

International Workshop on Accountability Challenges Summary Report

**Workshop Held on June 5 – June 7, 2007
Strasbourg, France**

Purpose

The primary purpose of the Workshop was to present and discuss strategies to address accountability challenges using case studies and discussing best practices. The Workshop agenda is contained in **Appendix A**.

Invitees

Invited persons were mainly people who have responsibility for operating programs that prevent and detect fraud, waste, and abuse in government- funded science and engineering programs. In addition, research universities and institutions were represented. International attendees and their affiliations are listed in **Appendix B**.

Overview

Christine Boesz, Dr.PH, Inspector General of the National Science Foundation (NSF) [USA], and David Weber, Director of Administration and Finance, European Science Foundation (ESF) hosted the Workshop at the offices of the ESF in Strasbourg, France.

In welcoming the attendees, Dr. Boesz introduced the topics that would be discussed during the two and a half days, with the focus on internal audit, risk assessment and risk management. David Weber also welcomed the attendees to Strasbourg and to the Workshop.

The remainder of the agenda was devoted to 1) evaluating and managing risks, 2) misconduct in research allegations, and 3) general auditing and internal control issues. The language for communication was English.

NARRATIVE SUMMARIES

The following narratives are summaries only. Please refer to the accompanying compact disk to view full presentations in PowerPoint or PDF format.

European Science Foundation Overview and Accountability Challenges

The European Science Foundation (ESF) provides its member organizations' research community with a common platform to advance research. The ESF has 75 member organizations in 30 countries. To support the mission ESF has offices in Strasbourg and Brussels with a staff of 128 to carry out a diverse program of exploratory workshops, networking programmes, conferences and other activities. Accountability challenges include financial, quality and efficiency of process, impact assessments, and performance indicators. ESF has numerous partners in the European research area. National boundaries put barriers to advances in scientific frontiers. ESF works to assist researchers to overcome these barriers. ESF has a scorecard for assessing research networking programmes. Its elements include objectives, key statistics, impact, and costs.

[Presenter: John Marks, Chief Executive, European Science Foundation (ESF), France]

Excellence Initiative and Overhead: Shaking Up the Deutsche Forschungsgemeinschaft

Deutsche Forschungsgemeinschaft (DFG) is the basic science funding agency for Germany. In 2005 DFG, in conjunction with the Wissenschaftsrat (WR), instituted an Excellence Initiative. WR is an advisory board to the federal and state governments on issues related to scientific institutions and systems of higher education.

The goals of the Excellence Initiative are:

- To strengthen international visibility of German researchers;
- To strengthen centers of excellence in research;
- To create an integrated approach to developing young scientists;
- To strengthen relationships among universities, research organizations, and industry to implement more efficient management of structures within universities; and,
- To introduce indirect cost funding.

There are three sources of funding: graduate schools, clusters of excellence, and institutional strategies. Common characteristics of projects are that they are large in scope, boost unconventional ideas, and integrate non-university research potential.

Graduate School Evaluation criteria for selection in the Excellence Initiative include research and training environment, research training and structure. Clusters of Excellence Evaluation criteria include research, people, and structure. Institution Strategies Evaluation Criteria include track-record excellence and convincing strategy.

In the first competition, the results were 17 clusters of excellence, 18 graduate schools, and 3 institutional strategies. The second round of competition is currently under way. The full presentation details the groups that were invited to submit full proposals. In brief, the competitions are two stages: draft proposals and then full proposals. The projects are scientifically driven. It is an open access competition, no quotas.

Germany is facing several challenges in higher education, affected by changing demographics and school terms (8 instead of 9 years of grammar school). DFG is attempting to ease some of the cost structure of research by instituting a “lump sum” payment for indirect costs (20 percent of direct research costs). The implementation is complicated because of the teaching responsibilities of German universities. The financing of the Excellence Initiative and the grant “lump sums” may lead to a larger federal government support of DFG.

[Presenter: Robert Kuhn, Director, Budget and Accounting Division, Deutsche Forschungsgemeinschaft, Germany]

Risk Assessment University Perspective

Institutional Risk Management

Risk management in universities is often linked to institutional objectives. Whilst this can be helpful, it can also miss crucial risk elements. In the UK, there is a requirement for universities to embed risk management into institutional processes, which should mean it is part of everyone's normal practice, rather than being left to a special committee. Universities use a range of policies to manage risk, e.g., financial handbook, research good practice, research misconduct, and conflicts of interest.

There is a range of areas of research risk:

Policy / strategy	Ethical	Staff-related
Academic	Humans and animals	Collaborative
Physical	Legal	PR & perceptions
Financial	Commercial	IT

These can be illustrated as follows:

Policy / strategy	Market and portfolio imbalance, e.g., through an exposure to a single source of funding, requiring a developed strategy and implementation plan, with replanning as necessary.
Academic	Investing time in proposals with low chances of success, which is an opportunity cost, as well as potentially damaging to person's career; requires action on individual basis.
Physical	Undertaking research in dangerous environments requires advice from safety professionals, carefully planning, and insurance.
Commercial	Inability to deliver to plan as a consequence of being over-ambitious requires effective project management and planning, training and insurance.
Collaborative	Incompatibility between partners, due to divergent aims, styles, etc., requires careful management of relationships, and termination of ineffective partnerships.

A university needs to manage all of these risks, at all levels of its organisation, as part of the normal processes.

Project-Level Risk Assessment

In most universities, individual projects require institutional authorisation. This will often include consideration of the academic quality of the proposal, as well as confirmation of the administrative details. The University of Liverpool has introduced a risk assessment process for all its research and related projects, to assist in the review and authorisation process. Each proposal is assessed against nine factors, with two or three possible values for each factor

(equating to low, medium and high risk). The value of each factor is either derived from information captured about the project (e.g., the customer type, the cost, the price), or is a subjective view provided by the Head of Department (HoD) of the lead researcher involved.

The nine factors are:

Desirability	Does the proposal fit well with the institutional and departmental research strategies?
Capability	Is the research team experienced in the areas proposed, or are they entering a new area, or early in their research career?
Public Good	Is the research being undertaken for public or private good (i.e., will the results be generally available, or will they be restricted in their distribution)?
Humans / Animals	Are human subjects or animals involved in the research?
Customer	Is the customer governmental, industrial, large or small, and have we any previous record with them?
Type and Terms	What form does the agreement take, and are the terms restrictive or punitive on the university?
Cost	What is the cost to the university?
Price	What is the price, and how much does it differ from the cost?
Permanency	Does the funding agreement require research staff employed on the project to have permanent contracts after the end of the project?

The values of the factors are added up, to provide a “risk score,” which is then used to determine the approval workflow – the higher the score, the more senior the individual or group is needed to sign off. At present, a simple scoring and addition process is being used, but weightings could be added if required, and more factors are likely to be introduced.

Individual items of information or factor values can be used to drive alerts (e.g., to Facilities Management that building or refurbishment is being considered), or to indicate the need for monitoring or level of intervention during the project (e.g., if the capability score shows a higher risk, the relevant HoD should be monitoring progress more frequently than otherwise).

In using this approach, we are conscious that the HoDs might score projects highly, regardless of reality, which could compromise the process. This could be counterbalanced by having regular reporting of assessments and outcomes (although that would in itself require good capture of project outcome information). There is also the need to ensure a suitable balance between a systematic approach and the use of human judgment; this mechanism helps to inform the process, it does not make the decision.

One particular area for thought and development is that of accumulating risks. The mechanism assesses risk of a single project, and a decision is made. Each high- risk project may be

acceptable on its own, but what proportion of a profile might acceptably be high risk, and should that profile vary between departments (and institutions)? High -risk projects may be more acceptable in a well-established department, or for an experienced group. It may be better to aggregate risks across projects based on the individual factors (which links back to the institutional research risk areas in Section 1 (e.g., level of total financial exposure, or balance across the customer base).

Summary

This presentation sought to illustrate the range of areas across which research risk needs to be managed, and that universities need to do so as part of their embedded processes. It also introduced a risk assessment process that is being applied to individual projects, to support the institutional approval process. The result of the assessment can be used in later stages of the operation of the project. The assessment process is likely to be extended, but there are some areas needing development, in particular that of accumulating risks.

[Presenter: Ian Carter, Director of Research, Research & Business Services, University of Liverpool, United Kingdom]

Report on the Global Science Forum Workshop on Best Practices for Ensuring Scientific Integrity and Preventing Misconduct

The Office of Economic Cooperation & Development (OECD) was asked by member nation Japan to look into the issues concerning misconduct in research. Through the Global Science Forum (GSF), OECD responded. Japan and Canada agreed to co chair a Committee to do so. On February 22-23, 2007 in Tokyo, GSF and Ministry of Education, Culture, Sports, Science and Technology (MEXT) helped the Workshop on the Best Practices for Ensuring Scientific Integrity and Preventing Misconduct. One goal is to assist countries that are currently setting up or refining their systems for promoting integrity. A report will be submitted to the GSF in October 2007. One finding is that misconduct allegations in international collaborations is a major challenge. The draft report and its findings will be presented and discussed at a World Conference in Lisbon, September 2007.

A follow-up activity is being proposed to the GSF. Its goal is to establish mechanisms for sharing information, promoting cooperation in investigations, developing generic, model documents for international research agreements on how to handle misconduct allegations, and to enable training across international boundaries. If this project is approved by the GSF and there is sufficient interest, the next step would be to hold a meeting to scope the project. Canada and the United States have agreed to be the lead countries on this project.

[Presenter: Christine Boesz, Inspector General, National Science Foundation, Office of Inspector General, United States]

Audit Committees: Responsibilities on Accountability

The subtitle of this presentation is: A Tale of Two Audit Committees. The organization is The Nature Conservancy, a non-profit organization that receives governmental and private funding.

The presentation discusses the role of an Audit Committee – to ensure accountability in an organization – through a first hand account of the Nature Conservancy's experiences. Faced with a front page newspaper expose, a Senate Finance Committee investigation and an audit by the Internal Revenue Service, the Nature Conservancy performed a wide ranging review of its corporate governance. This review, which prompted many organizational changes, also improved the work of the Audit Committee. The Committee's key responsibility -- overseeing the process that produces reliable and credible financial statements while ensuring the organization has effective internal controls--has expanded its responsibilities to include retention of the external auditors, grasp of all key information in the organization's financial reporting, oversight of risk management, and compliance with laws and regulations affecting the organization.

[Cheryl Place, Director, Internal Audit, The Conservancy, United States]

Discussion on Audit Committees

The discussion resulted in the following principles. The objectives in having an audit committee are to protect the public interest and to provide advice to organizational heads and other officials. An Audit Committee must have authority to act. Its responsibility is to review and analyze reports made by auditors, both internal and external, and to hold management accountable for taking appropriate corrective actions.

An Audit Committee should be composed of 3-6 independent leaders who are knowledgeable in areas such as financial management, public policy, administration, and information technology. The Audit Committee members should be paid for their time and services, and travel reimbursement. The Audit Committee should meet a minimum of 3 times per year, meeting independent of management with the auditors. The Audit Committee needs support resources and access to personnel, records, and all auditors.

[Facilitator: Christine Boesz, Discussion Leader]

Research Policy in a Programme Organisation: Indicators and Accountability:

The Foundation for Fundamental Research on Matter (FOM) promotes, coordinates and finances fundamental physics research in The Netherlands. It is an autonomous foundation responsible to the physics division of the National Research Council (NOW). Its annual budget is about 80 million euros. FOM employs about 950 people who work at FOM research institutes and in university laboratories.

In the past 15 years the funding structure of FOM transformed from an institutional organisation, through a programme organisation, to a hybrid organisation. The main difference is that in the institutional organisation budgets were assigned to the organisational units, whereas in the programme organisation, they were assigned to research programmes. In the hybrid organisation FOM-institutes receive mission budgets for infrastructure and research at institutes, and university groups are financed by means of approved research programmes. The current hybrid organisation has the best performance with respect to openness to new research groups and competition between institutes and university groups, at the same time yielding some continuity

for the FOM-institutes. Performance indicators used in this period were the programme shares of the various subfields of physics, the cash position, and the free reserve.

[Presenter: Mark Brocken, Head Financial Department Foundation for Fundamental Research on Matter, Netherlands]

Paying Referees: A Practical Approach

The EPSRC Referees' Incentive Scheme is a scheme that enables UK academic referees to earn additional research funds for their Departments. The annual fund for the Scheme is distributed using a points system, "Peer Miles", in proportion to the amount (and timeliness) of reviewing undertaken. One "Peer Mile," is credited for each usable review with a further one awarded if this is received by the requested date. Funding can only be used by the Department for approved purposes, e.g., conferences and student support.

[Presenter: Stuart Ward, Director of Resources, Engineering & Physical Sciences Research Council, United Kingdom]

Assessing Risk in Return on Investments

The International Human Frontier Science Program Organization (HFSP) Research institutions and research funding organisations (research organisations) operate in a competitive environment for human and financial resources. This entails prioritisation, and therefore evaluation. Evaluation of research activities presents a particular challenge because of the intangible nature of the output - knowledge - the various guises under which this knowledge will eventually disseminate, and the time it might take for that to happen. To evaluate its return on investment a research organisation might start by asking the question "how good is this organization at generating and moving knowledge?" which can only partially be done through anecdotal evidence or statistics such as bibliometrics.

A "micro case study" based on the HFSP Fellowship Program has been carried out to estimate the "generation and diffusion of knowledge" by HFSP fellows and illustrate some issues. The most critical among these is certainly the extreme difficulty to retrieve relevant data out of the enormous amount of digital information available. Queries in specialised commercial or public databases of scientific publications or patents are tedious and error-prone because of frequent homonymous and ineffective, machine readable identifiers (even for research organisations). Evaluation of "return on investment" in research is likely to become more systematic as one component of accountability. These evaluations bear risks: generate a "culture of results" that might antagonise the research community, be too simplistic with abuse of bibliometrics and impact factors, overlook a highly skewed pattern by which many research projects do not succeed with the successful ones more than compensating, and lead to misappropriation of results or serve a hidden agenda (cost cuts, restructuring and concentration). On the other hand, complete rejection of evaluation would be unsustainable because of a real demand from various stakeholders and could be counterproductive at the Society level.

Although the broad availability of electronic information might be seen as helpful, there is an obvious and urgent need for universal and unequivocal identifiers of researchers, research institutions, and funders in order to make possible the basic referencing and automated searches

that any proper evaluation would require. The research community would be the first beneficiary of a proactive attitude to address this issue. Interesting approaches use the most recent information technologies. However, an initiative is still lacking at the required global level. This could also involve existing organisations such as the OECD or even justify a dedicated entity with the right structure and governance (international, not-for-profit, involving stakeholders but independent) as seen already in other global communities.

[Presenter: Patrick Vincent, Director, Budget & Finance Administration, Human Frontier Science Program, France]

Single-Audit Concept: Quality versus Convenience (USA)

This presentation discussed the results of a 3-year effort by the US Offices of Inspector General to assess the quality of single audits performed on over 30,000 US institutions annually. It discussed first why single audits are important in the US. Over the past 46 years, the amount of federal grants government-wide has grown from \$7 Billion in 1960 to over \$450 Billion in 2006. With this enormous increase in federal grants, the burden of maintaining accountability of these funds has grown. As such, federal agencies in the US rely extensively on the single audits to ensure their appropriated funds are spent on allowable costs and for the purpose they were provided. For most entities, the single audits are the ONLY on-site reviews of how federal dollars are expended.

Yet, the quality of these audits is a continuing problem. To determine the extent of this problem, in 2003, seven Offices of Inspectors General agreed to participate in a project to statistically assess the quality of single audits government-wide and provide a baseline for monitoring future single audit quality. The project involved selecting a statistical random sample of 208 single audits from a universe of 38,000 single audits submitted for the period April 2003 through March 2004. The project team members reviewed the audit work papers supporting each of these 208 audits and assessed how well the auditor planned, conducted and reported the results of their audit related to testing of the entity's internal controls over compliance requirements, testing of the entity's actual compliance with specific major program requirements, and the content of the issued audit report.

The project team members categorized the results of their assessment of audit quality into three categories--acceptable, limited reliability, and unacceptable. The assessment found that while 48.5 percent of the 208 audits were of acceptable quality, 51.5 percent were of limited reliability or unacceptable. The results were slightly better for the audits of larger entities with 63.5% found to be at an acceptable level of quality and 36.5 percent of limited or no reliability.

There were four major deficiencies with the audit quality. Missing documentation to evidence the audit work performed and/or basis for the audit findings and opinion was the most prevalent problem, affecting 93 of the 108 audits that were categorized as having limited reliability or were unacceptable. Failure to obtain an understanding of controls over major program compliance and to test those controls was also a significant problem. Without adequate review of compliance controls, a federal agency cannot be sure the grantee institution is meeting the program requirements or spending funds on allowable costs. It was also unclear what testing of grantee compliance was performed or that all compliance requirements were tested. This problem was the primary cause for the audits found to be unacceptable. Lastly, many single audits either did

not correctly identify the major programs that it tested, did not fully explain the findings, and/or left findings out that should have been reported.

The project team made several recommendations to address the single audit quality problems, including revising and improving audit guidance and requirements, establishing standard requirements for single audit training program which all CPA firms would be required to take in order to qualify to perform single audits, and imposing monetary and other penalties for substandard audits.

[Presenter: Debbie Cureton, Associate Inspector General for Audit, National Science Foundation, Office of Inspector General, United States]

Discussion on Future Challenges in Accountability

A discussion was held on possible topics for future accountability workshops. A list of subjects for consideration in the 2008 Workshop follow:

- 1) Overhead Costs – full costing or not
- 2) Single Audit – follow-up
- 3) Framework for Research Evaluation
- 4) Dipstick Auditing
- 5) Monitoring/Oversight Visits
- 6) Performance Indicators
- 7) Project Management
- 8) Shared Service Centers - cost benefit
- outsourcing
- 9) Change in “Subsidiary Framework” (full cost accounting)
- 10) Inputs and Outputs of Research
- 11) Research misconduct information sharing – international collaboration (OECD)
- 12) Netherlands – update on activities of funding organizations, such as the Royal Academy
Meine Bosma
- 13) Polish Attendance (how to do) – site visit presentation next year
- 14) Organization Charts of Funding Organization and Background Material
- 15) Universities Reaction to the Single Audit Project

[Facilitator: Debbie Cureton]

Accountability in Ireland:

The presentation briefly outlined the history, vision, mission and organisational structure of the Science Foundation Ireland (SFI). Also, the presentation outlined the oversight processes and procedures in operation at SFI, both pre-award and post-award. The theme of the Workshop was then addressed. Accountability Challenges through a number of case studies which set out:

- Significant changes made to the grant payment cycle operated by SFI to streamline the payment process, to improve reporting of expenditure by grant recipients and to increase accountability;

- Changes in the discretion enjoyed by grant recipients to move funds between expenditure categories by expressing it as a fixed monetary amount irrespective of the size of the award as opposed to a percent value of the award size;
- Changes in the manner in which overheads are paid, thereby removing duplication of work;
- Details of a targeted audit of a specific grant where concerns had been raised about certain expenditure, and the successful outcome of that audit.

[Presenter: Donal Keane, Chief Operations Officer, Science Foundation Ireland (SFI), Ireland]

New Initiatives for Research Funding Administration Reform in Japan:

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan has established the Office of Research Funding Administration (ORFA). ORFA is responsible for planning and conducting countermeasures against misuses of research funds. ORFA has established Guidelines for Management and Auditing of Public Research Funds at Research Institutions. These involve clarification of institutions' responsibilities and heavier penalties for wrongdoing. The Science & Technology (S&T) Plans are formulated to implement a 5-year S&T policy. The policy goals are to improve the level of science and return the fruits of research to society through innovations. There is an emphasis on training and the establishment of a competitive environment for research resources. In Japan funding of scientific research is increasing. MEXT receives 75 percent of the total governmental research funds.

There has been some misuse of funds. From FY2004-FY2006 there were 30 cases. The cause of misuse is due to researcher moral issues, lack of organizational management systems, and inflexibility in the funding system.

The Law of "moth" and "mold" describes misuse in the US and Japan, respectively. "Moth" type of misuse is personal and sporadic with penalties focused on the individual. The "mold" type is organizational and lasts a long time. Countermeasures must eliminate the underlying factors.

The new Guidelines require that research institutions clarify responsibilities within the institution and improve the environment that enables appropriate operation and management. Institutions must engage in risk management and appropriately use and manage research funds. Institutions must establish a system of communication that allows for consultation and reporting of wrong doing. Institutions must have monitoring and management systems along with an internal auditing system. MEXT monitors progress, reviews annual reports, conducts site visits, and requests improvement plans when problems are found.

The research funding system is undergoing reform to be more flexible to allow for fund carry over. Also there is an effort to simplify the current complex rules. It is believed that this will help with compliance challenges.

[Presenter: Takashi Kiyoura, Director, Office of Research Funding Administration, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, and Technology (METX), Japan]

Accountability in Switzerland

Project SNF futuro

A presentation was held on the current project in the Swiss National Science Foundation. The presentation included the following points.

Objectives and Guidelines

- Preparation for growing and upcoming tasks
- Reinforcement of the research policy role and visibility
- Increased transparency of the processes to our customers
- Improvement and establishment of cross-functional tasks / responsibilities in the Foundation Council

- Harmonisation of interdepartmental processes

Principal decisions

- Application evaluation
- Transparency
- Project support
- Monitoring supported projects
- Scientific policy role of the SNF

Task forces

There are five different task forces drawing up concrete instruction for actions for the implementation, for the quantitative cost estimation of the planned measures and for revision / audit or re-creation of the legal basis.

- Foundation council / policy of research
- Expert committees
- Monitoring and Controlling
- Application evaluation
- Legal basis

[Presenter: Sandra Scheidegger, Controlling, Swiss National Science Foundation, Switzerland]

Accountability in Project Management and Risk Assessment

The Research Council of Norway (RCN) is a strategic body which identifies areas of special effort, allocates research funds and evaluates the resulting research. The Council is the principal research policy adviser to the government, and it acts as a meeting-place and network-builder for Norwegian research. The Internal Audit department of RCN has been engaged to audit the following up procedures of the research funds activities. The speaker focused on to steps in the

project management process, the contracts and the reports. It is important for the follow-up procedures to have a simple contract that is easy to understand. It is also important for the RCN to get information that they can rely on from the project management. Some examples of reports with information that can be false were shown. The examples can be used to identify risks in the project management process. More information about RCN: www.forskningsradet.no

[Presenter: Trine Tengbom, Director, Internal Audit, The Research Council of Norway, Norway]

Autonomy and Accountability: The Austrian Realities

The role of the state authority as a supervisory authority is not very prominent in the Austrian Science Fund (FWF) framework. Its competences are basically:

- Approval of the balance and the budget.
- Approval of long-term contracts.
- Long-term and short-term Working Plans.

The annual reports are submitted to two authorities; and they nominate three (in the near future four) members of the Supervisory Board. The most important competencies are the selection of three candidates for the presidency and the decision on the working plan. The president is elected by the General Assembly (Delegiertenversammlung) which consists entirely of scientists. The Board of the FWF appoints the Managing Director. The appointment needs to be confirmed by the Supervisory Board.

The supervisory authority is clearly laid out. It is worth noting that the authority has no say in funding decisions or in the composition of the Board. It has a say in terms of budget distribution.

The accountability the FWF provides exceeds the statutory obligations. The three main areas of accountability oversight are:

- Research funding
- Science Communications
- Finances

Furthermore, several internal and external controlling instruments (evaluation of the institution, evaluation of the organisation, management accounting, personnel controlling, etc.) are used. The only way to preserve autonomy is to ensure public confidence and to know the answers before the questions are asked.

[Presenter: Gerlinde Weibold, Head of Human Resources, Austrian Science Fund (FWF), Austria]

Accountability at the European Commission-DG JRC-Joint Research Center:

The European Commission's Joint Research Center (JRC) provides scientific and technical support for the development and implementation of European Union (EU) policies. The JRC has

institutes in five member states: The Netherlands, Belgium, Germany, Italy, and Spain. Originally established as a nuclear research center, JRC now focuses on research in areas such as the environment, remote sensing, renewable energies, informatics, advanced material, and food safety and quality. The policy themes for 2007-2013 are: prosperity in a knowledge intensive society, solidarity and responsible management of resources, security and freedom, Europe as a world partner, and Euratom. The presentation contains many examples of projects implemented to address the policy themes. Accountability is a challenge because of the diversity and complexity of the themes. A Score Card for EU policy makers was introduced in 2001. Its measurements demonstrate scientific-competence in mission-related areas. It tracks human and financial resources. JRC Indicators that support EU policy makers include the number of products/services delivered, percentage of inter-service consultations, deliverables to member states, and degree of satisfaction. Examples of scientific competence indicators are number of peer reviewed journal articles, number of conference contributions, number of books, number of invited presentations to international conferences, and number of new patents filed. Human and financial resource indicators include percentage of administrative costs, revenue generated from external sources, average number of training days, and percentage of scientific staff. A full listing of indicators is included in the presentation along with references about JRC.

[Presenter: Serge Vanacker, European Commission, Italy]

Time to Account: Towards a Monitoring and Evaluation Framework of ESF Activities:

ESF undertakes review and evaluation studies to monitor the quality of its services and makes necessary adjustments when required. However, the approaches taken have also been refined and further developed to meet the changing expectation of ESF's governing bodies and member organisations. Dr Mugabushaka presented a new Monitoring and Evaluation Framework of ESF activities which is currently being developed. The framework takes as a starting point three main questions asked in any evaluation exercise (What do you do? How do you do it? What results are you achieving?) and identify six main dimensions (activities, relevance, efficiency, quality of operations, output and impact) for which indicators – specific to the ESF activities – are to be developed.

ESF is also organizing a forum for its member organizations to discuss their approaches on Evaluation. The ESF Member Organisation on Evaluation of funding schemes and Research Programmes will focus on “Post-Grant” Evaluation, i.e., if the funding schemes or the research programmes achieve their stated aims. It will provide a platform to exchange and document current practices in the different national organizations and facilitate the networking of officers engaged in evaluation and help them to share practical information in an informal way. It will also be the venue to explore the needs and possibilities for collaboration in future evaluation exercises.

[Presenter: Mike Mugabushaka, Science Office in the CEO Unit, European Science Foundation (ESF), France]

International Accountability Issues: Crossing Borders

Because of time constraints the discussion was abbreviated. However, it was agreed that there was a need for accountability across international borders. One misuse of funds or an allegation

in misconduct in science affects all parties in research collaborations. One proposal is that international collaborations should agree in advance how misuse will be investigated and the degree of cooperation that will be given to international investigators. It is hoped that this approach will be studied by the Global Science Forum.

Another area of concern is the use of international reviewers or referees. Specifically, reviewers may plagiarize ideas and use them to obtain funding in their own country. This has occurred. The challenge is trying to track such occurrences. It is not known if the problem is prevalent or if certain research fields are more susceptible to this type of abuse or wrongdoing. Again, it is hoped that the Global Science Forum and the European Science Foundation will explore this issue.

The role of the university or research institute in international collaborations was discussed. It is believed that these organizations should have strong internal controls. Best practices in business models should be shared in the international community with the focus on international research collaborations and accountability in both scientific integrity and fiscal responsibility. It was agreed that this would be a good topic for follow-on accountability workshops.

[Facilitator: Christine Boesz]

Compliance Plans: An Approach to Accountability (Financial & Research)

Compliance demonstrates good stewardship of public funds. It means meeting the obligations associated with accepting funding. A compliance program is designed to prevent and detect wrong doing. It teaches and encourages employees to conform to ethical and legal standards. It is an organized, on-going effort. Three parties are responsible for compliance: government, research institutions/universities, and the individuals. Successful compliance is a partnership involving people from the three partners. Successful compliance uses internal controls to effectively monitor adherence to laws and other requirements. Success compliance requires leadership.

A compliance program is a system of controls to assure sound scientific and administrative judgments, adherence to funding requirements, and prudent management. The purpose of a compliance program is to provide clarity and consistency to all employees, to promote self-monitoring, and to provide training to identify potential problems and to take corrective actions. Elements of a compliance program include written standards of conduct, a designated compliance officer and committee to operate the program, effective education and training, effective communication with employees, clear definitions of roles and responsibilities, audits and evaluations to identify problem areas, appropriate disciplinary action when necessary, and prompt investigations of alleged offenses. In the United States compliance programs are based on the U.S. Sentencing Guidelines. Many civil settlements result in a written (mandated) Compliance Plan to improve corporate/institutional responsibility.

The key to a successful compliance program is finding risk and monitoring the handling of it. Common risk areas are discussed in the report. Examples are tracking equipment and real property, time and attendance reporting, and using human subjects in research. References on compliance programs are given.

[Presenter: Christine Boesz, Inspector General, National Science Foundation, Office of Inspector General, United States]

General Observations and Conclusions

The participants agreed that the workshop achieved its objectives. It was recognized that scientific research involves more international collaborations using both formal agreements and informal collaborations. While collaborations make complex and expensive projects more feasible, the accountability challenges are enormous both in scope and resources needed. Therefore, global communication and cooperation among accountability professionals is necessary to gain efficiency and to produce timely, useful accountability information. During the Workshop, there was discussion on the importance of devising ways to rely on the work of others in the accountability profession. The next Workshop is scheduled for June 19 and 20, 2008 in Liverpool UK. It will be hosted by the UK's Engineering and Physical Sciences Research Council, specifically Mr. Stuart Ward. The Workshop will follow the International Network of Research Management Societies (INORMS) conference, hosted by Dr. Ian Carter.

Also special thanks to David Weber and Anne-sophie Piavaux at The European Science Foundation for their assistance with the agenda and all the logistical and organizational arrangements they coordinated to make this Workshop such a success. The Workshop participants are grateful for the generosity of the ESF in providing the facilities and support for this meeting.

For additional information, contact Christine C. Boesz, Dr.P.H., Inspector General, National Science Foundation, U.S.A., e-mail: cboesz@nsf.gov

Final – July, 2007

AGENDA

International Workshop on Accountability Challenges

Meeting Place
The European Science Foundation
ESF Building at Rue deu Parchemin 5
Strasbourg, France
June 5 – June 7, 2007

Co-Chair: Christine C. Boesz
Inspector General
National Science Foundation (NSF)
United States of America

Co-Chair: David Weber
Director of Administration and Finance
European Science Foundation (ESF)
Strasbourg, France

Theme: *Accountability Challenges*

Purpose: To present and discuss strategies to address accountability challenges using case studies and discussing best practices.

Monday, June 4

6:30 – 8:00 PM “Meet & Greet” Reception at the European Science Foundation,
1 Quai Lezay-Marnesia - BP 90015, 67080 Strasbourg Cedex

Tuesday, June 5 (full day workshop) (ESF Building at Rue du Parchemin 5)

8:30 AM Workshop Registration
9:00 AM Welcome and Introductions

9:15 AM European Science Foundation Overview and Accountability Challenges:
John Marks, Chief Executive European, Science Foundation (ESF), France

9:45 AM Excellence Initiative and Overhead: Shaking Up the Deutsche
Forschungsgemeinschaft: Robert Kuhn, Director, Budget and Accounting
Division, Deutsche Forschungsgemeinschaft, Germany

10:45 AM Break

11:00 AM Risk Assessment University Perspective: Ian Carter, Director of Research,
Research & Business Services, University of Liverpool, United Kingdom

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- Noon Working Lunch: Report on the Global Science Forum Workshop on Best Practices for Ensuring Scientific Integrity and Preventing Misconduct: Christine Boesz, Inspector General, National Science Foundation Office of Inspector General, United States
- 2:00 PM Audit Committees: Responsibilities on Accountability: Cheryl Place, Director, Internal Audit, The Nature Conservancy, United States
- 3:00 PM Discussion on Audit Committees: Christine Boesz, Discussion Leader
- 3:30 PM Break
- 3:45 PM Research Policy in a Programme Organisation: Indicators and Accountability: Mark Brocken, Head Financial Department Foundation for Fundamental Research, Netherlands
- 4:45 PM Daily Wrap Up
- 5:00 PM Close for Day

Wednesday, June 6

- 8:30 AM Paying Referees: A Practical Approach
Stuart Ward, Director of Resources, Engineering & Physical Sciences Research Council, United Kingdom
- 9:30 AM Assessing Risk in Return on Investments
Patrick Vincent, Director, Budget & Finance Administration, Human Frontier Science Program, France
- 10:15 AM Break
- 10:30 AM Single-Audit Concept: Quality versus Convenience (USA)
Debbie Cureton, Associate Inspector General for Audit, National Science Foundation, Office of Inspector General, United States
- 12:00 noon Working Lunch- Discussion on Future Challenges in Accountability:
Debbie Cureton, Discussion Leader
- 1:45 PM Accountability in Ireland: Donal Keane, Chief Operations Officer, Science Foundation Ireland (SFI), Ireland
- 2:30 PM New Initiatives for Research Funding Administration Reform in Japan
Takashi Kiyoura, Director, Office of Research Funding Administration, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, and Technology (MEXT), Japan

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- 3:15 PM Break
- 3:30 PM Accountability in Switzerland: Sandra Scheidegger, Controlling, Swiss National Science Foundation, Switzerland
- 4:15 PM Accountability in Project Management and Risk Assessment
Trine Tengbom, Director, Internal Audit, The Research Council of Norway, Norway
- 5:00 PM Close for the Day – For ESF Function the bus leaves at 5:00 p.m.

Thursday, June 7

- 8:30 AM Autonomy and Accountability: The Austrian Realities
Gerlinde Weibold, Head of Human Resources, Austrian Science Fund (FWF), Austria
- 9:00 AM Accountability at the European Commission-DG JRC-Joint Research Center: Serge Vanacker, European Commission, Italy
- 9:30 AM Time to Account: Towards a Monitoring and Evaluation Framework of ESF Activities: Mike Mugabushaka, Science Office in the CEO Unit. European Science Foundation (ESF), France
- 10:15 AM Break
- 10:30 AM International Accountability Issues: Crossing Borders
Christine C. Boesz, Discussion Leader
- 11:00 AM Compliance Plans: An Approach to Accountability (Financial & Research):
Christine Boesz, Inspector General, National Science Foundation, Office of Inspector General, United States
- 11:45 AM Wrap-up Discussion\Conclude Workshop
- 12:00 noon Adjournment

PLEASE NOTE: All sessions will be conducted in English. Times of presentations and speakers may change. NSF Contact: Maury Pully, Assistant to the Inspector General: mpully@nsf.gov
As of 07/30/2007 4:31 PM

APPENDIX B

Attendee List for ACCOUNTABILITY IN SCIENCE RESEARCH FUNDING WORKSHOP - June 5-7, 2007 Strasbourg, France -FINAL

INVITEE	COUNTRY
<p>Gerlinde Weibold Head of Human Resources Austrian Science Fund (FWF) Human Resources Sensengasse 1 1090 Wien, Austria Phone: +43-1-505-67-40-8831 Fax: +43-1-505-6739 gerlinde.weibold@fwf.ac.at</p>	Austria
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<p>Thibaut Lery Science Officer, PESC Unit European Science Foundation (ESF), France pesc@esf.org</p>	France
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<p>Ian Carter Director of Research Research & Business Services University of Liverpool 3 Brownlow Street Liverpool L69 3GL Phone: 44-151-794-8723 Fax: 44-151-794-8728 i.carter@liv.ac.uk</p>	<p>United Kingdom</p>
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FINAL July 2007