animals in research. The legal framework for addressing non-regulated aspects of research is UK employment law, or the statutes and ordinances of the relevant institution.

3.2 Countries without legislation on research misconduct

The rules on research misconduct in Ireland (expected to be in effect in 2013) and Belgium/Flanders are based on a national initiative with participation of research institutions in the countries resulting in a national code of conduct.

In Luxembourg the rules on research misconduct lie with the national funding agency and a similar structure is found in Canada and Australia where national funding agencies have a common agency policy or code of conduct on responsible research.

Research misconduct rules in Austria and the Netherlands are established in the context of a central body on research misconduct set up in cooperation between research institutions, institutional organizations and funding agencies.

4. Institutions involved in handling cases on research misconduct

There are several institutions involved with handling cases of research misconduct in the various countries participating in the survey.

Figure 4 presents an overview of the relevant institutions in each country. In this regard the term research institutions will be used to cover universities, other research institutions and higher education institutions.

Figure 4 - institutions involved in handling cases on research misconduct.

Country	Institution(s)
Austria	Research institutions and the Commission on Research Integrity at the Austrian Agency for Research Integrity
Australia	Research institutions and the Australian Research Integrity Committee
Belgium/Flanders	Research institutions and the Flemish Commission of Scientific Integrity (being created)
Canada	Research institutions and the Panel on Responsible Conduct of Research
Croatia	Research institutions and the Committee on Ethics in Science and Higher Education
Denmark	Research institutions and the Danish Committees on Scientific Dishonesty
Ireland	Research institutions
Luxembourg	The Commission on Research Integrity at the National Research Fund
Norway	Research institutions and the National Commission for the Investigation of Research Misconduct
Poland	Research institutions and the Committee for Ethics in Science
Switzerland	Research institutions, the National Science Foundation and the Committee "Scientific Integrity" at the Swizz Academies of Arts and Sciences
Sweden	Research institutions and the Expert Committee on Research Misconduct at the Central Ethics Review Board
The Netherlands	Research institutions and the National Board for Research Integrity
The United Kingdom	Research institutions, private sector/commercial organizations, regulatory bodies such as the General Medical Council and the UK Research Integrity Office
The United States of America	Research institutions and federal funding agencies such as the National Science Foundation

Research institutions are involved in the handling of cases on research misconduct in all countries participating in the survey except for Luxembourg.

Universities and research institutions can only handle cases involving the relevant institution in some way (i.e. researcher is an employee/student at the university; research is carried out at the university; etc.)

The role of research institutions in different countries

In Ireland the primary and sole responsibility for handling cases of research misconduct is placed at the relevant research institution. The same structure applies in the UK if there is no regulatory body in the field of research in question.

In Croatia, Austria, Belgium/Flanders, Poland, Switzerland and Denmark research institutions may handle cases on research misconduct. In addition these countries have other bodies (in Belgium/Flanders the body is under creation) who can handle cases of research misconduct, e.g. national bodies (Croatia, Poland and Denmark), independent organizations (Austria) and bodies of funding agencies/academic organizations (Switzerland).

In Sweden the decision-making authority in cases of research misconduct lies with the research institutions. The Expert Committee on Research Misconduct in Sweden can make non-binding statements in cases of research misconduct on the request of universities. Similar to the Swedish system the initial responsibility for handling cases of research misconduct is placed at the research institutions in the Netherlands. The national Board for Research Integrity in the Netherlands can give advisory opinions on the preliminary decisions of the research institutions, and subsequently the research institutions make the final decision.

In Norway the primary responsibility for handling cases of research misconduct is placed at the research institutions by law. Research institutions may seek advice or refer the handling of a case to the National Commission for Investigating Research Misconduct. The national commission may at any time and at any stage process a case by its own initiative.

In USA, Australia and Canada the initial responsibility for handling cases of research misconduct is placed at the research institutions. In each country the national funding agencies have set up bodies with a mandate to review the processing of cases on research misconduct at the institutional level.

4.1 Committees and similar bodies involved in handling cases on research misconduct

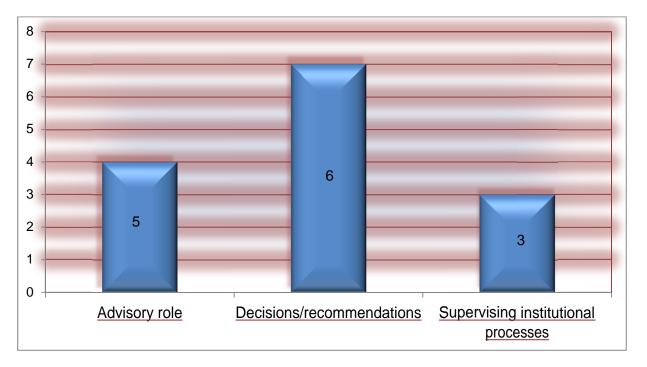
As described above and shown in figure 4 there are several committees or similar bodies involved in handling cases of research misconduct in the countries participating in the survey. The term committees will be used here to cover such bodies.

Common for the committees is that they are not part of an individual research institution.

The roles and mandates of the committees range from solely having an advisory role to being able to make decisions in cases of research misconduct to carrying out supervision of institutional processes.

The mandates and roles of the committees are spread as illustrated in figure 5.

Figure 5 - Grouping of the mandates and roles of committees involved in handling cases of research misconduct (internal committees of research institutions are not included. Not all countries/committees are included as information was not available in the survey. A committee may be represented in several categories if it has more than one role/mandate)



There is an almost equal dispersion across the categories of mandates and roles with a small predominance in the decision/recommendation-making category. This demonstrates how the mandates and roles of committees in the countries participating in the survey vary from country to country.

Within the three categories in figure 5 the mandates and roles of the committees may differ. For instance some committees can make binding decisions while others are limited to making non-binding recommendations or decisions.

Variations in the compositions of committees involved in cases of research misconduct

The composition of committees involved in cases of research misconduct differ substantiality in the countries participating in the survey, especially at the institutional level.

However, some general observations can be made (not including committees at the research institution due to the wide variety in these bodies)

Usually the members of a committee are appointed for a limited term, typically ranging from 2-4 years. The members are generally recognized researcher and the membership composition represents different areas of research.

Most committees are permanent and quite a few committees have legal knowledge represented at the committee, typically in the form of a judge.

Some committees have the possibility of including foreign expertise in their committee and the Commission for Research Integrity in Austria consists solely of foreign members.

USA is distinctive in its composition as there is not a traditional committee for handling cases of research misconduct. Instead the Office of the Inspector General at the relevant funding agency is functioning more as an independent division within the agency with the mandate to pursue cases of research misconduct.

5. Procedure for handling cases on research misconduct

Though the procedural steps in cases of research misconduct in the countries participating in the survey have some common features, there are variations between each country's procedures.

In this section focus will be on:

- 1. the possibility for taking up cases;
- 2. the hearing process (written/oral);
- 3. the possibility for appeal; and
- 4. the possibility for sanctions.

The procedure in misconduct cases in USA and Canada

Due to the supervising role of the research misconduct bodies in the US and Canada the procedure for handling cases of research misconduct is distinctive from that of the other countries participating in the survey.

The initial responsibility for investigating cases of research misconduct is placed at the research institutions.

In Canada the research institution provides the Panel on Responsible Conduct of Research with a report on its findings which the panel then reviews.

In the US the research institutions notify the relevant government agency (i.e. the funding body) when an investigation is opened and report the results of the investigation to the agency. When the National Science Foundation receives an allegation of misconduct it will refer the matter to the relevant institution and subsequently review the institution's investigation.

5.1 The possibility for taking up cases of research misconduct

In general, cases of research misconduct are brought before a committee or similar body by private persons or institutions submitting a complaint. The complaint will typically be in written form and some committees handle written allegations only.

In addition, some committees (for instance the Committee on Ethics in Science and Higher Education in Croatia and the Committee for Ethics in Science in Poland) have the possibility of processing cases on their own initiative.

Usually the relevant committee or similar body will conduct a preliminary assessment in order to determine whether the complaint falls within the competence (the mandate or terms of reference) of the committee.

If the committee is competent it will conduct a formal investigation of the case.

5.2 The hearing process

The parties to the case (the accused and/or the complainant) may be invited to provide statements as part of the process (this is the case in Ireland, Austria, Luxembourg, the UK, Norway, the Netherlands and Denmark).

In Denmark and Norway the parties to a case on research misconduct at the national committees are entitled to be assisted by assessors.

The hearing process is different from committee to committee. For instance the Danish Committees on Scientific Dishonesty solely conduct the hearing in writing, whereas the Commission on Research Integrity in Austria has the possibility of conducting oral hearings with the parties involved in the case.

In addition the processing of cases of research misconduct in Norway and Denmark must follow the general legislative rules on administrative decisions taken by public authorities, which has an impact on e.g. the hearing process.

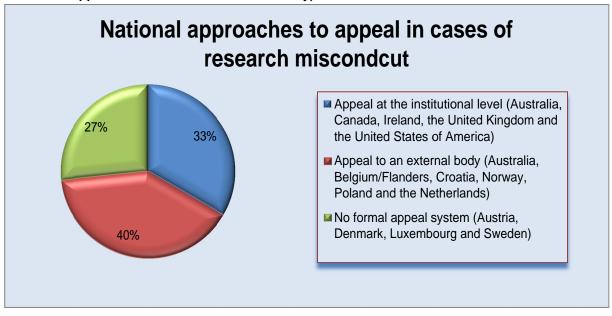
5.3 The possibility for appeal

The national systems for appeal in cases of research misconduct vary among the countries participating in the survey.

In general, there are three national approaches to appeal in cases of research misconduct:

- Appeal at the institutional level through the local mechanisms of the research institution in question
- Appeal to an external body
- No formal appeal system

Figure 6 - Overview of approaches to appeal in cases of research misconduct (Switzerland is not included as data on appeal was not available for the survey)



Further information on national approaches to appeal

In Ireland and the UK, research institutions' decisions in cases of research misconduct can be appealed at the institutional level. A similar approach is followed in Canada; however the decisions of the funding agencies are final. In USA the decision of the Inspector General can be appealed to the relevant agency's director.

In Croatia, Belgium/Flanders, Poland and Australia the decisions of the research institution may be appealed to the national commission or a similar body.

In Norway the National Commission for the Investigation of Research misconduct is not an appeal body for the decisions of the research institutions. The decisions of the national commission may be appealed to the Ministry of Education and Research.

Institutional decisions in the Netherlands can be appealed to the National Ombudsman of the Netherlands.

5.4 The possibility for sanctions in conclusions of research misconduct

At the institutional level research institutions may impose sanctions according to the relevant rules of the institution in question. These sanctions may include:

- Remediation
- Warning/reprimand
- Supervision
- Suspension from research related work
- Retractions
- Disciplinary action (i.e. academic probation, dismissal, etc.)
- Withdrawal of title (only possible in some countries and under certain circumstances)
- Withdrawal of internal funding support

Funding agencies may impose sanctions when informed that a researcher funded by them have committed research misconduct. These sanctions may include:

- Withdrawal of funding
- Supervision attached to future funding
- Prohibition from submitting applications for funding (usually for a limited period)

The national committees or similar bodies' possibilities for sanctioning persons found to have committed research misconduct depend on the mandate of the committee in question.

In general the national committees and the committees based in independent organizations set up by a cooperation of institutions can issue statements with recommendations on what sanctions to impose, which the relevant research institution can choose to follow. The character of these statements may vary

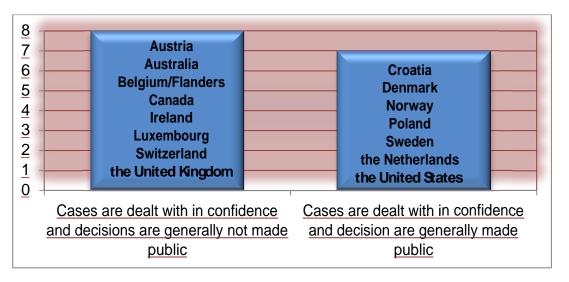
between different committees, e.g. some committees can make binding decision whereas others can only make non-binding advisory recommendations.

6. Transparency and confidentiality in cases on research misconduct

The level of transparency and confidentiality in cases on research misconduct is not identical in the countries participating in the survey, but there are basically two different approaches:

- Cases are dealt with in confidence and decisions are generally not made public
- Cases are dealt with in confidence and decision are generally made public (often in depersonalized form)

Figure 7 - Overview of participating countries' grouping in the two basic approaches



Further elaboration on national approaches to transparency and confidentiality

In Ireland the national policy which is currently being drafted propose the possibility of informing relevant funding agencies of misconduct concerning research funded by them.

In Austria, Belgium/Flanders, the UK and Canada the relevant institution or committee may disclose some information in cases that are severe and/or already are discussed in the public.

In Luxembourg, Switzerland and Australia cases are handled in full confidence and decisions are not made public. The Commission on Research Integrity in Luxembourg presents a short annual report on the commission's cases.

In Croatia, Sweden and Poland decisions are fully published.

In Norway, the Netherlands and Denmark decision are published in depersonalized form. Under administrative law the public may require full access to decisions in Norway and Denmark.

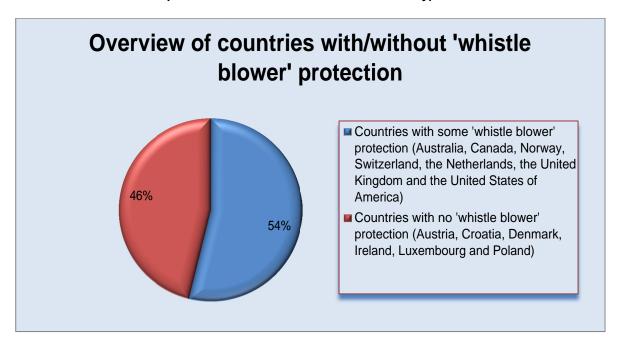
The level of transparency and confidentiality depends on the individual institution/agency in USA.

6.1 'Whistle blower' protection

The term 'whistle blower' refers in general to persons disclosing information on other person's wrongdoing, for instance persons committing research misconduct.

Figure 8 illustrates the spread of protection for 'whistle blowers' among the countries participating in the survey.

Figure 8 - Spread of protection for 'whistle blowers' (Sweden and Belgium/ Flanders are not included as data on 'whistle blower' protection was not available for the survey)



The nature and sources of 'whistle blower' protection in different countries differ across national systems.

In Switzerland the by-law on clinical trial forbids preventing or sanctioning the disclosure of scientific misconduct, and the Swiss Academies of Arts and Sciences views retaliatory measures against 'whistle blowers' as research misconduct in itself.

In the UK the Public Disclosure Act sets out the legal obligations of organizations towards 'whistle blowers'.

In Norway the Working Environment Act grants rights and protection for the 'whistle blower'. The act applies to cases of research misconduct to some extent.

In the Netherlands there is legislation on 'whistle blowing' for public employees and universities in general have institutional regulations on 'whistle blowing'.

In USA there are federal rules on 'whistle blowing' and in addition states and institutions have different policies in this area.

In Australia each state has its own legislation on 'whistle blowing'.

In Canada the Public Servants Disclosure Protection Act protects 'whistle blowers' in the federal public sector. In addition institutions which receive funding from the national funding agencies must have protection of 'whistle blowers' in their research misconduct policy.

Ireland is currently considering proposed 'whistle blowing' protection legislation in the corporate environment. This legislation may have an impact on the research sector when enacted.

7. Positive elements and challenges in systems for handling cases on research misconduct

The participants in the survey were asked to give their opinion on advantages, disadvantages and challenges in their national systems for handling cases on research misconduct.

In this section a summary overview on the positive elements and challenges in systems for handling cases on research misconduct will be given based on the responses in the survey.

In the participants responses emphasis was generally put on the advantage of placing responsibility for handling cases of research misconduct at the institutional level, as many of the participants in the survey believe that the academic world should have the lead in combating research misconduct. The research institutions have the expertise to review research and to assess whether misconduct has been carried out and they should have a community interest in assuring both the integrity and the quality of research.

On the other hand such self-regulation requires that institutional mechanisms are in place to ensure that cases are dealt with in an unbiased manner, and that the institutions are willing to handle cases of research misconduct even if it may harm their reputation. In addition the absence of coordinated national policies might result in differing outcomes in similar cases treated at different institutions.

As a consequence another positive element emphasized in the survey was the advantage of having a permanent independent body for handling cases of research misconduct. The presence of such a body ensures that there is an authority ready to handle cases of misconduct at all time and the independence of the body almost entirely eliminates the risk of bias in the processing of cases. A challenge in this regard is that most independent committees do not have the authority to take binding decisions or sanction research misconduct.

The following more specific challenges where emphasized by some participants in the survey:

- The lack of transparent procedures in cases of research misconduct
- The lack of a formal appeal system
- The lack of protection for 'whistle blowers'
- The prolonged processing of cases (partly due to administrative rules)
- Having expertise at the decision-making level while ensuring no conflict of interest in cases (mostly in small countries with small research communities)

Annex A - Schematic overview of participants' answers to selected topics

Country	Legislation on RM*	National or similar RM body	Special RM body within funding agencies or other organizations	Only RM body at individual institutions	Possibility for appeal	Cases are generally made public	'Whistle blower' protection	
Austria	No	Yes	No	No	No	No	No	
Australia	No	Yes	No	No	Yes	No	Yes	
Belgium/Flanders	No	No	No	Yes	Yes	No	Yes	
Canada	No	No	Yes	No	Yes	No	Yes	
Croatia	Yes	Yes	No	No	Yes	Yes	No	
Denmark	Yes	Yes	No	No	No	Yes	No	
Ireland	No	No	No	Yes	Yes	No	No	
Luxembourg	No	No	Yes	No	No	No	No	
Norway	Yes	Yes	No	No	Yes	Yes	Yes	
Poland	Yes	Yes	No	No	Yes	Yes	No	
Switzerland	Yes	No	Yes	No	Yes	No	Yes	
Sweden	Yes	Yes	No	No	No	Yes	Yes	
The Netherlands	No	Yes	No	No	Yes	Yes	Yes	
The United States of America	Yes	No	Yes	No	Yes	Yes	Yes	
The United Kingdom	Yes	Yes	No	No	Yes	No	Yes	

^{*} Research miscondcut

Annex B - Questionnaire regarding national mechanisms for handling cases on research misconduct

- 1. How do you define research misconduct in your country/state/region? (Please give a short description of the definition and the source)
- 2. Are there any legal instruments in your country/state/region regarding research misconduct? (Consolidated acts/statutes, executive/governmental orders, other legally binding instruments, etc. Please list the various instruments)
- Are there one or several institutions in your country/state/region who can handle cases on research misconduct?
 (Please list the various institution(s). If there is no institution(s) in your country/state/region please write this)
- 4. What kind of mandate do the institution(s) have?

 (Please indicate if the institution(s) have other responsibilities than handling and investigating allegations on research misconduct)
- 5. What part of the national system is/are the institution/institutions affiliated to? (Central administration, independent institution(s), local administration e.g. universities, etc.)
- 6. Do the institution(s) have a permanent board/council that makes decisions in all cases on research misconduct, or do the institution(s) assemble a temporary board/council in each case?
- 7. How many persons sit on the above mentioned permanent or temporary boards/councils?
- 8. Which types of qualifications and competences are represented in the above mentioned permanent or temporary boards/councils, e.g. who are the key persons involved in the preparation and decision making process in a case on research misconduct and what are their respective roles (investigation, secretariat, decision making etc.)?
 (Researchers, judges, civil servants, etc. Please provide information on how these persons are recruited and by whom they are appointed)
- 9. A. What is the procedure for handling a case on research misconduct in your country/state/region, and how long does it approximately/typically take? (Please give a short description of the process)
- 9. B. Is the process fully transparent? Are the cases dealt with in public? Are final decisions published in extenso and accessible to anyone? Or is the process kept fully or partly confidential? (Please give a short description)

- **10.** Is there a 'whistleblower' arrangement in your country/ state/ region? (If yes please give a short description)
- 11. What are the possible consequences if a person is found 'guilty' of research misconduct? (Sanctions, recommendations, etc.)
- 12. Do you have an administrative appeal system or are decisions on research misconduct final?
- 13. How many reported cases on research misconduct do you have in your country/state/region per year?

(Please provide an estimate if you do not have exact numbers. Please describe, if possible, the overall trend in the number over time. Do you see an increasing number, a stable number or a decreasing number?)

14. How do you personally evaluate your existing mechanism(s)? (Please list top-three advantages and disadvantages – and possible challenges)

15. Do you have reports/evaluations that indicate the impact of the systems/mechanisms described in the above?

(Please give a short description)

16. Could you point our attention to web-links, which in more detail (and preferably in English) describe the misconduct systems in your country/state/region?