

## The Royal Society response to the Roberts review of the research assessment exercise

30 September 2003

- 1 The Royal Society is grateful for this opportunity to respond to the report by Sir Gareth Roberts on the Research Assessment Exercise<sup>1</sup> and also to the parallel consultation on the OST review of the sustainability of university research. It does not, however, believe that it can respond adequately to either consultations merely through answering the supplied set of questions, and hence its submissions are in the form of a cover note together with the completed questionnaire. The overall response was drafted by the Society's Working Group on the future development of universities and has been endorsed by the Society's Council. The membership of the Working Group is at annex B.
- 2 The Society is concerned that the public non-project funding of university research, including the funding of academic staff while they are engaged with research, has become increasingly centrally directed over the last decade or so, more so than in any other country of similar size. This has resulted in two trends:
  - increasing complexity of the mechanisms for determining the distribution of this support;
  - arguably too selective a distribution of resources, possibly because of too limited a view of the purposes for the public support of university research
- 3 The White Paper and the subsequent reports have many related aspects, and it is unfortunate that the opportunity was not taken to undertake a more fundamental review of the overall public funding of university research, including consideration of the balance between the Research and Funding Councils funding streams, and whether for example it would be better for the Research Councils to pay the full cost of the research they support. The Society will be publishing a more detailed paper setting out some options in the near future.
- 4 Devising the optimum policy and funding for university research is crucial not only for the future of the universities, but also the country as a whole. Any fundamental review should take into account the diverse reasons for publicly funding university research. First and foremost the purpose of university research is to take forward the frontiers of knowledge and in doing so to provide a capacity to:
  - i. to solve problems – eg to underpin solutions to societal problems such as those in the health, social, economic, environmental areas;

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<sup>1</sup> <http://www.ra-review.ac.uk/reports/roberts.asp>

- ii. to fuel economic activity, new and better/cheaper products and new and better/more efficient public and private services;
- iii. to maintain knowledge, skills, and long-term research infrastructure, for unforeseen eventualities and also a capacity to keep in touch with and understand developments occurring elsewhere in the world;
- iv. to train PhDs and post docs and to provide within universities an exciting and challenging learning environment for first degree and masters students
- v. to retain existing expertise and business investment, and to attract inward migration of skilled people and “foreign” companies/capital.

Implicit in many of these are the key roles that research plays in maintaining culture and the UK’s standing within the world community.

- 5 As these benefits are distributed to the institution, the local community and to the nation as a whole, the relationship between the degree of selectivity and the benefits are highly non linear. It is arguable that recent increases in selectivity in England have been counter-productive for the country as a whole.
- 6 The Society believes that research is an essential activity of universities offering higher degrees, and forms a necessary scholarly basis for at least the final year of honours degrees. A research environment is important for high quality learning, and every university teacher should have been active in research at some stage of his or her career. It is also important that those teaching professional courses should be in close touch with current practice in their field.
- 7 It is essential that universities have flexible funding available to develop and underpin their research activities and provide the time and facilities on which individual researchers can apply for research grants or contracts. The present funding scheme from the HEFCE is not optimal, and it will become even less so with the moves towards full economic cost. The latter is scheduled to begin before the proposed RAE, and this underlines the importance of an urgent review of the whole arrangements for the public funding of university research.
- 8 The Society is concerned that some of the recommendations in the report, while seeking to achieve worthwhile outcomes, will place further burdens on the universities.
- 9 The Society agrees that any system of determining quality has to be overseen by expert peer review bodies with knowledge of the discipline or disciplines under consideration. It therefore supports the continuation of assessment panels, although it is not convinced of the need for a three-layer structure, and believes that this needs further consideration. It is concerned about the proposals to exclude some institutions and departments from the proposed Quality Research Assessment (QRA). However, much will depend on the Secretary of State’s directions over the degree of selectivity that he or she wishes to see imposed on the system.
- 10 It also agrees that the RQA system should not use the current system of mapping of criteria onto fixed rating points, which is not designed to achieve comparability across subjects, and is subject to anomalous results. It supports the proposed profiling arrangements, which follow closely the suggestions in the Society’s evidence to the Roberts committee. However, it has two concerns:

- a. That the Funding Councils consult over the criterion based definitions to be used for the star ratings, and warns against the danger of equating fashionable science with high quality;
  - b. that proposed star ratings stop at the top half of the national quality research level; if necessary either one star should cover all national research quality, or a four-star system should be used.
- 11 The Society supports the recommendation that panels should explore the use that can be made of proxy measures in their own particular area. As has been observed by a number of commentators, in a few selected subjects the outcome of the RAE can be predicted almost exactly from Research Council or total research income, but generally this is not the case. The Society urges the Funding Councils to make funds available to panels to allow them to explore possible indicators of quality that can help inform the decisions in their areas. It believes that it may well be possible to develop in most if not all discipline groups a peer review supervised proxy-measure system in time for the next exercise but one.
- 12 Two other areas where the Society has concerns are:
  - with a six-year interval between RAEs, it is not convinced of the need for any mid-term review.
  - it is impractical to conduct the research competencies exercise, except on a very broad-brush way, on an institutional level. It believes that this should remain a responsibility of the individual panels.
- 13 The attached completed questionnaire represents the Society's views on the various recommendations, but should be read in the light of our view that there needs to be a fundamental review of the overall public funding arrangements.

*Please send any comments or enquires about this submission to:*

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Annex A

**Review of research assessment: response form**

**Please complete and return as a Word attachment to an e-mail, to responses@ra-review.ac.uk. The deadline for responses is 30 September 2003.**

Response by (name of person or organisation):...The Royal Society

Corporate response (representing the views of the group or organisation): Yes

Private response (representing the views of one or more individuals): No

Contact in case of queries:

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**Recommendation 1 (see paragraphs 113-116 of the review)**

Any system of research assessment designed to identify the best research must be based upon the judgement of experts who may, if they choose, employ performance indicators to inform their judgement.

Do you agree or disagree with recommendation 1? Place a cross beside the appropriate answer:

Strongly agree	X	
Agree		...
Neither agree nor disagree	...	
Disagree		...
Strongly disagree		...

Comments on recommendation 1:

The basis for the system of distributing non-project funds should be peer judgement.

Research assessment cannot be undertaken purely through formulaic use of performance indicators, as the relevance of these varies from discipline to discipline and even within a discipline. Nevertheless, suitable performance indicators appropriate for particular subject areas can inform peer judgement and identify issues that need further investigation. Indeed the Society believes that the Funding Councils should undertake a project to see if suitable proxy measures can be developed at a discipline level, which if overseen by a peer review panel may provide a satisfactory system that also significantly reduces the load on the universities for the next but one RQA. It will, however, be essential to consider the potential perverse incentives that might be created by such proxy measures.

**Recommendation 2 (see paragraphs 117-126 of the review)**

- a. There should be a six-year cycle.
- b. There should be a light-touch ‘mid-point monitoring’. This would be designed only to highlight significant changes in the volume of activity in each unit.
- c. The next assessment process should take place in 2007-8.

Do you agree or disagree with recommendation 2? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a		X			
Point b					X
Point c		X			

Comments on recommendation 2:

A six-year cycle, starting in 2007-08 would appear to be a satisfactory compromise.

On a six-year cycle a midyear review is unnecessary.

### Recommendation 3 (see paragraphs 127-133 of the review)

- a. There should be an institution-level assessment of research competences, undertaken approximately two years before the main assessment.
- b. The competences to be assessed should be institutional research strategy, development of researchers, equal opportunities, and dissemination beyond the peer group.
- c. An institution failing its assessment against any one of the competencies would be allowed to enter the next research assessment but would not receive funding on the basis of its performance in that assessment until it had demonstrated a satisfactory performance.

Do you agree or disagree with recommendation 3? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a					X
Point b				X	
Point c				X	

Comments on recommendation 3:

While it is important for universities to take these competencies seriously, it is unlikely that is best done at an institutional level, and could be handled as at present by individual panels.

**Recommendation 4 (see paragraphs 134-155 of the review)**

- a. There should, in principle, be a multi-track assessment enabling the intensiveness of the assessment activity (and potentially the degree of risk) to be proportionate to the likely benefit.
- b. The least research-intensive institutions should be considered separately from the remainder of the HE sector.
- c. The form of the assessment of the least research intensive institutions would be a matter for the relevant funding council.
- d. The less competitive work in the remainder of institutions should be assessed by proxy measures against a threshold standard.
- e. The most competitive work should be assessed using an expert review assessment similar to the old Research Assessment Exercise.

Do you agree or disagree with recommendation 4? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a				X	
Point b				X	
Point c				X	
Point d				X	
Point e			X		

Comments on recommendation 4:

While the motivation for recommendations 4 a-d (to reduce the burden of work for those institutions and departments that achieve only small amounts of funding for their research from this exercise) is commendable, opting for other arrangements should be optional.



**Recommendation 5 (see paragraphs 156-171 of the review)**

- a. The output of the Research Quality Assessment should be a ‘quality profile’ indicating the quantum of ‘one star’, ‘two star’ and ‘three star’ research in each submission. It will not be the role of the assessment to reduce this profile to summary metrics or grades.
- b. As a matter of principle, star ratings would not be given to named individuals, nor would the profile be published if the submission were sufficiently small that individual performance could be inferred from it.
- c. Panels would be given guidelines on expected proportions of three star, two star and one star ratings. These proportions should normally be the same for each unit of assessment. If a panel awarded grades which were more or less generous than anticipated in the guidelines, these grades would have to be confirmed through moderation.<sup>2</sup>

Do you agree or disagree with recommendation 5? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a		X			
Point b	X				
Point c			X		

Comments on recommendation 5:

The Society strongly supports the profiling arrangement, but is concerned that the definitions of the various star ratings equate to criterion based quality judgements, rather than just fashion. Furthermore, it is concerned at the cut-off point mid way down “national” quality. Either one star should include all of the “national” category or there should be a 4 star system.

The question of anonymity is crucial to acceptance of this arrangement.

Moderation is important, but probably less so than with the current arrangements.

<sup>2</sup> This consultation question reflects an edited version of recommendation 5. The recommendation in the review report also states that ‘the funding councils should provide institutions with details of the relative value, in funding terms, of one star, two star, and three star research, and of research fundable through the Research Capacity Assessment in advance of the assessment. These ratios might vary between disciplines.’ In the event that the review recommendations are accepted, each funding council will develop its own policies for reflecting the assessment results in funding, taking proper account of Sir Gareth’s recommendation.

**Recommendation 6 (see paragraphs 172-197 of the review)**

- a. There should be between 20 and 25 units of assessment panels supported by around 60 sub-panels. Panels and sub-panels should be supported by colleges of assessors with experience of working in designated multidisciplinary ‘thematic’ areas.
- b. Each panel should have a chair and a moderator. The role of the moderator would be to ensure consistency of practice across the sub-panels within the unit of assessment.
- c. Each panel should include a number of non-UK based researchers with experience of the UK research system.
- d. The moderators of adjacent panels should meet in five or six ‘super-panels’ whose role would be to ensure consistency of practice between panels. These ‘super-panels’ should be chaired by senior moderators who would be individuals with extensive experience in research.

Do you agree or disagree with recommendation 6? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a				X	
Point b			X		
Point c			X		
Point d			X		

Comments on recommendation 6:

We are concerned over the complexity of the three tier system and believe that the overall number and balance between panels and sub-panels needs further consideration.

With the present overly selective funding in England and the problematical mapping onto research ratings, much better consistency across panels was required. It is impossible to justify the present huge difference in funding between 4 and 5 rated departments. The problem of consistency would be less with the “star” profiling system

Other important issues are the need to ensure that panels can handle satisfactorily:

- Equality of opportunity
- Interdisciplinary and inter-institutional research

**Recommendation 7 (see paragraphs 198-204 of the review)**

- a. The rule that each researcher may only submit up to four items of research output should be abolished. Research Quality Assessment panels should have the freedom to define their own limits on the number and/or size of research outputs associated with each researcher or group.
- b. Research Quality Assessment panels should ensure that their criteria statements enable them to guarantee that practice-based and applicable research are assessed according to criteria which reflect the characteristics of excellence in those types of research in those disciplines.

Do you agree or disagree with recommendation 7? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a			X		
Point b	X				

Comments on recommendation 7:

While panels should be free to determine the research output, the Society believes that if the maximum number of items of research output is raised for certain disciplines, it is important to emphasise the need to be concerned with quality rather than quantity.

The Society agrees that practice based and applicable research must be properly assessed using appropriate benchmarks, and is concerned that it is not always easy to identify “international” quality work for such research eg in engineering and clinical research.

**Recommendation 8 (see paragraphs 205-213 of the review)**

- a. The funding councils should work alongside the subject communities and the research councils to develop discipline-specific performance indicators.
- b. Performance against these indicators should be calculated a year prior to the exercise, and institutions advised of their performance relative to other institutions.
- c. The weight placed upon these indicators as well as their nature should be allowed to vary between panels.

Do you agree or disagree with recommendation 8? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a			X		
Point b			X		
Point c			X		

Comments on recommendation 8:

We believe that looking for performance indicators is an important exercise that requires significant resources from the Funding Councils and should be brought within the RQA. The appropriate indicators will vary from discipline to discipline as will the weightings given to common ones, and the Funding Councils should undertake a major exercise to see whether discipline based measures overseen by peer review bodies might be the main method of determining quality in the RQA next but one.

As with all performance indicators it is important that they do not become the drivers for perverse incentives.

**Recommendation 9 (see paragraphs 214-234 of the review)**

- a. Where an institution submits to Research Quality Assessment in a sub-unit of assessment all staff in that sub-unit should become ineligible for the Research Capacity Assessment, even if they are not included in the Research Quality Assessment submission.
- b. The funding councils should establish and promote a facility for work to be submitted as the output of a group rather than an individual where appropriate.
- c. The funding councils should consider what measures could be taken to make joint submission more straightforward for institutions.
- d. Where an institution submits a sub-unit of assessment for Research Quality Assessment, no fewer than 80% of the qualified staff contracted to undertake research within the sub-unit of assessment must be included in the submission.
- e. All staff eligible to apply for grants from the research councils should be eligible for submission to Research Quality Assessment.

Do you agree or disagree with recommendation 9? Please indicate your views using the grid below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Point a			X		
Point b		X			
Point c		X			
Point d				X	
Point e		X			

Comments on recommendation 9:

As indicated above we are concerned about the two level approach, especially if certain institutions and departments in other institutions are automatically excluded.

On point d, the Society is not clear why any particular percentage of the department's staff should be chosen since, unlike the RAE, the results of the profiling system are independent of how many staff are entered who do not achieve a star rating. Indeed, one of its benefits is to remove the need to take invidious decisions on which staff should be excluded from the assessment.

**Recommendation 10 (see paragraphs 235-238 of the review)**

Each panel should consider a research strategy statement outlining the institution's plans for research at unit level.

Do you agree or disagree with recommendation 10? Place a cross beside the appropriate answer:

- |                            |     |
|----------------------------|-----|
| Strongly agree             | ... |
| Agree                      | ... |
| Neither agree nor disagree | X   |
| Disagree                   | ... |
| Strongly disagree          | ... |

Comments on recommendation 10:

The connection of this with the Research Competency Assessment needs to be clarified. There is a danger that too detailed a research strategy can stifle innovation.

### Question 11 Burden for institutions

The review proposals have been designed to make the burden of assessment proportionate with the possibility of financial reward. Do you agree that this has been achieved? Place a cross by the appropriate answer:

Strongly agree	...
Agree	...
Neither agree nor disagree	...
Disagree	X
Strongly disagree	...

Comments on question 11 – burden for institutions:

We have reservations as expressed in our cover sheet and in the answers to previous questions over the way that a multi-track system would operate and over the compulsory exclusion of institutions.

## Question 12 Value of research assessment

What value do you place on the research assessment if the financial reward is likely to be small? Place a cross by the appropriate answer:

High	...
Medium	...
Low	...

Comments on question 12 – value of research assessment:

Presumably the question is directed to higher education institutions, but clearly the cost of the exercise should be commensurate with the financial reward at stake. However, whether to enter the RQA should be at the institution's discretion.



### Question 13 Equality of opportunity for all groups of staff

The funding councils wish to promote equality of opportunity for all staff regardless of age, sexual orientation, political belief, disability, gender, race or religion and seek to ensure that its research assessment policies are compatible with this objective. How successful do you consider that the proposals of the research assessment review are in this respect? Place a cross by the appropriate answer:

Very successful	...
Successful	...
Neither successful nor unsuccessful	X
Unsuccessful	...
Very unsuccessful	...

Comments on question 13 – equality of opportunity for all groups of staff:

Each panel should be charged with ensuring equal opportunity and to submit a report upwards.

## Question 14 Overall approach of the review

Notwithstanding your views on any specific recommendations, and given the responses to the earlier ‘Invitation to contribute’, do you agree or disagree with the broad approach taken by the review to the question of research assessment? Place a cross by the appropriate answer:

Strongly agree	...
Agree	...
Neither agree nor disagree	...
Disagree	X
Strongly disagree	...

Comments on question 14 – overall approach of the review:

Our major reservations as set out in the previous answers are:

- The Society believes that the time has come for a fundamental review of the funding of publicly funded university research
- The proposed arrangements may increase rather than decrease the burden on universities
- Whether there is any need for a mid term review as part of an RAE
- The separation of research competencies from the exercise to determine research quality.
- If there is to be a multi-track approach, the choice of route should be at the discretion of the institution
- The panel system proposed appears to be overly complex.

The proposed star rating system would remove some of the problems with the present RAE, but it should not itself be used to increase selectivity, and so should accommodate all national quality research.

## Question 15 Further comments

Question 15 – any further comments:

**Members of the Royal Society's Working Group on the Future Development of Universities**

Established to advise the Society's Council on the recent White Paper on the future of higher education and the expected subsequent range of related reports.

<i>Professor John Enderby CBE FRS (Chair)</i>	<i>Vice-President and Physical Secretary of the Royal Society</i>
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<i>Professor George Kalmus CBE FRS</i>	<i>Rutherford Appleton Laboratory</i>
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<i>Professor Roger Waterhouse</i>	<i>Vice-Chancellor, University of Derby</i>
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