REF 01.2010
July 2010

Nominations for panel members should be completed online by 8 October 2010

Applications to be sub-panel chairs should be e-mailed by 17 September 2010

This document sets out the configuration, roles and responsibilities of main panels and sub-panels for the Research Excellence Framework, and invites associations and organisations with an interest in publicly funded research to nominate candidates for panel membership.

Units of assessment and recruitment of expert panels

REF2014
Research Excellence Framework

Units of assessment and recruitment of expert panels

To

Heads of publicly funded higher education institutions in the United Kingdom

Subject associations

Organisations with an interest in commissioning or using academic research including businesses, public sector bodies, charities and other third sector organisations

Of interest to those responsible for

Research

Reference

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Executive summary

Purpose and key points

1. This document sets out the funding bodies' decisions in relation to the following aspects of the 2014 Research Excellence Framework (REF):

- the configuration of units of assessment (UOAs) and grouping of sub-panels under main panels (see Annex A)
- the roles and responsibilities of main panels, sub-panels and their members in the assessment
- the criteria and process for recruiting panel chairs and members.

2. This document also:

- invites individuals to apply to become sub-panel chairs
- invites organisations and associations with an interest in research to nominate candidates to become panel members.

Action required

3. Subject associations and other organisations with an interest in research conducted by UK higher education institutions (HEIs) are invited to nominate candidates to be panel members. Nominations should be completed online at www.ref.ac.uk, **by 8 October 2010**.

4. Individuals wishing to apply to become sub-panel chairs should refer to the particulars available at www.ref.ac.uk. Applications are due by **17 September 2010**.

5. No action is required by HEIs.

Background

The Research Excellence Framework

6. The Research Excellence Framework (REF) is the new system for assessing research in UK higher education institutions (HEIs). It replaces the Research Assessment Exercise (RAE). The REF will be undertaken by the four UK higher education funding bodies, the Higher Education Funding Council for England (HEFCE), the Scottish Funding Council (SFC), the Higher Education Funding Council for Wales (HEFCW) and the Department for Employment and Learning, Northern Ireland (DEL). The exercise will be managed by the REF team based at HEFCE and overseen by the REF Steering Group, consisting of representatives of the four UK higher education funding bodies.

7. The REF will:

- inform the selective allocation of research funding to HEIs on the basis of excellence
- provide benchmarking information and reputational yardsticks
- provide accountability for public investment in research and demonstrate its benefits.

8. Through the REF, the UK funding bodies aim to develop and sustain a dynamic and internationally competitive research sector that makes a major contribution to economic prosperity, national wellbeing and the expansion and dissemination of knowledge.

9. The REF will be a process of expert review. Institutions will be invited to make submissions to 36 units of assessment (UOAs). The submissions will be assessed by an expert sub-panel to be established for each UOA, working under the guidance of four main panels to ensure common procedures and consistent application of the overall assessment standards.

10. Under our current plans for the REF, three distinct elements will be assessed for each submission: the quality of research outputs, the wider impact of research, and the vitality of the research environment. Output quality will be the dominant element, with a significant weighting for each of the other elements.

Timetable

11. The first REF exercise will be completed in 2014, to inform funding from 2015-16. The broad timetable for the REF is as follows:

2010	Appoint panels
2011	Publish assessment criteria
2013	Institutions make submissions
2014	Panels assess submissions; outcomes published

12. A detailed provisional timetable is at Annex A.

13. Further information about the REF is available at www.ref.ac.uk, including initial decisions on the assessment framework (HEFCE Circular letter 04/2010).

REF units of assessment and expert panels

14. Through 'Research Excellence Framework: Second consultation on the assessment and funding of research' (HEFCE 2009/38) we consulted on the configuration of panels, proposing there should be fewer, broader panels than in the 2008 RAE, operating with a greater degree of consistency. We invited views on a proposed configuration of 30 sub-panels and four main panels. Key points raised by responses in relation to these proposals were:

- broad support for rationalising the number of panels, primarily to enable greater consistency across the exercise, and to help reduce burden
- widespread support for continuing with a two-tier structure of sub-panels working under the guidance of the four proposed main panels
- concerns that some of the specific sub-panels we had proposed would lack coherence or would be too diverse (particularly in the humanities)
- a general concern to ensure that the expert panels would include sufficient breadth and depth of expertise to produce robust assessments and carry the confidence of the community
- queries about the extent to which 'multiple submissions' would be allowed.

15. Following the consultation we published initial decisions about the REF (HEFCE Circular letter 04/2010). In terms of the configuration, role and recruitment of expert panels, we announced that:

a. Institutions will be invited to make submissions, and the assessment will be undertaken, at the level of 30 to 40 UOAs. These UOAs would be finalised after further dialogue with key stakeholders in particular areas.

b. There will be a two-tier structure of panels; sub-panels will undertake the assessment for each UOA, working under the guidance of four main panels.

c. We would proceed to appoint Chairs Designate for the four main panels.

d. Multiple submissions (more than one submission by a single HEI to a particular UOA) would be allowed in exceptional circumstances.

Configuration of panels and units of assessment

16. We have now finalised the configuration of UOAs and panels, taking account of the consultation feedback as well as further dialogue with key stakeholders in particular areas where a consensus did not emerge through the consultation exercise. This is set out at Annex B.

17. The REF panels will develop descriptors of the scope and boundaries of each UOA, ensuring that all fields of research can be assessed within the collective scope of all the UOAs.

18. We will address the general concern to ensure sufficient breadth and depth of expertise on the panels, in our approach to the membership and working methods of panels. In particular:

a. Although there will be fewer panels than in the RAE, the average number of members per sub-panel will increase.

b. The number of members on each sub-panel will be more proportionate to the scale and diversity of the panel's remit.

c. Sub-panels will be invited to identify areas where additional expertise may be required to contribute to the assessment, and additional assessors will be recruited during the assessment phase to ensure that submitted research is assessed by people with the appropriate breadth and depth of expertise. (This is discussed further at paragraphs 37-41.)

Multiple submissions

19. A number of responses to the REF consultation queried the scope for HEIs to make more than one submission to a single UOA, in the context of the move to broader UOAs. Some respondents raised concerns about the visibility of distinct groups or areas of research covered by a single UOA, or felt that greater granularity in the outcomes would be useful for internal management purposes. Others argued there should be clear constraints on making multiple submissions, otherwise this could undermine the benefits of rationalising the panel structure.

20. Having considered the arguments, we will develop arrangements to allow multiple submissions to the REF in exceptional circumstances. We will consult the expert panels and develop clear criteria to permit multiple submissions where the research covered by each submission is academically distinct, undertaken by separate research units and meets a size threshold. Other exceptional circumstances may also apply, for example where an institution makes its own submission to a particular UOA as well as a joint submission, with another HEI, to that UOA. Requests to make multiple submissions will need the approval of the REF manager, who will take advice from the panels concerned.

21. Notwithstanding the arrangements for multiple submissions, given the move to fewer UOAs we expect that overall there will be a significantly smaller number of discrete submissions to the 2014 REF than to the last RAE.

Interdisciplinary research

22. We aim to encourage the submission of interdisciplinary research and ensure it is assessed fairly by people with appropriate expertise. The broader sub-panels and main panels will help enable this, and we aim to include specific interdisciplinary expertise on sub-panels. Cross-panel membership will be encouraged in cases where there are strong connections across panels, and cross-referral mechanisms will also allow material submitted to a UOA to be assessed by members on a different panel.

Roles and responsibilities of panels

23. The panels will work within a generic framework to develop the assessment criteria and to conduct the assessments. In developing detailed guidance and criteria for the assessment, our starting point is that the approach should be consistent across the exercise, unless there are justifiable reasons for main or sub-panels to vary the approach in specific areas. Initially we will consult the panels to identify those aspects of the criteria and procedures that should be common across the framework, and those specific aspects that should be determined by the main panels and sub-panels.

24. The panels will then carry out two phases of work:

a. During 2011: To define in detail those aspects of the criteria and working methods that are specific to the panels.

b. From late 2013 to late 2014: To assess submissions and deliver the assessment outcomes.

Role of a main panel

25. Each main panel will provide leadership and guidance to a group of sub-panels. In particular, the role of a main panel is:

- to produce a document setting out the criteria and working methods for the group of sub-panels under its remit. In doing so, the main panel will ensure:
  - the criteria and working methods adhere to the overall assessment framework
  - the criteria and working methods are as consistent as far as possible across the sub-panels within each main panel's remit, and vary between the sub-panels only where justified to the REF Steering Group
  - the academic community has been consulted effectively when developing the criteria and working methods
  - other appropriate stakeholders have been consulted, particularly when developing criteria relating to the assessment of impact. This includes stakeholders from the private, public and third sectors who are informed by, make use of or benefit from academic research in the disciplines covered by the panel.
- to work with the sub-panels during the assessment period to ensure adherence to the criteria, working methods and equal opportunities guidance
- to work with the sub-panels during the assessment period to calibrate the assessment standards between sub-panels and ensure the consistent application across the framework of the overall assessment standards
- to sign off the assessment outcomes for all submissions made to the sub-panels, based on the work and advice of the sub-panels
- to give advice as requested by the REF team and funding bodies on aspects of the assessment process
- to produce a final report on the state of research in the disciplines covered by the sub-panels and its wider benefits.

26. In signing off the assessment outcomes, the main panel will confirm that it has worked with the relevant sub-panels to ensure the sub-panels have adopted reasonable and consistent approaches to the assessment of all forms of research, including basic, applied, practice-based and interdisciplinary research; and that each sub-panel has applied the quality thresholds for the exercise to a consistent standard.

27. Final responsibility for the effective conduct of the assessment process for the REF lies with the funding bodies' chief executives (or equivalent). Decisions about academic judgements in the assessment will remain the responsibility of the panels. The main panels will report their progress in reaching assessment outcomes to the four UK higher education funding bodies; and will report the final outcomes to the funding bodies at the conclusion of their assessment. In the event of any dispute about the assessment process that cannot be resolved within the main panel, the decision of the UK funding bodies will be final.

Role of a sub-panel

28. The role of a sub-panel is:

a. To consult on and contribute to the criteria and working methods of the group of sub-panels within a main panel, and develop any necessary criteria and working methods specific to the individual sub-panel, for approval by the main panel.

b. To work within the agreed criteria and methods, and under the guidance of the main panel, to assess submissions.

c. To advise the main panel and REF team on cross-referrals to other sub-panels of submitted material and any need for additional expertise required to assess submissions.

d. To produce draft assessment outcomes for each submission to be recommended for sign off by the main panel, and associated concise feedback for submissions.

29. We intend that the working relationship between a main panel and its sub-panels be close and collaborative, with sub-panels developing their criteria collectively as far as possible within a main panel, and each sub-panel assessing submissions through an iterative process in dialogue with the main panel. Main and sub-panel meetings will be timed to enable such iteration, and the main panel chair and additional members will be expected to attend a range of sub-panel meetings.

30. Sub-panels will be assisted where appropriate by additional expert assessors, in assessing submissions (role b. above). The role of assessors is explained further in paragraphs 37-41 below.

Composition and recruitment of panels

Main panel composition

31. Each main panel will be made up of:

- the chair
- the chairs of each sub-panel under its remit
- additional members with international expertise
- additional members with expertise in the use, application and wider benefits of research.

32. We have appointed Chairs Designate for the four main panels, through an open process of application. Their role initially is to advise the REF team in the further development and planning of the REF. Once the panels are in place they will take up their roles in chairing and providing leadership to the main panels. Further details of the main panel Chairs Designate can be found at www.ref.ac.uk.

33. We are seeking nominations for additional members of main panels with the following expertise:

a. Experience of leading research internationally, and expert knowledge of international research across more than one sub-panel covered by the main panel. This should include substantial experience of leading research in at least one country outside the UK. Such 'international' members should be people whose judgement is likely to command the respect of the higher education community across a range of disciplines. International members will be asked to contribute especially to the development of main panel criteria that reflect international standards, and to provide assurance during the assessment phase that sub-panels adhere to internationally referenced standards. We envisage that this will involve active participation during panels' initial calibration exercises, and attendance at a range of sub-panel meetings during the assessment phase.

b. Individuals with senior-level experience in the private, public or third sectors of commissioning, benefitting from, applying or making use of research from a range of disciplines covered by the main panel. Candidates should be people whose judgement is likely to command the respect of the higher education community as well as external stakeholders. Main panel members with expertise in the use and wider benefits of research will be asked especially to contribute to and provide assurance about the criteria and procedures relating to the assessment of research impact.

34. We may invite observers from key stakeholder groups to attend main panel meetings. Observers may provide informal advice to panels but will not share their responsibility for determining criteria or assessment outcomes. The UK funding bodies' chief executives (or equivalent) will decide which groups will be invited to send an observer.

Sub-panel composition

35. Each sub-panel will be made up of:

- the chair
- members (normally between 10 and 30, depending on the scale and breadth of the panel's remit)

36. Sub-panel members will predominantly be practicing researchers of suitable personal standing who collectively have an appropriate breadth of research expertise and carry the confidence of the community. Sub-panels should normally also include members from the private, public or third sectors with expertise in commissioning, applying or making use of research.

Assessors

37. For the assessment phase of the exercise, we expect to appoint additional experts to assist the work of the sub-panels in assessing submissions, to ensure the panels have sufficient breadth and depth of expertise for this task. In the lead-up to

the assessment phase, sub-panels will be invited to identify and advise on the need for additional assessors. Assessors are expected to have the following expertise:

a. Those with professional experience of making use of, applying or benefitting from academic research, to contribute in particular to the assessment of those elements of submissions relating to the impact of research. (Details of the way in which panels will assess impact will be determined after the conclusion of the REF impact pilot exercise. We aim to define an approach that can effectively involve a range of research users and beneficiaries in assessing impacts, while focusing their efforts on this task and minimising the time they are asked to commit in reviewing material and attending meetings.)

b. Practicing researchers with specific expertise, to contribute in particular to the assessment of outputs. This will enable the sub-panels to ensure that outputs are assessed by experts with the appropriate breadth of expertise, and that the workload of assessing potentially large volumes of outputs can be spread across a sufficient number of people. Significant numbers of assessors may be recruited in particular to work with those panels with very large and diverse remits. Assessors may also be recruited with specialist expertise in interdisciplinary research or research in the pedagogy of the discipline.

38. The role of assessors will be to contribute to the assessment of particular aspects of submissions as requested by the sub-panel. During the assessment phase they will be expected to attend initial meetings for briefing and to calibrate their standards of assessment with the sub-panel, and to attend meetings where the material they have assessed is to be discussed. Assessors will thus make a full contribution to the assessment of specific aspects of submissions; the sub-panel members will retain responsibility for producing the draft assessment outcomes for each submission as a whole and for recommending these to the main panel.

39. While the focus of their role will be to assess either outputs or impacts, assessors may also consider the information submitted about the research environment to help inform their assessments, and may be asked by panels to contribute to the assessment of environment.

40. As with sub-panel members, individual assessors may work with more than one sub-panel, for example those assessors with inter- or multi-disciplinary expertise; or with expertise in the use or benefits of research that is relevant across sub-panel boundaries.

41. In the 2008 RAE, we appointed a number of specialist advisors. Given that assessors in the REF will broaden the expertise of panels they take part in, we do not intend to make use of specialist advisors in the REF. Where a body of work in a specialist area is submitted to a panel that does not include the relevant expertise, the panel will be asked to identify and work with assessors rather than seek advice from specialists who are less integrated with the panel's work.

Recruitment of sub-panel chairs

42. The UK funding bodies invite individuals to apply for the roles of sub-panel chair. Details of how to apply, a job description and criteria for appointment are on the web at www.ref.ac.uk. The deadline for applications is **17 September 2010**.

43. Note that individuals applying to become sub-panel chairs are asked to include statements of endorsement by subject associations and/or other organisations that demonstrate the individual's standing in the community. Subject associations and other organisations are therefore asked to provide such statements to the individuals concerned to form part of their applications, rather than to contact the REF team directly to endorse candidates. Subject associations may if they wish endorse more than one candidate.

44. Sub-panel chairs will be appointed by the chief executives (or equivalent) of the UK higher education funding bodies after taking advice from the Main Panel Chairs Designate.

Recruitment of panel members and assessors

45. Following the recent consultation (HEFCE 2009/38) we have identified a list of 1,950 nominating bodies[1]: academic associations and other bodies with an interest in research and in nominating candidates to be REF panel members. We are now contacting each of them directly to invite them to nominate candidates to be:

- additional main panel members
- sub-panel members
- assessors.

[1] A list of these nominating bodies is available on the web at www.ref.ac.uk

46. However, any other association or organisation with a clear interest in the conduct, quality, funding or wider benefits of publicly funded research – except for mission groups, individual UK HEIs and groups within or subsidiaries of individual UK HEIs – may also make nominations; this document invites any such body to make nominations.

47. All nominations should be made by completing the online form at www.ref.ac.uk by **8 October 2010**.

48. It is highly desirable that individuals who are nominated confirm that they are willing and able to serve. We ask nominating bodies to inform nominees that their names have been put forward, and to ensure that they are aware of the provisional timetable and workload implications (see Annex A).

49. Where nominees know in advance that they will not be available to sit on REF panels, we urge them to contact the REF team and ask to be withdrawn from consideration. E-mails to this effect should be sent to info@ref.ac.uk.

50. In general we expect that candidates nominated to be members would also be considered as potential assessors. Nevertheless we expect during 2013 to seek further nominations for assessors, especially those with expertise in the use or benefits of research across the private, public and third sectors. During 2013 we may also invite specific bodies to make further nominations for assessors with specific research expertise required by panels.

Criteria for appointing panels

51. All main and sub-panel chairs, members and assessors will be appointed by the chief executives (or equivalent) of the four UK higher education funding bodies.

52. Additional main panel members will be appointed during 2010 after considering nominations received and taking advice from the main panel chairs.

53. Sub-panel members will be appointed during 2010 after taking advice from the sub-panel chair in each case, and in discussion with the main panel chairs.

54. Assessors will be appointed after taking advice from the sub-panels, during 2013.

55. The criteria for appointing sub-panels and assessors are as follows:

a. Each sub-panel should include expertise across the main fields of research within the UOA, and its membership should collectively command the respect of the relevant research and wider communities.

b. The sub-panel members and additional assessors should provide sufficient breadth and depth of expertise to undertake the assessment across the sub-panel's remit (including as appropriate expertise in interdisciplinary research and expertise in the wider use or benefits of research).

c. Sub-panels will be composed predominantly of practicing researchers, and should normally include individuals with expertise in the use or benefits of research.

d. Sub-panel members and assessors will be appointed on the basis of their personal experience and expertise, not as representatives of any group or interest.

e. There should be an appropriate degree of continuity in the sub-panel's membership from previous assessment exercises. Where possible at least a third of the members of the sub-panel will have RAE panel experience; and at least a third will not have served on RAE panels.

f. The diversity of the research community in the relevant fields should be reflected in the sub-panel membership.

56. In deciding the sub-panel membership the funding bodies will have regard to the desirability of ensuring that the overall body of members reflects the diversity of the research community, including in terms of age, gender, ethnic origin, scope and focus of their home institution, and geographical location. The REF Equalities and Diversity Advisory Group will monitor the diversity of the panel membership[2].

57. The panel membership will be published in December 2010.

58. As the REF progresses, main panels or sub-panels may recommend to the funding bodies the appointment of a small number of members or assessors in addition to those appointed through the processes outlined above, to provide further expertise where this is necessary and in accordance with the above criteria. Where a candidate with the appropriate expertise has not been nominated, the main or sub-panel may recommend that the funding bodies seek further nominations from the appropriate body or co-opt a member or assessor whose expertise is known to the panel. The funding bodies will co-opt no more than a small proportion of each panel's members and assessors.

[2] Further details about the REF Equalities and Diversity Advisory Group are available at www.ref.ac.uk.

Annex A

Provisional timetable and workload for panels

1. The provisional timetable for the 2014 REF is as follows:

July 2010	Main Panel Chairs Designate appointed Announce panel structure and start recruitment of expert panels
17 September 2010	Deadline for applications for sub-panel chairs
8 October 2010	Deadline for nominating panel members
October 2010	Sub-panel chairs appointed
November 2010	Reports from the impact pilot exercise
December 2010	Panel members appointed
Early 2011	Panels begin meeting
Mid 2011	Guidance on submissions published
Mid 2011	Panels consult on criteria
Late 2011	Panel criteria and methods published
Early 2013	Submission system operational
Mid- to late 2013	Panels meet to prepare for the assessment Further nominations sought and assessors appointed
Late 2013	Submissions deadline
2014	Panels assess submissions
December 2014	Outcomes published

2. The workload implications for panellists are as follows:

a. During 2011 (the criteria setting phase) each main and sub-panel will meet three or four times to develop and finalise the criteria and working methods. Panellists will also be involved in consulting stakeholders about these through their routine contacts and attending meetings of subject associations or other stakeholder groups. Each panel may also organise a meeting or event specifically to consult on developing the impact criteria and to ensure appropriate input into these by research users, beneficiaries and audiences.

b. During the second half of 2013 we anticipate each main and sub-panel will meet three times to prepare for the assessment, consider institutions' submission intentions and the need for additional assessors, and to undertake initial calibration exercises.

c. During 2014 (the assessment phase) we anticipate that each main panel will meet around six times and each sub-panel around eight times to assess submissions. Some of the sub-panel meetings during this phase may be held over several days each, involving staying away overnight. In preparation for meetings during this phase, sub-panel members will be expected to review a range of submitted material. This will involve a substantial workload for individual members, especially in reviewing outputs[3].

3. Panel members will be expected to attend meetings throughout the process. Assessors will be expected to attend initial briefing meetings in late 2013, and those meetings during 2014 at which the material they have reviewed is to be discussed. Further details about the workload for assessors with expertise in the use and benefits of research will be provided when seeking further nominations for these assessors during 2013.

4. We intend that the workload of sub-panels be more evenly distributed across panels than it had been in the 2008 RAE, by making the number of members appointed to each panel more proportionate to the scale and scope of the panel's remit, and allowing for the recruitment of additional expert assessors for the assessment phase.

[3] Within the overall assessment framework, panels will have some discretion to develop their working methods, and these will impact on panel members' workloads. Panels will have some discretion to determine what proportion of submitted outputs they will review in detail, will consider the extent to which citation information in some disciplines will inform their assessment of outputs, and will be invited to develop clear criteria for 'double weighting' outputs of exceptional scale and scope.

5. Main and sub-panel members and assessors will be paid an attendance fee of £200 per day for the meetings they attend, and an additional fee in recognition of preparatory work for the assessment, to be determined. Reasonable travelling and subsistence expenses for meetings will be reimbursed.

6. Main panels and sub-panels will be supported by panel advisers and panel secretaries, who will assist panels in planning and managing their work; co-ordinate the schedule of meetings; provide guidance and advice on the rules and procedures; prepare agendas, relevant papers, reports and feedback; and record the discussions and assessment outcomes. The panel advisers will also report the progress of the main and sub-panel's work to the REF team. Panel advisers and secretaries will be seconded from HEIs or other organisations involved in the funding, management or conduct of research.

Annex B

REF 2014 Units of assessment and panel configuration

Main panel		REF unit of assessment	Broad coverage, in relation to 2008 RAE sub-panels
A	1	Clinical Medicine	Sub-panels 1-5 (Cardiovascular Medicine; Cancer Studies; Infection and Immunology; Other Hospital Based Clinical Subjects; Other Laboratory Based Clinical Subjects) which received a total of 3,568 full-time equivalents (FTE) and 15,420 outputs.
	2	Public Health, Health Services and Primary Care	Sub-panels 6-8 (Epidemiology and Public Health; Health Services Research; Primary Care and Other Community Based Clinical Subjects) which received a total of 1,202 FTE and 5,309 outputs.
	3	Allied Health Professions, Dentistry, Nursing and Pharmacy	Sub-panels 10-13 (Dentistry; Nursing and Midwifery; Allied Health Professions and Studies; Pharmacy) which received a total of 2,939 FTE and 12,598 outputs.
	4	Psychology, Psychiatry and Neuroscience	Sub-panels 9 and 44 (Psychiatry, Neuroscience and Clinical Psychology; Psychology) which received a total of 2,440 FTE and 10,143 outputs.
	5	Biological Sciences	Sub-panels 14 and 15 (Biological Sciences; Pre-clinical and Human Biological Sciences) which received a total of 2,938 FTE and 12,245 outputs.
	6	Agriculture, Veterinary and Food Science	Sub-panel 16 (Agriculture, Veterinary and Food Science) which received 1,016 FTE and 4,203 outputs.

Main panel		REF unit of assessment	Broad coverage, in relation to 2008 RAE sub-panels
B	7	Earth Systems and Environmental Sciences	Sub-panel 17 (Earth Systems and Environmental Sciences) which received 1,179 FTE and 5,091 outputs.
	8	Chemistry	Sub-panel 18 (Chemistry) which received 1,151 FTE and 4,930 outputs.
	9	Physics	Sub-panel 19 (Physics) which received 1,686 FTE and 7,156 outputs.
	10	Mathematical Sciences	Sub-panels 20-22 (Pure Mathematics; Applied Mathematics; Statistics and Operational Research) which received a total of 1,933 FTE and 7,707 outputs.
	11	Computer Science and Informatics	Sub-panel 23 (Computer Science and Informatics) which received 1,846 FTE and 7,519 outputs.
	12	Aeronautical, Mechanical, Chemical and Manufacturing Engineering	Sub-panels 26 and 28 (Chemical Engineering; Mechanical, Aeronautical and Manufacturing Engineering) which received a total of 1,274 FTE and 5,222 outputs.
	13	Electrical and Electronic Engineering, Metallurgy and Materials	Sub-panels 24 and 29 (Electrical and Electronic Engineering; Metallurgy and Materials) which received a total of 1,217 FTE and 4,965 outputs.
	14	Civil and Construction Engineering	Sub-panel 27 (Civil Engineering) which received 513 FTE and 2,066 outputs.
	15	General Engineering	Sub-panel 25 (General Engineering and Mineral & Mining Engineering) which received 1,455 FTE and 6,041 outputs.

Main panel		REF unit of assessment	Broad coverage, in relation to 2008 RAE sub-panels
C	16	Architecture, Built Environment and Planning	Sub-panels 30 and 31 (Architecture and the Built Environment; Town and Country Planning) which received a total of 1,035 FTE and 4,373 outputs.
	17	Geography, Environmental Studies and Archaeology	Sub-panels 32 and 33 (Geography and Environmental Studies; Archaeology) which received a total of 1,631 FTE and 6,737 outputs.
	18	Economics and Econometrics	Sub-panel 34 (Economics and Econometrics) which received a total of 839 FTE and 3,037 outputs.
	19	Business and Management Studies	Sub-panels 35 and 36 (Accounting and Finance; Business and Management Studies) which received a total of 3,501 FTE and 13,159 outputs.
	20	Law	Sub-panel 38 (Law) which received 1,673 FTE and 6,264 outputs.
	21	Politics and International Studies	Sub-panel 39 (Politics and International Studies) which received 1,269 FTE and 4,714 outputs.
	22	Social Work and Social Policy	Sub-panel 40 (Social Work and Social Policy & Administration) which received 1,244 FTE and 5,271 outputs.
	23	Sociology	Sub-panel 41 (Sociology) which received 929 FTE and 3,733 outputs.
	24	Anthropology and Development Studies	Sub-panels 42 and 43 (Anthropology; Development Studies) which received a total of 528 FTE and 2,069 outputs.
	25	Education	Sub-panel 45 (Education) which received 1,697 FTE and 7,154 outputs.
	26	Sports-Related Studies	Sub-panel 46 (Sports-Related Studies) which received 500 FTE and 2,015 outputs.

Main panel		REF unit of assessment	Broad coverage, in relation to 2008 RAE sub-panels
D	27	Area Studies	Sub-panels 47-50 (American Studies and Anglophone Area Studies; Middle Eastern and African Studies; Asian Studies; European Studies) which received a total of 828 FTE and 3,425 outputs.
	28	Modern Languages	Sub-panels 51-56 and 58 (Russian, Slavonic and East European Languages; French; German, Dutch and Scandinavian Languages; Italian; Iberian and Latin American Languages; Celtic Studies; Linguistics) which received a total of 1,478 FTE and 5,795 outputs.
	29	English Language and Literature	Sub-panel 57 (English Language and Literature) which received 1,853 FTE and 7,468 outputs.
	30	History	Sub-panel 62 (History) which received 1,763 FTE and 6,960 outputs.
	31	Classics	Sub-panel 59 (Classics, Ancient History, Byzantine and Modern Greek Studies) which received 415 FTE and 1,657 outputs.
	32	Philosophy	Sub-panel 60 (Philosophy) which received 577 FTE and 2,155 outputs.
	33	Theology and Religious Studies	Sub-panel 61 (Theology, Divinity and Religious Studies) which received 472 FTE and 1,992 outputs.
	34	Art and Design: History, Practice and Theory	Sub-panels 63 and 64 (Art and Design; History of Art, Architecture and Design) which received a total of 2,036 FTE and 9,335 outputs.
	35	Music, Drama, Dance and Performing Arts	Sub-panels 65 and 67 (Drama, Dance and Performing Arts; Music) which received a total of 1,005 FTE and 4,342 outputs.
	36	Communication, Cultural and Media Studies, Library and Information Management	Sub-panels 37 and 66 (Library and Information Management; Communication, Cultural and Media Studies) which received a total of 845 FTE and 3,387 outputs.

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