

University of Sussex

Reviewing our Contribution to Knowledge and Understanding for REF2029

This document outlines how outputs submitted to REF are assessed and can be used to assist Units of Assessment (UoAs) in their REF preparations, in particular internal/external output reviews. This document draws on REF2029 guidance where available; where this is not available yet, REF2021 guidance has been used. The document will be updated when further REF2029 guidance is released.

The internal and external review of outputs considered for submission to REF2029 is a vital element of our REF preparations, allowing us to identify excellent research for inclusion in our submissions.

The outcomes of internal/external output reviews will be viewed by UoA Leads and shared with ADRIIs where appropriate. The central RIQI team can view these reviews when they are uploaded into Elements. Aggregated results with author details removed will be made available to Faculty REF Groups and the institutional REF Steering Group. They will be used for the purposes of REF selection only and will not be used in any performance or promotions reviews.

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Definition of research for the REF

For the purposes of the REF, research is defined as a process of investigation leading to new insights, effectively shared.

This includes:

- work of direct relevance to the needs of commerce, industry, culture, society, and/or to the public and voluntary sectors
- scholarship, which is defined for the REF as the creation, development, and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases
- the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights
- the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction.

‘Effectively shared’ refers to research that is published, disseminated, or made publicly available in the form of assessable research outputs and confidential reports.

See the REF2029 guidance on the definition of research and exclusions from the definition of research [here](#).

Assessment of research outputs

Sussex's contribution to knowledge and understanding will be assessed by REF sub-panels, who will review unit-level submissions according to a set of assessment criteria and level definitions. In the REF assessment phase, sub-panels and main panels will work together to ensure submissions are evaluated fairly, consistently, and robustly. Sub-panels assess submissions using peer review and expert judgment, guided by the published criteria [not yet published for REF2029]. Main panels oversee the assessment process, providing cross-panel calibration, addressing methodological issues, and ensuring consistency of standards across sub-panels. They review and endorse the final outcomes recommended by sub-panels.

The sub-panels will assess the quality of submitted research outputs in terms of their **originality, significance, and rigour (OSR)**, with reference to international research quality standards. Each output will be assessed against the quality levels: 4*, 3*, 2*, 1* or 'unclassified'. The outputs sub-profile of each UoA will be formed by calculating the percentage of outputs listed in a submission that are assigned each quality level, with each output contributing an equal proportion to the sub-profile.

Originality, significance, and rigour (OSR)

Originality will be understood as the extent to which the output makes an important and innovative contribution to understanding and knowledge in the field. Research outputs that demonstrate originality may do one or more of the following: produce and interpret new empirical findings or new material; engage with new and/or complex problems; develop innovative research methods, methodologies and analytical techniques; show imaginative and creative scope; provide new arguments and/or new forms of expression, formal innovations, interpretations and/or insights; collect and engage with novel types of data; and/or advance theory or the analysis of doctrine, policy or practice, and new forms of expression.

Significance will be understood as the extent to which the work has influenced, or has the capacity to influence, knowledge and scholarly thought, or the development and understanding of policy and/or practice.

Rigour will be understood as the extent to which the work demonstrates intellectual coherence and integrity, and adopts robust and appropriate concepts, analyses, sources, theories, and/or methodologies.

Quality levels

The definitions for each quality level are given below. These are supplemented by further definitions provided by each panel in their criteria and working methods documents, also set out below.

4*	Quality that is world leading in terms of OSR
3*	Quality that is internationally excellent in terms of OSR, but which falls short of the highest standards of excellence
2*	Quality that is recognised internationally in terms of OSR
1*	Quality that is recognised nationally in terms of OSR

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
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‘World leading’, ‘internationally’ and ‘nationally’ in this context refer to quality standard. They do not refer to the nature or geographical scope of particular subjects, nor to the locus of research nor its place of dissemination. For example, research which is focused within one part of the UK might be of ‘world-leading’ standard. Equally, work with an international focus might not be of world-leading, internationally excellent, or internationally recognised standard.

Panel criteria and level definitions

The panels have outlined the qualities they are looking for when reviewing outputs, which may help UoAs assign quality levels to their outputs during the review process. The following is an excerpt from the REF2021 [Panel Criteria and Working Methods \(2019/02\)](#) which has been lightly edited for ease and clarity. This document will be updated to reflect the REF2029 panel criteria when it is available.

Panel A - Criteria and level definitions

[Page 35 in Panel Criteria and Working Methods \(2019/02\)](#)

In assessing outputs, the sub-panels will look for evidence of the quality of the output in terms of OSR and will apply the generic definitions of the starred quality levels.

The sub-panels will look for evidence of some of the following types of characteristics of quality, as appropriate to each of the starred quality levels:

- scientific rigour and excellence, with regard to design, method, execution, and analysis
- significant addition to knowledge and to the conceptual framework of the field
- actual significance of the research
- the scale, challenge and logistical difficulty posed by the research
- the logical coherence of argument
- contribution to theory-building
- significance of work to advance knowledge, skills, understanding and scholarship in theory, practice, education, management, and/or policy
- applicability and significance to the relevant service users and research users
- potential applicability for policy in, for example, health, healthcare, public health, food security, animal health, or welfare.

Unless there is sufficient evidence of at least one of the above, or the [definition of research used for the REF](#) is not met, research outputs will be graded as ‘**unclassified**’.

The sub-panels welcome research practice that supports reproducible science and the application of best practice. Examples include registered reports, pre-registration, publication of data sets, experimental materials, analytic code, and use of reporting checklists for publication purposes and those relating to the use of animals in research. These contribute to the evaluation of rigour for submitted outputs. Replication studies may be submitted as outputs and will be evaluated on the extent to which they contribute significant new knowledge, improved methods, or advance theory or practice.

The sub-panels will use citation information, where appropriate and available, as part of the indication of academic significance to inform their assessment of output quality. Further

details on the use of citation data are provided on page 50 of [Panel Criteria and Working Methods 2019/02](#).

Panel B - Criteria and level definitions

[Page 36 in Panel Criteria and Working Methods \(2019/02\)](#)

In assessing outputs, the sub-panels will look for evidence of OSR and apply the generic definitions of the starred quality levels as follows:

In assessing work as being **4*** (quality that is world-leading in terms of OSR), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics:

- agenda-setting
- research that is leading or at the forefront of the research area
- great novelty in developing new thinking, new techniques or novel results
- major influence on a research theme or field
- developing new paradigms or fundamental new concepts for research
- major changes in policy or practice
- major influence on processes, production, and management
- major influence on user engagement.

In assessing work as being **3*** (quality that is internationally excellent in terms of OSR, but which falls short of the highest standards of excellence), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics:

- makes important contributions to the field at an international standard
- contributes important knowledge, ideas and techniques which are likely to have a lasting influence, but are not necessarily leading to fundamental new concepts
- significant changes to policies or practices
- significant influence on processes, production, and management
- significant influence on user engagement.

In assessing work as being **2*** (quality that is recognised internationally in terms of OSR), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics:

- provides useful knowledge and influences the field
- involves incremental advances, which might include new knowledge which conforms with existing ideas and paradigms, or model calculations using established techniques or approaches
- influence on policy or practice
- influence on processes, production, and management
- influence on user engagement.

In assessing work as being **1*** (quality that is recognised nationally in terms of OSR), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics:

- useful but unlikely to have more than a minor influence in the field
- minor influence on policy or practice
- minor influence on processes, production, and management
- minor influence on user engagement.

Research will be graded as **‘unclassified’** if it falls below the quality levels described above or does not meet the [definition of research used for the REF](#).

Panel C - Criteria and level definitions

Page 37 in Panel Criteria and Working Methods (2019/02)

In assessing outputs, the sub-panels will look for evidence of OSR, and apply the generic definitions of the starred quality levels as follows:

In assessing work as being **4*** (quality that is world-leading in terms of OSR), sub-panels will expect to see some of the following characteristics:

- outstandingly novel in developing concepts, paradigms, techniques or outcomes
- a primary or essential point of reference
- a formative influence on the intellectual agenda
- application of exceptionally rigorous research design and techniques of investigation and analysis
- generation of an exceptionally significant data set or research resource.

In assessing work as being **3*** (quality that is internationally excellent in terms of OSR, but which falls short of the highest standards of excellence), sub-panels will expect to see some of the following characteristics:

- novel in developing concepts, paradigms, techniques or outcomes
- an important point of reference
- contributing very important knowledge, ideas and techniques which are likely to have a lasting influence on the intellectual agenda
- application of robust and appropriate research design and techniques of investigation and analysis
- generation of a substantial data set or research resource.

In assessing work as being **2*** (quality that is recognised internationally in terms of OSR), sub-panels will expect to see some of the following characteristics:

- providing important knowledge and the application of such knowledge
- contributing to incremental and cumulative advances in knowledge
- thorough and professional application of appropriate research design and techniques of investigation and analysis.

In assessing work as being **1*** (quality that is recognised nationally in terms of OSR), sub-panels will expect to see some of the following characteristics:

- providing useful knowledge, but unlikely to have more than a minor influence
- an identifiable contribution to understanding, but largely framed by existing paradigms or traditions of enquiry
- competent application of appropriate research design and techniques of investigation and analysis.

Research will be graded as **'unclassified'** if it falls below the quality levels described above or does not meet the [definition of research used for the REF](#).

Panel D - Criteria and level definitions

Page 38 in Panel Criteria and Working Methods (2019/02)

The terms 'world-leading', 'international' and 'national' will be taken as quality benchmarks within the generic definitions of the quality levels. They will relate to the actual, or deserved influence of the work, whether in the UK, a particular country or region outside the UK, or on international audiences more broadly. There will be no assumption of any necessary international exposure in terms of publication or reception, or any necessary research content

in terms of topic or approach. Nor will there be an assumption that work published in a language other than English or Welsh is necessarily of a quality that is or is not internationally benchmarked.

In assessing outputs, the sub-panels will look for evidence of OSR and apply the generic definitions of the starred quality levels as follows:

In assessing work as being **4*** (quality that is world-leading in terms of OSR), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics across and possibly beyond its area/field:

- a primary or essential point of reference
- of profound influence
- instrumental in developing new thinking, practices, paradigms, policies or audiences
- a major expansion of the range and the depth of research and its application
- outstandingly novel, innovative, and/or creative.

In assessing work as being **3*** (quality that is internationally excellent in terms of OSR, but which falls short of the highest standards of excellence), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics across and possibly beyond its area/field:

- an important point of reference
- of considerable influence
- a catalyst for, or important contribution to, new thinking, practices, paradigms, policies, or audiences
- a significant expansion of the range and the depth of research and its application
- significantly novel or innovative or creative.

In assessing work as being **2*** (quality that is recognised internationally in terms of OSR), sub-panels will expect to see evidence of, or potential for, some of the following types of characteristics across and possibly beyond its area/field:

- a recognised point of reference
- of some influence
- an incremental and cumulative advance on thinking, practices, paradigms, policies, or audiences
- a useful contribution to the range or depth of research and its application.

In assessing work as being **1*** (quality that is recognised nationally in terms of OSR), sub-panels will expect to see evidence of the following characteristics within its area/field:

- an identifiable contribution to understanding without advancing existing paradigms of enquiry or practice
- of minor influence.

Research will be graded as '**unclassified**' if it falls below the quality levels described above or does not meet the [definition of research used for the REF](#).