



Cyngor Cyllido Addysg
 Uwch Cymru
 Higher Education Funding
 Council for Wales

hefcw



Research
 England



Consultation on the design of the UK's future research assessment system

Introduction

Background

In May 2021, the [Future Research Assessment Programme](#) (FRAP) was launched at the request of UK and devolved government ministers and the four UK Higher Education Funding Bodies¹. It is a significant piece of work aimed at exploring possible approaches to the assessment of UK higher education research performance. It seeks to identify those that can encourage and strengthen the emphasis on delivering excellent research and impact, and support a positive research culture, while simplifying and reducing the administrative burden on the HE sector.

The Programme includes four interrelated strands of work:

1. Learning the lessons from the current assessment exercise. This consists of an evaluation package, including ongoing work, independent analyses and consultation with stakeholders.
2. Understanding international practice in national research assessment. What is done elsewhere, what works well? How the does UK system look from the outside?
3. Developing alternative models and enhanced approaches to research assessment. What are the alternatives including radical change and more evolutionary options?
4. Listening to views, concerns and perspectives on national research evaluation from a range of stakeholders. How might a future research system recognise and reward those elements we want to see in a healthy research system?

Responses to this consultation will be one of the key inputs that shape the design of a future exercise. They will be considered alongside a range of internal and commissioned evaluations, feedback on the current exercise (gathered separately from institutions and individuals), and advice from the Programme's [International Advisory Group](#). Decisions on the design of the next exercise will be taken by the funding bodies.

¹ Research England, the Scottish Funding Council, the Higher Education Funding Council for Wales, the Department for the Economy, NI.

Current research assessment model

The [Research Excellence Framework](#) (REF) is the UK's current system for assessing the excellence of research in UK higher education providers (HEPs).

The REF outcomes are used to inform the allocation of around £2 billion per year of public funding for universities' research.

The REF was first carried out in 2014, replacing the previous Research Assessment Exercise. The REF is undertaken by the four UK higher education funding bodies.

The funding bodies' shared policy aim for research assessment is to secure the continuation of a world-class, dynamic and responsive research base across the full academic spectrum within UK higher education.

The submission deadline for REF 2021 was 31 March 2021. Assessment outcomes will be published in May 2022.

The REF's primary objectives are:

- To provide accountability for public investment in research and produce evidence of the benefits of this investment.
- To provide benchmarking information and establish reputational yardsticks, for use in the higher education sector and for public information.
- To inform the selective allocation of funding for research.

As a minimum, it is expected that any future exercise will continue to enable the funding bodies to allocate funding based on research quality and will continue to provide accountability for public investment in research. Further purposes may be identified following the consultation.

The REF is governed by the principles of equity, equality and transparency. Any future exercises will continue to be underpinned by these principles.

Roundtables

Consultation with the sector and wider stakeholders forms one of the Programme's key workstreams. It is important that the programme seeks to understand – through dialogue with the higher education sector and its key stakeholders – what a healthy, thriving research system looks like and how an assessment model can best form its foundation.

Following the launch of the Programme, the funding bodies held a series of early engagement events. These included a large-scale virtual event for 140 Pro-Vice Chancellors (or equivalent), a series of meetings with research users, and focused roundtable discussions on the following themes:

- a. Supporting Early Career Researchers
- b. Supporting diverse research roles

- c. Supporting diverse researchers
- d. Supporting a dynamic research system with socio-economic impact
- e. Supporting rigorous and open research
- f. Supporting diverse research contributions

These focus group discussions brought together over 100 stakeholders, advocates and experts to explore different perspectives on the ways in which a UK-wide research assessment system can support (or hinder) a healthy, inclusive research system.

The discussions were held under the Chatham House Rule and participants spoke in a personal capacity. The points raised during discussions have fed into the development of this consultation and summaries of the key points are included as context in each of consultation sections.

Participants were asked to identify the key elements of a healthy, inclusive research system and consider how a research assessment system might best support this system. A number of themes emerged from these discussions. As might be expected, views were not uniform across the sector. In several areas, conflicting viewpoints were presented and mutually exclusive suggestions were put forward by participants. Understanding where these views sit within the wider research community is one of the key aims of this consultation.

1. Purpose and role of REF. There was widespread agreement that the REF is a key driver of behaviours and research culture in the UK. However, participants were also keen to stress that REF is part of a wider research and innovation system, including funding, publishing, league tables and recruitment practices. There was a lack of consensus on whether it should be the role of the funding bodies/REF to shape research culture, with many arguing that this responsibility lies with the institution.
2. Research Excellence. Participants were asked to consider what elements of the research process should be assessed in a future model. This sparked lively debates about the definition of research excellence and what it encompasses. Some participants, particularly those in more senior roles, expressed concern that a system that focuses on research activities and environment might 'distract from' or 'dilute' the assessment of research excellence. Conversely, early career researchers in particular expressed support for a more rounded assessment of research excellence that extends beyond the current focus on outputs and impact. It was acknowledged that the environment element of the current REF covers this to a certain extent but it was argued that the current weighting of this element means that it is not perceived as central to research excellence. Those in support of a more holistic assessment argued that a broader definition would better support: open research practices, research integrity, research careers (especially early career researchers and those in research-related roles), and team science.

3. Role of metrics. There was widespread concern about increasing the role of metrics in the exercise and some dismay that this topic was being raised again. Participants cited the negative impact on underrepresented groups and ECRs, the potential disadvantage for interdisciplinary research, the lack of applicability across disciplines, and the likely narrowing of output types submitted. Only a very small minority supported a move towards a more metrics-based system, citing the potential reduction in burden. However, there was some support for exploring metrics and indicators that may be used to support narratives around the research environment, including research careers, equality diversity and inclusion, and wider research culture.
4. Narrative approach. There was broad support for exploring the introduction of a 'narrative CV' approach that would enable institutions to provide a more holistic account of their contributions to the research system. It was also seen to be a more flexible approach that might recognise the differences between institution types. However, this was tempered with cautions that this approach could lack robustness and would require careful thought about how institutions might provide 'objective' evidence. There were also concerns that this approach might reward those 'who shout loudest' both within and between institutions.
5. There was also support for introducing a greater formative element that would enable institutions to adapt and improve based on feedback. This was often accompanied by suggestions to revise the frequency of the exercise.
6. Burden. While participants broadly agreed that the REF requires substantial investment from institutions, overall they believed that the burden is proportionate and justified by the level of public investment linked to the exercise. Although they would welcome attempts by the funding bodies to reduce burden, participants warned against making this the primary focus of the review. It was also noted that a large proportion of the burden is created by institutions' implementation of the REF, rather than the exercise itself.

Responding to the consultation

The following sections seek views on aspects of the following features of a future assessment framework:

- purposes of a future exercise
- guiding principles and priorities for system design
- defining research excellence
- assessment criteria
- assessment processes, including frequency, granularity and use of metrics
- burden

We invite views in response to the questions posed throughout the sections. A summary of the questions is available at Annex A. Responses to this consultation are invited from any organisation, group or individual with an interest in the conduct, quality, funding or use of research. Responses to the consultation should be made using the online form provided available alongside this consultation at <https://www.jisc.ac.uk/future-research-assessment-programme/consultation> by **noon on Friday 6 May 2022**.

Only responses received through the online form will be reviewed and included in our analysis. All responses made through the online form by the deadline will be considered.

Following the deadline, the FRAP team will copy responses to Research England, the Scottish Funding Council, the Higher Education Funding Council for Wales and the Department for the Economy in Northern Ireland.

The FRAP team will be holding consultation events during the consultation period. The events will outline the questions and will provide an opportunity for stakeholders to raise any issues for clarification and discussion. Further information on events will be made available on the [FRAP webpages](#).

Next steps

The responses to this consultation will be considered by the boards (or equivalent) of the funding bodies in mid-2022. Initial decisions on the next exercise will be announced by the end of 2022.

We will commit to read, record and analyse responses to this consultation in a consistent manner. For reasons of practicality, usually a fair and balanced summary of responses rather than the individual responses themselves will inform any decision made. In most cases the merit of the arguments made is likely to be given more weight than the number of times the same point is made. The funding bodies reserve the right to take into account the nature of the respondent in our weighting of the analysis.

We will publish an analysis of the consultation responses and an explanation of how they were considered in our subsequent decision. We may publish individual responses to the consultation in the summary. Where we have not been able to respond to a significant material issue, we will usually explain the reasons for this.

Additionally, all responses may be disclosed on request, under the terms of the relevant Freedom of Information Acts across the UK. The Acts give a public right of access to any information held by a public authority, in this case the four UK funding bodies. This includes information provided in response to a consultation. We have a responsibility to decide whether any responses, including information about your identity, should be made public or treated as confidential. We can refuse to disclose information only in exceptional circumstances. This means that responses to this consultation are unlikely to be treated as confidential except in very particular circumstances. For further information about the Acts see the Information Commissioner's Office website, <https://ico.org.uk/> or, in Scotland, the website of the Scottish Information Commissioner, <https://www.itpublicknowledge.info/home/ScottishInformationCommissioner.aspx>.

Questions

Section one: purposes of research assessment

The current assessment exercise serves three primary purposes:

- inform the selective allocation of funding to HEIs for research;
- provide accountability for public investment in research; and
- provide benchmarking information.

In addition, an independent review of REF 2014, carried out by Lord Stern in 2016 identified three further purposes:

- provide an evidence base to inform strategic national priorities;
- provide an evidence base for HEIs and other bodies to inform decisions on resource allocation;
- create a performance incentive for HEIs.

The funding bodies have set out their intention to retain the link between assessment outcomes and funding, and to require any future exercise to provide accountability for public investment in research.

Questions

1. In addition to enabling the allocation of research funding and providing accountability for public investment in research, which purposes should a future UK research assessment exercise fulfil? Select all that apply.
 - a. Provide benchmarking information
 - b. Provide an evidence base to inform strategic national priorities
 - c. Provide an evidence base for HEIs and other bodies to inform decisions on resource allocation
 - d. Create a performance incentive for HEIs.
2. What, if any, additional purposes should be fulfilled by a future exercise?
3. Could any of the purposes be fulfilled via an alternative route? If yes, please provide further explanation.
4. Do you have any further comments to make regarding the purposes of a future research assessment system?

Section two: setting priorities

The roundtable discussions identified a number of priorities and guiding principles that participants believed should drive the development of a future assessment exercise. Some of

these principles potentially preclude or conflict with others. It is therefore important for the funding bodies to understand which principles the sector would like them to prioritise when designing a future system.

Questions

5. To what extent should the funding bodies be guided by the following considerations in developing the next assessment system? Please rank the considerations from 1 (most important) to 9 (least important)
 - a. Ability of the system to promote research with wider socio-economic impact.
 - b. Comparability of assessment outcomes (across institutions, disciplines and/or assessment exercises)
 - c. Ensuring that the bureaucratic burden of the system is proportionate
 - d. Impact of the assessment system on local/regional development
 - e. Impact of the system on research culture
 - f. Impact of the system on the UK research system's international standing
 - g. Maintaining continuity with REF 2021
 - h. Providing early confirmation of the assessment framework and guidance
 - i. Robustness of assessment outcomes

6. Relating to research culture, to what extent should the funding bodies be guided by the following considerations in developing the next assessment system? Please rank the considerations from 1 (most important) to 6 (least important)
 - a. Impact of the assessment system on research careers:
 - b. Impact of the assessment system on equality, diversity and inclusion:
 - c. Ability of the assessment system to promote collaboration (across institutions, sectors and/or nations)
 - d. Impact of the system on inter- and transdisciplinary research
 - e. Impact of the system on open research
 - f. Impact of the system on research integrity

7. What, if any, further considerations should influence the development of a future assessment system? Please set out the considerations and indicate where they should be located in the list of priorities.

8. How can a future UK research assessment system best support a positive research culture?

Section three: identifying research excellence

The funding bodies agreed that the outcomes of the next assessment framework should continue to enable them to allocate funding based on research excellence. It is therefore

important that the exercise adequately captures those elements that constitute excellent research and assesses them robustly against appropriate criteria.

Components of excellence

The REF currently assesses three elements:

- Outputs (60%)
- Impact (25%)
- Environment (15%)

Roundtable discussions suggested that a broader definition of excellence, which recognises and rewards a wider range of activities and inputs, may better support a healthy, inclusive research system. Participants recognised that some of these elements are already captured through the environment statement but called for increased weighting and/or a more structured approach to assessing elements such as open research practices and policies to support equality, diversity and inclusion.

At the same time, participants questioned how these components might be assessed robustly and consistently. It was agreed that robust indicators would be required and participants acknowledged that this may be challenging.

Questions

9. Which of the following elements should be recognised and rewarded as components of research excellence in a future assessment exercise?

(Multiple options: 'Should be heavily weighted' – 'Should be moderately weighted' – 'Should be weighted less heavily' – 'Should not be assessed' – 'Don't know')

- a. Research inputs (e.g. research income, internal investment in research and in researchers)
- b. Research process (e.g. open research practices, collaboration, following high ethical standards)
- c. Outputs (e.g. journal articles, monographs, patents, software, performances, exhibitions, datasets)
- d. Academic impact (contribution to the wider academic community through e.g. journal editorship, mentoring, activities that move the discipline forward)
- e. Engagement beyond academia
- f. Societal and economic impact
- g. Other (please specify).

10. Do you have any further comments to make regarding the components of research excellence?

Assessment criteria

In assessing submissions, the REF expert panels assess three distinct elements of each submission, against the following generic criteria:

1. **Outputs:** The panels assess the quality of submitted research outputs in terms of their 'originality, significance and rigour', with reference to international research quality standards.
2. **Impact:** The panels assess the 'reach and significance' of impacts on the economy, society, culture, public policy or services, health, the environment or quality of life that were underpinned by excellent research conducted in the submitted unit.
3. **Environment:** The panels assess the research environment of the submitted unit in terms of its 'vitality and sustainability', including the approach to enabling impact from its research, and its contribution to the vitality and sustainability of the wider discipline or research base.

The detailed criteria are set out at Annex B.

Roundtable discussions revealed some concerns about the wider effects of the current REF assessment criteria. For example, the criterion of 'originality' in relation to outputs was seen to discourage the submission of replication studies and reviews, which are essential to driving forward high-quality research. Similarly, the criterion of 'reach' for impact was seen to discourage the submission of research with local impacts, despite clarifications in the Panel Criteria that reach should not be interpreted in this way.

Questions

11. Are the current REF assessment criteria for outputs clear and appropriate? (Yes/No/Don't know)
 - a. Originality
 - b. Significance
 - c. Rigour
12. Do you have any further comments to make regarding the criteria for assessing outputs?
13. Are the current REF assessment criteria for impact clear and appropriate? (Yes/No/Don't know)
 - a. Reach
 - b. Significance
14. Do you have any further comments to make regarding the criteria for assessing impact?
15. Are the current REF assessment criteria for environment clear and appropriate? (Yes/No/Don't know)
 - a. Vitality
 - b. Sustainability
16. Do you have any further comments to make regarding the criteria for assessing environment?

Section four: assessment processes

Frequency

Outcomes from the REF are used to inform the allocation of block grant funding to universities. This funding method ensures a degree of research stability and independence not provided by other funding sources, because the results of research assessment are used over a prolonged period and the funding can be used as providers choose rather than being directed to particular research programmes.

Participants at the roundtables were asked to consider the frequency and sequencing of assessment exercises. Currently, the REF takes place every 5-7 years and assessment of all disciplines takes place in parallel. It has been suggested that a more regular exercise could increase its formative element and would ensure that funding based on REF outcomes more accurately reflects recent performance. However, it was noted that this must be weighed up against the potentially destabilising effect arising from the uncertainty of funding outcomes on a more regular basis.

The funding bodies recognise that views on the frequency of a future exercise will depend on the overall design of the assessment system. For example, it would not be feasible to run the exercise as it currently stands every three years without significantly increasing the burden on the sector. However, the funding bodies are keen to understand in principle whether the sector considers the availability of more current information to be more important than the stability offered by a less frequent exercise.

Questions

17. When considering the frequency of a future exercise, should the funding bodies prioritise:
- a. stability
 - b. currency of information
 - c. both a. and b.
 - d. neither a. nor b.
 - e. Don't know.
18. Do you have any further comments to make regarding the prioritisation of stability vs. currency of information?

Sequencing

During discussions on the frequency of the exercise, some roundtable participants expressed some appetite for moving to a rolling exercise, sequenced by main panel or by assessment element. It was suggested that this would remove some of the perverse behaviours linked to the cyclical nature of the REF, particularly around recruitment and publishing practices. It was suggested that this would also reduce burden at an institutional level as effort would be spread across a number of years, rather than focused on a single end point. As with the frequency of

the exercise, any decision to move to a rolling exercise must be weighed up the potentially destabilising effect of such a change.

Questions

19. Should a future exercise take place on a rolling basis?
- f. Yes, split by main panel
 - g. Yes, split by assessment element (e.g. outputs, impact, environment)
 - h. No
 - i. Don't know.
20. Do you have any further comments to make regarding conducting future research assessment exercises on a rolling basis?

Granularity

A number of the changes made between REF2014 and 2021 were intended to reduce the emphasis on the individual in order to shift the focus onto the submitting unit as a whole. At the same time, an institutional-level environment statement is being piloted alongside REF 2021.

Roundtable discussions emphatically rejected a return to a more individual-focused exercise. However, views were divided on the extent to which future exercises should retain the Unit of Assessment structure. Those in favour of a more institution-focused approach frequently cited the current (perception of) disadvantage to inter- and transdisciplinary research in a discipline-based system. It was also noted that many of the issues relating to research culture and environment can only be addressed at the level of the institution.

There was, however, concern amongst others that a move to a fully institutional-level assessment would conceal the 'pockets of excellence', particularly in less research-intensive HEIs, and would make REF assessment outcomes less robust indicators of excellence. This is an important consideration for the funding bodies, given the continued link with funding.

Questions

21. At what level of granularity should research be assessed in future exercises?
- a. Individual
 - b. Unit of Assessment based on disciplinary areas
 - c. Unit of Assessment based on self-defined research themes
 - d. Institution
 - e. Combination of b. and d.
 - f. Combination of c. and d.
 - g. Other (please specify)
22. Do you have any further comments to make regarding the granularity of assessment in a future research assessment exercise?

Metrics

Roundtable discussions suggest limited appetite for increasing the role of metrics in the assessment of outputs. However, there was greater support for exploring quantitative indicators in the environment section. The use of metrics in the REF has been discussed at length, most notably in the 2015 Metric Tide Report. However, discussions persist in the sector.

Questions

23. To what extent and for what purpose(s) should quantitative indicators be used in future assessment exercises? (Please select as many as apply)
- a. Move to an entirely metrics-based assessment
 - b. Replace peer review with standardised metrics for:
 - i. Outputs
 - ii. Impact
 - iii. Environment
 - c. Use standardised metrics to inform peer review of:
 - i. Outputs
 - ii. Impact
 - iii. Environment
 - d. Should not be used at all.
 - e. Other (please specify)
24. Do you have any further comments to make regarding the use of metrics in a future research assessment exercise?

Burden

The cost and bureaucratic burden of the REF are frequently cited in criticism of the exercise. Roundtable discussions identified some sources of burden specific to the current exercise (e.g. special circumstances procedures), along with the overall scale and complexity of the exercise. However, several participants stated that the bureaucracy is, to a certain extent, generated by institutions' approaches to the REF and can be difficult to distinguish from activities that would be carried out as part of business as usual or in response to requirements elsewhere in the system (e.g. by research funders). Several respondents expressed scepticism that burden would increase or diminish significantly with changes made to the exercise. It was also noted that changes may, in themselves, create additional burden for institutions regardless of their nature or intent. While UK-wide research assessment falls outside the scope of the ongoing ['Independent review of research bureaucracy'](#) commissioned by the Department for Business, Energy & Industrial Strategy, related discussions have largely echoed the views expressed in the roundtables.

25. How might a future UK research assessment exercise ensure that the bureaucratic burden on individuals and institutions is proportionate?

Annex A: Consultation questions

Section one: purposes of research assessment

1. In addition to enabling the allocation of research funding and providing accountability for public investment in research, which purposes should a future UK research assessment exercise fulfil? Select all that apply.
 - a. Provide benchmarking information
 - b. Provide an evidence base to inform strategic national priorities
 - c. Provide an evidence base for HEIs and other bodies to inform decisions on resource allocation
 - d. Create a performance incentive for HEIs.
2. What, if any, additional purposes should be fulfilled by a future exercise?
3. Could any of the purposes be fulfilled via an alternative route? If yes, please provide further explanation.
4. Do you have any further comments to make regarding the purposes of a future research assessment system?

Section two: setting priorities

5. To what extent should the funding bodies be guided by the following considerations in developing the next assessment system? Please rank the considerations from 1 (most important) to 9 (least important)
 - a. Ability of the system to promote research with wider socio-economic impact.
 - b. Comparability of assessment outcomes (across institutions, disciplines and/or assessment exercises)
 - c. Ensuring that the bureaucratic burden of the system is proportionate
 - d. Impact of the assessment system on local/regional development
 - e. Impact of the system on research culture
 - f. Impact of the system on the UK research system's international standing
 - g. Maintaining continuity with REF 2021
 - h. Providing early confirmation of the assessment framework and guidance
 - i. Robustness of assessment outcomes
6. Relating to research culture, to what extent should the funding bodies be guided by the following considerations in developing the next assessment system? Please rank the considerations from 1 (most important) to 6 (least important)

- a. Impact of the assessment system on research careers:
 - b. Impact of the assessment system on equality, diversity and inclusion:
 - c. Ability of the assessment system to promote collaboration (across institutions, sectors and/or nations)
 - d. Impact of the system on inter- and transdisciplinary research
 - e. Impact of the system on open research
 - f. Impact of the system on research integrity
7. What, if any, further considerations should influence the development of a future assessment system? Please set out the considerations and indicate where they should be located in the list of priorities.
8. How can a future UK research assessment system best support a positive research culture?

Section three: identifying research excellence

9. Which of the following elements should be recognised and rewarded as components of research excellence in a future assessment exercise?
(Multiple options: 'Should be heavily weighted' – 'Should be moderately weighted' – 'Should be weighted less heavily' – 'Should not be assessed' – 'Don't know')
- a. Research inputs (e.g. research income, internal investment in research and in researchers)
 - b. Research process (e.g. open research practices, collaboration, following high ethical standards)
 - c. Outputs (e.g. journal articles, monographs, patents, software, performances, exhibitions, datasets)
 - d. Academic impact (contribution to the wider academic community through e.g. journal editorship, mentoring, activities that move the discipline forward)
 - e. Engagement beyond academia
 - f. Societal and economic impact
 - g. Other (please specify).
10. Do you have any further comments to make regarding the components of research excellence?
11. Are the current REF assessment criteria for outputs clear and appropriate? (Yes/No/Don't know)
- a. Originality
 - b. Significance
 - c. Rigour
12. Do you have any further comments to make regarding the criteria for assessing outputs?

13. Are the current REF assessment criteria for impact clear and appropriate? (Yes/No/Don't know)
- Reach
 - Significance
14. Do you have any further comments to make regarding the criteria for assessing impact?
15. Are the current REF assessment criteria for environment clear and appropriate? (Yes/No/Don't know)
- Vitality
 - Sustainability
16. Do you have any further comments to make regarding the criteria for assessing environment?

Section four: assessment processes

17. When considering the frequency of a future exercise, should the funding bodies prioritise:
- stability
 - currency of information
 - both a. and b.
 - neither a. nor b.
 - Don't know.
18. Do you have any further comments to make regarding the prioritisation of stability vs. currency of information?
19. Should a future exercise take place on a rolling basis?
- Yes, split by main panel
 - Yes, split by assessment element (e.g. outputs, impact, environment)
 - No
 - Don't know.
20. Do you have any further comments to make regarding conducting future research assessment exercises on a rolling basis?
21. At what level of granularity should research be assessed in future exercises?
- Individual
 - Unit of Assessment based on disciplinary areas
 - Unit of Assessment based on self-defined research themes
 - Institution
 - Combination of b. and d.
 - Combination of c. and d.

- g. Other (please specify)
22. Do you have any further comments to make regarding the granularity of assessment in a future research assessment exercise?
23. To what extent and for what purpose(s) should quantitative indicators be used in future assessment exercises? (Please select as many as apply)
- a. Move to an entirely metrics-based assessment
 - b. Replace peer review with standardised metrics for:
 - i. Outputs
 - ii. Impact
 - iii. Environment
 - c. Use standardised metrics to inform peer review of:
 - i. Outputs
 - ii. Impact
 - iii. Environment
 - d. Should not be used at all.
 - e. Other (please specify)
24. Do you have any further comments to make regarding the use of metrics in a future research assessment exercise?
25. How might a future UK research assessment exercise ensure that the bureaucratic burden on individuals and institutions is proportionate?

Annex B: REF 2021 assessment criteria

These definitions can be found in the [Panel criteria and working methods \(REF 2019/02\)](#). Paragraph references refer to this document.

Outputs

191. 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.

192. 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.

193. 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.

Impact

288. Reach will be understood as the extent and/or diversity of the beneficiaries of the impact, as relevant to the nature of the impact. Reach will be assessed in terms of the extent to which the potential constituencies, number or groups of beneficiaries have been reached; it will not be assessed in purely geographic terms, nor in terms of absolute numbers of beneficiaries. The criteria will be applied wherever the impact occurred, regardless of geography or location, and whether in the UK or abroad.

289. Significance will be understood as the degree to which the impact has enabled, enriched, influenced, informed or changed the performance, policies, practices, products, services, understanding, awareness or wellbeing of the beneficiaries.

290. The sub-panels will make an overall judgement about the reach and significance of impacts, rather than assessing each criterion separately. While case studies need to demonstrate both reach and significance, the balance between them may vary at all quality levels. The sub-panels will exercise their judgement without privileging or disadvantaging either reach or significance.

291. HEIs may submit case studies describing impacts at any stage of development or maturity. However, the assessment will be solely on the impact achieved during the assessment period, regardless of its stage of maturity. No account will be taken of anticipated or future potential impact, nor of impact that occurred outside the assessment period (1 August 2013 to 31 July 2020).

Environment

326. Vitality will be understood as the extent to which a unit supports a thriving and inclusive research culture for all staff and research students, that is based on a clearly articulated strategy for research and enabling its impact, is engaged with the national and international research and user communities and is able to attract excellent postgraduate and postdoctoral researchers.

327. Sustainability will be understood as the extent to which the research environment ensures the future health, diversity, wellbeing and wider contribution of the unit and the discipline(s), including investment in people and in infrastructure.

328. In assessing the environment element of submissions, panels will assess vitality and sustainability in terms appropriate to the scale and diversity of the research activity the submitting unit supports, and as appropriate for its subject area(s). They will assess vitality and sustainability in terms of both the research environment within the submitting unit, and its participation in and contribution to its subject discipline, academic community and wider society.