

The Institution of Environmental Sciences

Response to Consultation on Draft Criteria RAE 4/99

UoA 21 Environmental Sciences as part of the Joint Earth Sciences and Environmental Sciences panel (UoA 20 and 21).

Umbrella Panel Physical Sciences and Engineering

The following comments relate to the numerated paragraph of the published panel criteria for the joint panel covering UoA 20 and 21.

UoA Descriptor

2.14.1. It is very disappointing to find that the UoA descriptor is dominated by earth science considerations with a relatively short list of environmental science descriptors. The environmental science descriptors do, however, identify components of the natural environment (i.e. terrestrial, aquatic or atmospheric environments) and allow consideration of their polluted state. This approach is welcomed. It is extremely disappointing to see no public acknowledgement in the UoA descriptor that the panel will consider as part of its deliberations the broad area of environmental policy, assessment and management that contributes to, and underpins, the application of environmental science research. Paragraph 2.14.6 stresses the importance of interdisciplinary work (which should include *inter alia* environmental policy and management issues) but the absence of a strong statement in the descriptor is most unwelcome.

It is also of concern that environmental science is listed as a descriptor for UoA 35, Geography. Very clear guidance is required on where Environmental Science is to be considered.

UoA Boundaries

2.14.2/3. It is pleasing to note that the panel intends to refer work to other panels. The panel needs to consider closely its relationship with UoA 35 and its inclusion of environmental science as a descriptor. There is an urgent need for this issue to be clarified for the environmental science research community.

Sub Panels

2.14.4/5. The panel's intention to have a sub-panel in environmental biology and pollution is welcomed. This could usefully be extended to the issues referred to above in 2.14.1. The terms of reference for this panel and the contribution of members of this panel to the working methods and decision making process outlined in 2.14.25 -32 will need to be made known to the environmental science community.

Interdisciplinary Research

2.14.6. The panel's recognition that it will need to call upon the expertise of other panels (Geography, Biology, and Chemistry) when it considers some elements of the submissions it will receive is welcomed. This approach will work well with submissions that are structured to offer an interdisciplinary approach. However, such submissions will contain strong elements of environmental policy, risk, management and assessment. Clearly, some of this can be referred to other panels but it would be sensible to make an explicit statement that this UoA will consider such material just as it did in the 1996 assessment. It is also important that the panels (UoA 35/18 and 14) consider and make public their approach to such referrals.

2.14.7 No comment.

Treatment of Evidence

2.14.8. This clear statement is welcomed and in particular it is pleasing to see that evidence of vitality and a strong research culture will be a key criterion.

2.14.9-12. The criteria outlined are welcomed. It is particularly pleasing to note that the panel intends to give full recognition to work of direct relevance to commerce and industry and will accept a significant proportion of work disseminated through media such as patents and government reports. The panel's clear statement that, above all, else it will seek to judge the intrinsic quality of submitted work is welcomed.

Research Students and Studentships

2.14.13-14. The approach is welcomed.

External Research Income

2.14.15 - 17. The panel's approach is welcomed and in particular the position outlined in 2.14.17 regarding RA6, income and research excellence is supported.

Research Plans and General Observations

2.14.18 - 24. The wish of the panel to see evidence of focussed research programmes, recognition of the role of individual scholars and the clear statement that artificial groupings of staff in delineated research areas will secure no advantage are all welcomed. The comments at 2.14.21 regarding continuity in developments in research plans from 1996 are pertinent but also acknowledge that there will be new entrants into this UoA in 2001. It would be helpful for the panel to be explicit about how it will consider the case of a new entrant into the UoA. The approach of the panel in considering indicators of peer esteem and the development of younger staff is welcomed.

Working Methods

2.14.25- 31 The key criterion of staff returned undertaking excellent work as judged by national and international comparisons is welcomed. The approach set out in 2.14. 26 - 28 is supported and the clarity of the working method set out in 2.14.29 a-d and 2.14.30 is particularly welcomed and supported. The criteria for judging the international quality of works submitted are acknowledged as qualitative but provide a clear basis upon which judgements may be made. The emphasis placed upon international medals and other honours is, however, surprising.

2.14.32 The use of a number of experts of international standing to inform the panel's deliberations may be useful but a clear statement of their role and responsibility will be required.

Summary and Conclusion

In conclusion the broad thrust of the panel's approach is welcomed and supported. There are however, several areas of concern.

The inclusion of environmental science as a descriptor in UoA 35.
The most appropriate location for works in the area of environmental policy/management/risk/assessment.

The absence of terms of reference for the proposed sub-panel and the experts of international standing.