Peer review and quality management

Douglas Niven
EPSRC, UK

ESF MOForum on Peer Review, Mar 08
About EPSRC

- £740m (€ 960m) annual budget
- Broad range of science: maths, engineering, ICT etc

Mission:
- Support high quality basic and applied research
- Advance knowledge and technology to contribute to economic competitiveness
Scale of EPSRC operations

- 7000 grant applications
- 22000 review requests
- 150 panel meetings
- 5000 live grants

Success rates = 33% (per annum)
## Principles of Peer Review

<table>
<thead>
<tr>
<th>Transparency</th>
<th>Prioritisation</th>
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<tr>
<td>Appropriateness</td>
<td>Right to Reply</td>
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<tr>
<td>Managing Interests</td>
<td>Separation of Duties</td>
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<tr>
<td>Confidentiality</td>
<td>No Parallel Assessment</td>
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<td>Expert Assessment</td>
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What is quality?

“The degree to which a set of characteristics fulfils a need or expectation”
Quality principles

- Customer focus
- System approach to management
- Continual improvement
- Factual approach to decision making
- Mutually beneficial supplier relationships
Quality Management at EPSRC

- Applies to grant applications
- Covers processes and infrastructure
- Stakeholders: applicants, peer reviewers, research organisations
- Suppliers: IT, internal expertise, college
Quality Management System

Policy

Objectives

Implement Process

Monitor, Measure

Analyse

Improve (Continually)
ISO 9001 accreditation, Jun 2006
What we do:

- Audits (internal and external)
- Control of documents
- Measurement/Data analysis
- Surveys of stakeholders
- Quality Management Reviews
Benefits of quality management

- Assurance that peer review leads to better science (improved decision making)
- Increased satisfaction from stakeholders
- Improved performance:
  - More proactive approach
  - Holistic approach to peer review
Summary

- Quality management is a useful tool
  - Builds in feedback
  - It works well in a public sector, service organisation
  - Helps identify the most crucial factors of peer review
How satisfied were you that your proposal was processed in accordance with our stated processes? (Applicant survey 2007)
% of proposals processed under 26 weeks

Time (quarters):
- 05q1
- 05q2
- 05q3
- 05q4
- 06q1
- 06q2
- 06q3
- 06q4
- 07q1
- 07q2

% Actual
- 50
- 55
- 60
- 65
- 70
- 75
- 80
- 85
- 90
- 95
- 100

% Target
- 90

Legend:
- Actual
- Target
Summary of peer review process

1. Receive
2. Check
3. Peer Review
4. Sift
5. Panel
6. Decision
7. Not Fund
8. Fund