

Research Excellence Framework

Assessment framework

Guidance on submissions

Panel criteria

Purpose

- Research funding allocation (£2 billion per year)
- Accountability for public funding of research
- Demonstration of benefits
- Benchmarks and reputational yardsticks

Timetable

2011

- Panels appointed (Feb)
- **Guidance on submissions published (Jul)**
- Draft panel criteria for consultation (Jul)
- Close of consultation (5 Oct)

2012

- **Panel criteria published (Jan)**
- HEIs submit codes of practice (by Jul)
- Pilot of submissions system (Sep)
- HEIs may request multiple submissions (by Dec)
- Survey of HEIs' submission intentions (Dec)

2013

- Launch REF submissions system (Jan)
- Additional assessors appointed to panels
- Staff census date (31 Oct)
- **Submissions deadline (29 Nov)**

2014

- Panels assess submissions
- **Publish outcomes (Dec)**

Information and Guidance

- **Assessment framework and guidance on submissions (July 2011):**
 - Sets out the information required in submissions and the definitions used
- **Panel criteria and working methods (Jan 2012):**
 - Sets out how panels will assess submissions
 - Refined following consultation in 2011

The above documents set out the official guidelines for the REF. These slides provide a summary of key points but do not provide or replace the official guidelines.

Submissions

- Staff details (REF1a/b/c)
- Research outputs (REF2)
- Impact template and case studies (REF3a/b)
- Environment data (REF4a/b/c)
- Environment template (REF5)

- Institutions normally make one submission in each UOA
- Joint submissions are encouraged if this is an appropriate way of describing collaborative research
- Multiple submissions may be made in a UOA only by exception and with prior permission

B10 does not expect multiple submissions based on the sub-themes within the mathematical sciences

Staff Selection

HEIs are responsible for selecting eligible staff whose outputs are to be included in REF submissions

Each HEI is required to develop, document and submitted to the REF by 31 July 2012 a code of practice for selection of staff:

Codes should demonstrate:

Transparency: clearly setting out the procedures for staff selection, and communicating these to all eligible staff

Consistency: applying consistent procedures across the institution

Accountability: clearly defining responsibilities for decisions, with appropriate training for those involved

Inclusivity: promoting an inclusive environment, with robust procedures for staff to disclose individual circumstances

Assessment Framework

Overall quality

Outputs

Impact

Environment

Maximum of 4 outputs
per researcher

Impact template and
case studies

Environment data and
template

65%

20%

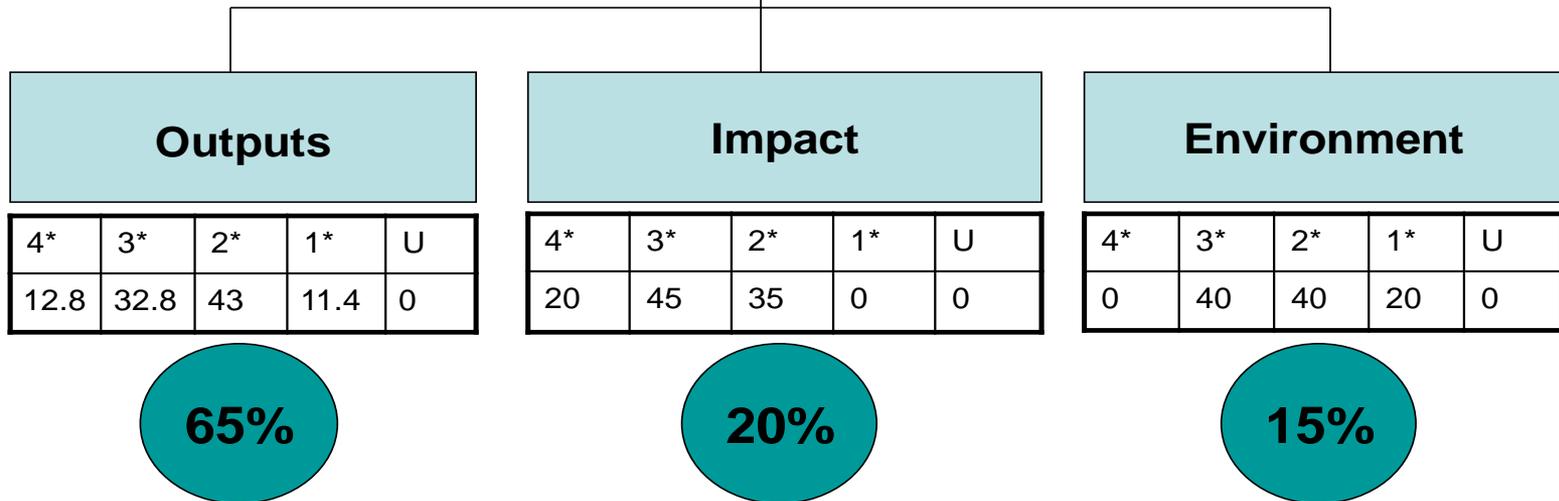
15%

A Quality Profile

Overall Quality Profile

Quality Level	4*	3*	2*	1*	U
% of Research Activity	12	37	41	10	0

The overall quality profile is comprised of the aggregate of the weighted sub-profiles produced for outputs, impact and environment.



Publication of Results

- An 'overall quality profile' for each submission
 - Using the same scale as RAE2008, but in steps of 1%
- Further reports and feedback will be provided:
 - Overview reports by panels
 - Concise feedback on submissions, to the heads of HEIs
 - The output, impact and environment sub-profiles for each submission will be published
 - A report by the Equality and Diversity Advisory Panel
- Submissions will be published (except for confidential or sensitive information)
- code of practice for selection of staff

REF panels

Panels

36 sub-panels under 4 main panels.

Membership: www.ref.ac.uk

Sub-panel responsibilities

- Contributing to the main panel criteria and working methods
- Assessing submissions and recommending the outcomes

Main panel responsibilities

- Developing the panel criteria and working methods
- Ensuring adherence to the criteria/procedures and consistent application of the overall assessment standards
- Signing off the outcomes

Main Panel B

Chair Dame Anne Dowling (Eng. Cambridge)

7	Earth Systems and Environmental Sciences
8	Chemistry
9	Physics
10	Mathematical Sciences
11	Computer Sciences and Informatics
12	Aeronautical, Mechanical, Chemical and Manufacturing Engineering
13	Electrical and Electronic Engineering, Metallurgy and Materials
14	Civil and Construction Engineering
15	General Engineering

Additional Assessors

Additional assessors will be appointed to extend the breadth and depth of panels' expertise:

- Both 'academic' assessors (to assess outputs) and 'user' assessors (to assess impacts) will be appointed
- Assessors will play a full and equal role to panel members, in developing either the outputs or impact sub-profiles. They will be fully briefed, take part in calibration exercises and attend the relevant meetings:
 - * Some appointments will be made in 2012 where a clear gap has already been identified
 - * Further appointments to be made in 2013, in the light of the survey of institutions' submission intentions

B10 News
Following February
meeting

Specialist advisers for Finnish and Russian.

Italian can be handled within panel.

Could History of Maths be specialist advisor – or cross-refer to History?.

Paul Fearnhead for Sylvia Richardson (resigned)
Adrian Bownam for Peter Lane (now Impact assessor)

New Assessors (2012)

Sir Simon Donaldson

Jacek Gondzio

Steve Wilson

Additional Assessors Requested (2013)

Number theory & combinatorics (workload)

Financial maths (workload /expertise)

Logic (expertise)

Theoretical physics (conflict)

Analysis & probability (workload)

Mathematical physics (expertise – share with Physics)

Main Panel Working Methods

- Main panels have consistent criteria for sub-panels
- Main panels will guide sub-panels throughout the assessment phase, ensuring:
 - Adherence to the published criteria
 - Consistent application of overall assessment standards
- Main panels will undertake calibration exercises and keep the emerging outcomes under review
- Main panel international and user members will be engaged at key stages across the sub-panels

Sub-panel Working Methods

- Sub-panels will review their expertise to ensure appropriate coverage
- Work will be allocated to members/assessors with appropriate expertise
- Each sub-panel will run calibration exercises for outputs and impacts, guided by the main panels
- All outputs will be examined in sufficient detail to contribute to the formation of the outputs sub-profiles
- Each Impact case study will normally be assessed by at least one academic and one user
- Graduated sub-profiles will be formed for each aspect of submissions

Interdisciplinary Research

- Sub-panels expect submissions to include work that is interdisciplinary, multidisciplinary or spanning boundaries between UOAs
- Panels are committed to assess all such work on an equal basis:
 - Members have experience of such work, and where appropriate assessors will be appointed to augment their expertise (in some cases, working across UOAs)
 - The sub-panels prefer to assess all work submitted within their UOAs but may, exceptionally, cross-refer specific parts of submissions to other sub-panels for advice. The original sub-panel remains responsible for recommending the quality profile.

Outputs

Research Outputs

- Outputs may include but are not limited to: printed or electronic publications, materials, devices, images, artefacts, products, buildings, confidential or technical reports, patents, performances, exhibits or events
- All types of research and all forms of research output shall be assessed on a fair and equal basis
- Panels will assess outputs by expert review.
- Panels will not use journal impact factors, rankings or lists or the perceived standing of the publisher
- B10 will not use citation data

Co-authorship

- A co-authored output may be listed against one or more individuals who made a substantial contribution
- It may be listed against any or all such co-authors returned in **different submissions**; and a maximum of two such co-authors within the **same submission**
- Panels require 100 words confirming that the co-authors made a substantial and distinct contributions
- Once this is accepted, panels will assess the quality of the output, not the individual author's contribution

Double-weighting

- Institutions may request 'double-weighting' for outputs of extended scale and scope
- Sub-panels will consider these request separately from assessing the quality of the output
- If a sub-panel accepts a request, the output will count as two outputs in calculation of an output sub-profile
- Institutions may submit a 'reserve' that will be assessed only if the double-weighting request is rejected

The arXiv

According to the published guidance

An output first published in its final form during the REF publication period that was 'pre published' during calendar year 2007 is eligible but papers pre-published in 2006 and earlier are not

Because of the long publication times and mathematical journals backlogs there is considerable concern about this cut off

Sub-panel B10 will normally take the following view:

an output published in a journal which practices a rigorous peer review process will be treated as having undergone a substantial revision as a result of that refereeing process and provided its journal publication occurs between 1/1/08 and 31/12/13, such an output is thus deemed to satisfy the publication period constraints of the REF criteria.

Assessment Criteria

- The criteria for assessing the quality of outputs are **originality, significance and rigour**
- Each panel provides further explanation of how they will interpret these criteria
- Panels will assess the quality of outputs, not the individual researchers to the submission
- They will examine all outputs in sufficient detail to contribute to the formation of a robust outputs sub-profile that represents all the outputs listed in a submission

Assessment Criteria

The criteria for assessing the quality of outputs are **originality, significance and rigour***

Four star	Quality that is world-leading in terms of originality, significance and rigour
Three star	Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence
Two star	Quality that is recognised internationally in terms of originality, significance and rigour
One star	Quality that is recognised nationally in terms of originality, significance and rigour
Unclassified	Quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment

* Each main panel provides descriptive account of the criteria

Impact

Definition of Impact

- Impact is defined broadly for the REF: an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia
- Panels recognise that impacts can be manifest in a wide variety of ways, may take many forms and occur in a wide range of spheres, in any geographic location
- Examples of impact provided by panels as relevant to their disciplines are intended to stimulate ideas - not as exhaustive or prescriptive lists

Impact Submission

Impact template (REF3a)

20% of the
impact
sub-profile

- Sets out the submitted unit's general approach to supporting impact from its research:
 - Approach to supporting impact during the period 2008 to 2013
 - Forward strategy and plans

Case studies (REF3b)

80% of the
impact
sub-profile

- Specific examples of impacts already achieved, that were underpinned by the submitted unit's research:
 - 1 case study per 10 FTE staff submitted (plus 1 extra)
 - Impacts during 2008 to 2013; underpinned by research since 1993

Impact Case Studies

- Each case study should:
 - Clearly describe the underpinning research, who undertook it and when
 - Provide references to the research and evidence of quality
 - Explain how the research led/contributed to the impact
 - Clearly identify the beneficiaries and define the impact
 - Provide evidence/indicators of the impact
 - Provide independent sources of corroboration
- All the material required to make a judgement should be included in the case study
- Submitted case studies need **not** be representative of activity across the unit: pick the strongest examples

Research Underpinning Impact

- Each case study must be underpinned by research that:
 - was produced by staff while working in the submitting HEI
 - is evidenced by outputs published between 1 Jan 1993 to 31 Dec 2013
 - meets the quality threshold of at least equivalent to 2*
 - made a material and distinct contribution to the impact (there are many possible 'routes' to impact, but in each case a distinct and material contribution must be shown)
- Once the panel is satisfied that these criteria have been met, it will assess and grade the case study in terms of the 'reach and significance' of the impact

Evidence of Impact

- Case studies should provide a clear and coherent narrative linking the research to the impact
- Including evidence appropriate to the case made
- Evidence may take many different forms, including quantitative (where possible) and qualitative.
- Key claims should be capable of verification. Independent sources of corroboration should listed, to be used for audit purposes

Impact Assessment Criteria

- The criteria for assessing impact are **reach and significance**
- In assessing a case study, the panel will form an overall view about the impact's reach and significance taken as a whole, rather than assess each criterion separately
- 'Reach' is not a geographic scale. Sub-panels will consider a number of dimensions to the 'reach' as appropriate to the nature of the impact.
- In assessing the **impact template**, the panel will consider the extent to which the unit's approach is conducive to achieving impacts of 'reach and significance'

The criteria for assessing impacts are **reach and significance***

Four star	Outstanding impacts in terms of their reach and significance
Three star	Very considerable impacts in terms of their reach and significance
Two star	Considerable impacts in terms of their reach and significance
One star	Recognised but modest impacts in terms of their reach and significance
Unclassified	The impact is of little or no reach and significance; or the impact was not eligible; or the impact was not underpinned by excellent research produced by the submitted unit

* Each main panel provides descriptive account of the criteria

Environment

Environment Template

- Each submission to include a completed template:
 - Overview
 - Research strategy
 - People, including:
 - staffing strategy and staff development
 - research students
 - Income, infrastructure and facilities
 - Collaboration and contribution to the discipline or research base
- The 'panel criteria' request specific types of evidence under each heading, and indicate how much weight they will attach to each component

Environment Data

- All submissions to include data on:
 - Research doctoral degrees awarded (REF4a)
 - Research income (REF4b)
 - Research income in-kind (REF4c)
- Definitions are aligned with HESA returns; the data relate to the 'whole unit' - not just submitted staff
- Sub-panels 8, 9, 19, 25 and 26 request specific additional data, to be included within the environment template (REF5)
- Data will be considered by panels alongside the information provided in the environment template

Environment Assessment Criteria

The criteria for assessing the environment are
vitality and sustainability*

Four star	An environment that is conducive to producing research of world-leading quality, in terms of its vitality and sustainability
Three star	An environment that is conducive to producing research of internationally excellent quality, in terms of its vitality and sustainability
Two star	An environment that is conducive to producing research of internationally recognised quality, in terms of its vitality and sustainability
One star	An environment that is conducive to producing research of nationally recognised quality, in terms of its vitality and sustainability
Unclassified	An environment that is not conducive to producing research of nationally recognised quality

* Each main panel provides a descriptive account of the criteria

Further information

www.ref.ac.uk

(includes all relevant documents)

Enquiries from staff at HEIs should be directed to their nominated institutional contact (see www.ref.ac.uk for a list)

Other enquiries to info@ref.ac.uk

The End

REF panels:

Main Panel A

1	Clinical Medicine
2	Public Health, Health Services and Primary Care
3	Allied Health Professions, Dentistry, Nursing and Pharmacy
4	Psychology, Psychiatry and Neuroscience
5	Biological Sciences
6	Agriculture, Veterinary and Food Science

REF panels:

Main Panel C

16	Architecture, Built Environment and Planning
17	Geography, Environment Studies and Archaeology
18	Economics and Econometrics
19	Business and Management Studies
20	Law
21	Politics and International Studies
22	Social Work and Social Policy
23	Sociology
24	Anthropology and Development Studies
25	Education
26	Sports-related Studies

REF panels:

Main Panel D

27	Area Studies
28	Modern Languages
29	English Literature and Language
30	History
31	Classics
32	Philosophy
33	Theology and Religious Studies
34	Art and Design: History, Practice and Theory
35	Music, Drama, Dance and Performing Arts
36	Communications, Cultural and Media Studies, Library and Information Management

Staff Returned

Staff:

Individual staff circumstances

- Up to four outputs must be listed against each individual
- This can be reduced without penalty where an individual's circumstances have constrained their ability to work productively or produce four outputs in the REF period:
 - A wide range of circumstances will be taken into account
 - With as much clarity as possible about the permitted reductions
 - To be treated consistently across the exercise
 - With robust procedures and confidentiality arrangements to enable staff to disclose sensitive information

Staff:

Clearly defined circumstances

- **Early Career researchers**

- **Part-time working, career breaks and secondments outside of HE**

- **Periods of maternity, adoption and additional paternity leave**

- These are circumstances involving a clear 'absence' from work
- 'Tariffs' define the number of outputs that may be reduced without penalty
- These will be applied consistently by all REF sub-panels
- Circumstances can be combined up to a maximum reduction of three outputs
- Where an individual has a combination of clearly defined **and** complex circumstances, these should be submitted collectively as 'complex'

Staff:

Complex circumstances

- **Disability**
- **Ill health or injury**
- **Mental health conditions**
- **Additional constraints related to bringing a child into the family**
- **Other caring responsibilities**
- **Gender reassignment**
- **Other circumstances related to legislation**

- For these circumstances a judgement is needed about the appropriate reduction
- The EDAP will consider all these cases on a consistent and confidential basis, and recommend the appropriate reductions to the Main Panel Chairs
- Sub-panels will be informed of the decisions and will not have access to further details
- ECU has published worked examples (www.ecu.ac.uk)

Impact:

Some examples of impact

Improved health or welfare outcomes

Enhanced professional standards, ethics, guidelines or training

Improved risk management

Public debate has been shaped or informed by research

Improved quality, accessibility or efficiency of a public service

More effective management or workplace practices

Improved business performance

Changes to the design or delivery of the school curriculum

Production costs have reduced

Research has enabled stakeholders to challenge conventional wisdom

A social enterprise initiative has been created

Policy debate or decisions have been influenced or shaped by research

Enhanced preservation, conservation or presentation of cultural heritage

Improved access to justice, employment or education

Improved forensic methods or expert systems

Organisations have adapted to changing cultural values

Jobs have been created or protected

Research has informed public understanding, values, attitudes or behaviours

Improved management or conservation of natural resources

Enhanced corporate social responsibility policies

Levels of waste have reduced

The policies or activities of NGOs or charities have been informed by research

Changes to legislation or regulations

A new product has been commercialised

New forms of artistic expression or changes to creative practice

Changes in professional practice

Enhanced technical standards or protocols