Consultation on the second Research Excellence Framework

Summary of responses

In December 2016, the UK higher education funding bodies in England, Scotland, Wales and Northern Ireland published a joint 'Consultation on the second Research Excellence Framework'. The consultation set out proposals for implementing the recommendations of Lord Stern's 'Research Excellence Framework (REF) review: Building on success and learning from experience', published in July 2016. This document summarises our analysis of the responses we received, and these informed our initial decisions which are set out in a separate document (REF 2017/01).

REF2021 Research Excellence Framework

Contents

REF2021

Consultation on the second Research Excellence Framework

Summary of responses

Executive summary

Purpose

1. In December 2016, the UK higher education funding bodies in England, Scotland, Wales and Northern Ireland published a joint 'Consultation on the second Research Excellence Framework' (HEFCE 2016/36). This document summarises our analysis of the 388 formal responses we received.

2. The consultation set out issues and proposals relating to particular aspects of the next REF and sought views on the following aspects of the assessment framework:

- overall approach
- unit of assessment structure
- expert panels
- staff
- collaboration
- outputs
- impact
- environment
- institutional-level assessment
- outcomes and weighting
- proposed timetable.

3. The consultation responses informed the initial decisions taken on a number of high-level aspects of the framework (which was published recently as REF 2017/01). There are some areas (including the eligibility of institutions to participate in the exercise, submission of staff, and output portability) where we are undertaking further engagement before finalising arrangements (see Annex A of HEFCE Circular letter 33/2017). The second set of decisions will be published in autumn 2017.

Key points

4.   Consultation responses welcomed an overall continuity of approach with REF 2014 and recognised that this would reduce the burden on institutions and panels. Broad support was expressed for the principles behind Lord Stern's recommendations. There were mixed responses to some of the proposed approaches to implementing the changes, in particular:

- all-staff submission

- non-portability of outputs

- institutional-level assessment

- open access and data sharing.

5.   Feedback on these areas included concern about their effects on different disciplines or types of institution, their impact on specific groups, in particular early career researchers and those with protected characteristics[1], and the burden of implementation.

Action required

6.   This publication is for information.

---

[1] 'Protected characteristics' identify groups that are protected under the Equality Act 2010. They are arranged under the following headings: age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage and civil partnership, and pregnancy and maternity.

Introduction

7.   In December 2016, the UK higher education funding bodies in England, Scotland, Wales and Northern Ireland published a joint 'Consultation on the second Research Excellence Framework' (HEFCE 2016/36). The consultation was based on the findings of Lord Stern's Research Excellence Framework (REF) review: 'Building on success and learning from experience', published in July 2016, and our evaluation of REF 2014. The consultation ran from 8 December 2016 to 17 March 2017. This document summarises our analysis of the responses we received, and these informed our initial decisions which are set out in a separate document (REF 2017/01).

8.   We received 388 formal responses to the consultation. Of these, 380 responses were submitted via the online survey. Eight further responses were provided in an alternative format and did not always address the questions directly. Responses were from a broad range of stakeholders across the sector (see Table 1).

Table 1: Categories of online respondents to the 2016 REF consultation

Higher education institution	147
As an individual	72
Subject association or learned society	69
Representative body	39
Other	17
Department or research group	13
Charity	11
Public sector organisation	8
Business	4

9.   All responses were read, recorded and analysed, and this summary outlines the key issues raised. For practical reasons, quantitative analyses and tables of responses include only those who submitted through the online survey. Unless otherwise specified, percentages and proportions refer to the pool of those who responded to the relevant question(s). Response rates to each question – broken down by respondent type – can be found at Annex A.

10.   The consultation responses informed the initial decisions taken on a number of high-level aspects of the framework (see REF 2017/01). There are some areas (including the eligibility of institutions to participate in the exercise, submission of staff, and output portability) where we are undertaking further engagement before finalising arrangements (HEFCE Circular letter 33/2017, Annex A). The second set of decisions will be published in autumn 2017.

Continuity with REF 2014

Informed by responses to:

Question 1. Do you have any comments on the proposal to maintain an overall continuity of approach with REF 2014, as outlined in paragraphs 10 and 23 [of the consultation]?

11.   Over 80 per cent of consultation respondents, including over 95 per cent of higher education institutions (HEIs), commented on the proposal to maintain an overall continuity of approach with the 2014 Research Excellence Framework (REF). There was overwhelming support for the proposal, with many respondents indicating that continuity would help to reduce the burden on institutions and panels. A significant number of respondents highlighted the benefits of ensuring comparability between exercises to enable longitudinal analyses of progress, development and growth at institutional and disciplinary levels. Several comments related to specific policies and proposals (open access, unit of assessment (UOA) structure, interdisciplinary research, staff selection, and the decoupling and portability of outputs). These points have been incorporated into the relevant sections and are outlined here only insofar as they relate to the question of continuity.

12.   There was widespread support for continuing to assess research excellence through outputs, impact and environment. Overall, it was agreed that the introduction of impact in REF 2014 had been successful, and a number of respondents highlighted the importance of continuity in ensuring that it becomes fully embedded in the exercise. Many highlighted peer review as a positive element of the REF. Several respondents recommended the inclusion of a greater number of research users on the panels, as well as increasing their involvement in the development and delivery of the exercise.

13.   A significant number of respondents argued that any radical changes would be difficult to implement at this stage in the assessment cycle, and that many institutions had already put in place processes and strategies based on the assumption of continuity with REF 2014.

14.   Several respondents indicated neither agreement nor disagreement with the proposal but, rather, expressed the opinion that the proposals put forward elsewhere in the consultation did not represent continuity with REF 2014. In particular, it was felt that the changes around staff submission, along with the decoupling and portability of outputs, would require actions that were incompatible with Lord Stern's aims to reduce burden and maintain continuity. While feedback on these specific proposals is outlined in subsequent sections, it should be noted that a number of respondents drew attention to the need to consider these changes holistically and evaluate their cumulative effect on the exercise.

15.   A few respondents highlighted that consideration must be paid to the potential effects that changes may have on specific groups, including early career researchers and those with protected characteristics.

The inclusion of academic staff in the next REF

Informed by responses to:

Question 7. Do you have any comments on the proposal to use HESA cost centres to map research-active staff to UOAs and are there any alternative approaches that should be considered?

Question 8. What comments do you have on the proposed definition of 'research-active' staff?

Question 11. Do you support the introduction of a mandatory requirement for the Open Researcher and Contributor ID (ORCID) to be used as the staff identifier, in the event that information about individual staff members continues to be collected in REF 2021?

Question 12. What comments do you have on the proposal to remove Category C as a category of eligible staff?

Question 13. What comments do you have on the definition of research assistants?

Question 14. What comments do you have on the proposal for staff on fractional contracts and is a minimum of 0.2 FTE appropriate?

Definition of staff who have a significant responsibility to undertake research

16.   Over 75 per cent of respondents to the consultation addressed the proposed definition of 'research-active' staff. Nearly all HEIs commented on this issue. There was considerable support for the recommendation to include in the exercise the research of 'staff who have any significant responsibility to undertake research'. There was, however, variation in views about how the principle should be operationalised.

17.   The vast majority of respondents expressed concerns about the use of contract type, as reported on the Higher Education Statistics Agency (HESA) staff record, as the means for identifying staff with significant responsibility for research. There were two principal issues raised in relation the proposed approach, outlined in paragraphs 43 and 44 of the consultation (HEFCE 2016/36).

18.   Over a third of respondents noted that contractual status does not necessarily reflect the diversity of activities undertaken by academic staff. This concern was raised primarily by HEIs. Respondents pointed out the following:

a.   HESA staff return classifications offer limited contract types (Teaching only, Teaching and Research, and Research only), and many HEIs issue Teaching and Research contracts to all academic staff as either a requirement of statute or a matter of policy.

b.   Respondents noted that staff on Teaching and Research contracts may have very different proportions of their time allocated between teaching and research activities,

and will be involved in other significant and important activities, including knowledge exchange and enterprise, or activities related to professional practice. In many cases, the balance of activities carried out by individuals is determined through work profile documents rather than contracts. As a result, respondents argued, not all staff on Teaching and Research contracts meet the Stern Review criteria of having 'significant responsibility to undertake research', and their inclusion within research volume risks a significant distortion of research activity in HEIs.

19. Over a third of respondents suggested that the proposal might result in changes to contractual status, with some staff being moved to Teaching-only contracts. A small number of HEI respondents suggested that they would make such contract changes if the proposal is implemented. Respondents raising this concern were predominantly HEIs, learned societies and subject associations. Respondents argued that this would have a negative impact on staff morale and career development, create burden for HEIs, and potentially lead to a 'two-tier' system separating teaching and research staff. Some respondents specifically mentioned equalities implications, suggesting that contract changes might differentially apply to staff with protected characteristics.

20. Where alternative approaches were suggested, the predominant suggestion (by one-fifth of respondents addressing this issue) was that HEIs should retain a key role in identifying staff with significant responsibility for research. Respondents making this proposal referred to the existence, in many HEIs, of auditable evidence to support their decision making, such as work profile documents or detailed job descriptions. Most respondents were content with the proposed pool of staff from which those with significant responsibility for research would be drawn (meaning. those having Teaching and Research or Research-only contracts).

21. Many respondents stressed the importance of research independence as a criterion, especially for staff employed on Research-only contracts. The majority of respondents argued for a nuanced approach to the inclusion of research assistants where they could demonstrate research independence. There was some support for using the REF 2014 independence criteria, although many requested clearer guidance to limit the burden on HEIs. Some respondents suggested that decisions about the research independence of research assistants must take into account disciplinary differences, and that advice on criteria would be needed from main panels or sub-panels.

22. The removal of Category C as a category of eligible staff was supported by the majority of respondents to Question 12. Respondents noted the small scale of usage of this category in REF 2014, and a number commented that removing this category would help to reduce the burden of the exercise. Around a third of respondents to the question opposed the proposal. Many of these respondents were concerned about the potential disincentive for research collaborations with organisations outside the higher education sector. Specific reference was made to the museums sector, and a significant number referred to potential issues for clinical research and collaboration with the NHS.

23. The majority of respondents commenting on fractional contracts (Question 14) agreed with a minimum of 0.2 full-time equivalent (FTE). In this context, many respondents

highlighted the particular value of staff jointly employed in industry or practice, and the contribution they make to research activity. A small number disagreed with the proposal and cited concerns about 'gaming' around the appointment of staff on fractional contracts. There was wide support for the inclusion in submissions of a statement outlining the connection of staff on minimum FTE contracts as a means of mitigating against gaming, but recognised that this could increase burden.

24.   Most respondents who commented on Question 11 supported the introduction of a mandatory requirement for the use of ORCID as a staff identifier, which was perceived to promote good research practice through data linking and better interoperability of research data administration systems. Respondents cited specific related advantages, including the ability to track research impact more easily and to re-use information. A small number commented on the nature of the organisation governing ORCID, specifically that it is external to HEFCE, non-UK-based and the misperception that it is a commercial company[2]. Respondents also questioned the extent of its uptake by HEIs and identified differences between disciplines, with science, technology, engineering and mathematics (STEM) disciplines perceived to have adopted it more widely than arts and humanities.

Allocation of staff volume to REF units of assessment

25.   Strong views against the proposal to use HESA costs centres to map staff to UOAs were expressed by the vast majority of respondents to Question 7. There were three principal areas of concern reported in relation to the proposal:

a.   A significant majority of respondents noted that HESA cost centres are allocated largely on the basis of departmental location or teaching responsibilities, and that these allocations do not map accurately onto areas of research activity. Respondents argued that their use in the REF would lead to research outputs and impact being submitted to sub-panels without the required expertise to assess them, and that such staff groupings would prevent robust assessment of the research environment.

b.   Nearly 50 per cent of respondents expressed the concern that the relatively fixed nature of HESA cost centres would make it harder to submit research that spans disciplinary boundaries. It was pointed out that the potential discouragement of interdisciplinary research runs counter to the priority to encourage this type of research given elsewhere in the consultation, and in the Stern Review.

c.   Over 10 per cent of HEIs reflected that the proposal could potentially lead to a large number of small submissions to the REF. Respondents argued that these small submissions would increase the burden of the exercise, as each submission would require an environment statement and at least one impact case study.

26.   There was considerable support for an approach that would allow HEIs themselves to report how research volume maps onto UOAs within their institutional context. This approach, respondents suggested, could use HESA cost centre allocations as a starting point, but would permit HEIs to reallocate. Respondents also mentioned that an audit approach could be used to ensure that HEIs' allocations of research volume to UOAs was appropriate.

2 ORCID is a non-profit organisation.

27.   A number of respondents suggested that it would be feasible to add an additional field to the HESA staff record to reflect a research area or REF UOA for future assessment exercises. Respondents supporting this suggestion argued that it was important that any new field could be updated regularly, to reflect any changes in research focus.

Outputs

Informed by answers to:

Question 9. With regard to the issues raised in relation to decoupling staff and outputs, what comments do you have on:

a.   The proposal to require an average of two outputs per FTE staff returned?

b.   The maximum number of outputs for each staff member?

c.   Setting a minimum requirement of one for each staff member?

Question 10. What are your comments on the issues described in relation to portability of outputs, specifically:

a.   Is acceptance for publication a suitable marker to identify outputs that an institution can submit and how would this apply across different output types?

b.   What challenges would your institution face in verifying the eligibility of outputs?

c.   Would non-portability have a negative impact on certain groups and how might this be mitigated?

Question 16. Do you agree with the proposal to allow the submission of a reserve output in cases where the publication of the preferred output will postdate the submission deadline?

Question 17. What are your comments on the assessment of interdisciplinary research in REF 2021?

Question 18. Do you agree with the proposal for using quantitative data to inform the assessment of outputs, where considered appropriate for the discipline? If you agree, have you any suggestions for data that could be provided to the panels at output and aggregate level?

The relationship between staff and research outputs in the next REF

28.   Over 80 per cent of consultation responses commented on the relationship between research staff and the submission of research outputs in the next REF. The vast majority of this group (over 75 per cent) indicated broad support for Lord Stern's principle to submit an average number of outputs per FTE staff, with flexibility for some members of staff to submit more and others fewer than the average. A range of supporting arguments and caveats were expressed in relation to this view, as summarised below.

29.   The consultation sought views on the use of a multiplier of two outputs per FTE, with the aim of maintaining the same number of outputs as in REF 2014. Over half of responses provided explicit support for the proposed multiplier; the majority of these were from HEIs evenly spread across institutions of all types. The majority of those who suggested an alternative to an average of two outputs recommended using a higher multiplier. Just over 10 per cent of responses referenced the use of sampling of outputs for assessment. The majority were not in favour of taking this approach, even if a higher output multiplier were to be used.

30.   One-third of responses reflected on the interdependency between their view on the number of outputs required and the definition of staff with 'significant responsibility to undertake research'. Responses acknowledged that the average number of outputs per FTE would need to be considered against a more accurate understanding of staff in scope for the REF in order to ensure the total number of outputs across the REF continued to be manageable. It was felt that the total number of outputs returned to REF 2014 (191,000) was appropriate.

31.   Several responses reflected on the differential impact of the output multiplier on HEIs of varying levels of research intensity, particularly where there might be an increase in the volume of staff submitted for less research intensive HEIs. When viewed at sector level, responses suggested that this might give the overall impression of a decline in research quality in the UK. It was argued that:

a.   If research intensive HEIs were required to submit fewer research outputs than in 2014, relative to other HEIs, they might: have a larger pool of outputs to choose from; be constrained in their ability to showcase excellent research; demonstrate an 'upward shift' in four-star research, leading to less ability in the system to discriminate between top performing HEIs.

b.   If less research intensive HEIs (or those with a high volume of fractional contracts, or with a focus on teaching or significant professional practice) were required to submit more research outputs than in 2014, they might experience: a significant increase in administrative burden in the selection of outputs; a greater volume of lower quality outputs; a dilution of existing 'pockets of excellence'; or disproportionate burden on existing stellar researchers.

32.   Around a third of respondents to 9c. commented on the potential impact on particular groups of researchers should there be no formal procedures to take account of staff with relevant individual circumstances. The majority view was that the current approach would not make sufficient allowance for certain groups, including early career researchers, part-time staff and those with periods of maternity leave. The following concerns were raised:

a.   There may be a reduced pool of outputs available for departments with higher numbers of staff with circumstances that have constrained their ability to produce research. This could lead to pressure being placed on other members of staff (it was suggested the impact of this might be felt hardest by smaller research units with a smaller field of outputs to begin with).

b. Staff with protected characteristics could be discriminated against where they are less able to produce research at the same rate as other staff. This could influence recruitment behaviour.

c. Where there is no formal account of the rationale for the number of outputs by each staff member selected for submission, there may be additional stigma for staff associated with fewer outputs and potential perceptions relating to the quality of research they produce.

33. Some respondents believed that a formal equality and diversity process would not be necessary as the additional flexibility for some members of staff to submit more and others less than the average would make it easier to include high-calibre researchers who would have been unable to produce four outputs as per the previous exercise. However, the majority of respondents on this issue suggested that some form of individual staff (or research unit) circumstances measure would be required in the next exercise, particularly if a minimum of one output per person is required. This was raised by over a third of respondents. Approximately 5 per cent of responses preferred a minimum of zero on the basis that this removed the need to account for individual staff circumstances (recognising the burden associated with this in 2014) and would reduce the likelihood of discrimination. Counter to this, a few respondents expressed the view that even if a minimum of zero were applied, additional measures would still be required to account for individual staff circumstances.

34. For some, in light of the burden associated with REF 2014, a lighter-touch method of recognising individual circumstances was desirable. Others believed the benefits of this process would outweigh the associated burden. Suggestions ranged from 2014-style processes to set quotas for the number of individuals that could be returned with zero outputs. Others suggested a submission-level reduction in number of outputs on the basis of circumstances within a submitting unit.

35. Respondents made a number of suggestions to ensure that staff with protected characteristics were adequately supported. The most frequently mentioned were:

•   capturing data about the pool of researchers in a department and reducing the total number of outputs required for that submitting unit accordingly

•   providing evidence of equality and diversity policies and practices, and related data, on the staff body

•   providing data on the spread of submitted research outputs across the staff base.

36. Respondents commented on the burden associated with the proposal to decouple staff from outputs, as it was perceived to be more difficult to select outputs than select staff. The majority of responses indicated that the proposals would increase or at least maintain the administrative burden on HEIs. This was thought to be a result of the transfer of work from selecting staff to what was felt the more difficult task of selecting outputs, and would be further increased by the introduction of a minimum and maximum number of outputs as opposed to 'true decoupling' of staff from outputs.

37. A small number of responses suggested that the maximum number of outputs should be varied according to UOA. It was argued that it is easier to produce six outputs in some disciplines than others and that having different maximum numbers would help to avoid disadvantaging those disciplines with longer-length publications and higher levels of professional practice or teaching commitments.

38. A fifth of respondents to Question 9b. expressed concern that the principle of decoupling staff from outputs would limit the extent to which multi-authored research could be returned to REF. This was thought to be particularly relevant in 'team science' and disciplines with a culture of group authorship. Such an approach was also perceived to disadvantage interdisciplinary research. A small number of respondents suggested that the guidelines should enable institutions to duplicate the submission of a given output where it has multiple authors from the same institution. However, a slightly larger number pointed out the risk that this could lead to gaming, whereby researchers are added as co-authors without having made a significant contribution to the output.

Minimum and maximum number of outputs

39. Of those who commented on question 9c., asking for views on the minimum number of outputs per staff member, over half supported setting a minimum requirement of one output per person. Over one-third were in favour of no minimum at all. This support was often linked to the use of contracts to determine research-active status and concern about the ability to submit large numbers. When considering a potential minimum number of outputs, only 5 per cent of responses raised concerns about potential contract changes for staff without any outputs or where their outputs would not be of sufficient quality.

40. The importance of all research-active staff being represented in a submitting unit's submission was the most popular argument made in support of requiring a minimum of one output. This proposal was also thought by some to encourage the submission of a breadth of research disciplines and provide the necessary accountability for public funding.

41. Arguing in favour of a minimum of one, some respondents reflected the concerns outlined in paragraph 31, speculating that returning a significant number of researchers with no outputs would send an unwelcome signal to international partners about the strength of the UK research base. Conversely, concerns were raised about the potential increase in low-quality research in REF submissions caused by a non-selective submission and a minimum of one output person, and the effect that might have on the reputation of the submitting unit, HEI, and the health of UK research overall.

42. Respondents suggested that a minimum of one output would not be possible for all staff if non-portability rules were introduced. Where responses broadly agreed with a minimum of one, responses often requested an exception for those affected by non-portability rules in this way.

43. There was very mixed feedback on the appropriate maximum number of outputs per person. Overall, just under 50 per cent of respondents supported a maximum of six outputs per person. Fewer than 5 per cent expressed explicit disagreement with a

maximum of six; however, a large number of respondents were in favour of an alternative maximum of four or five, or implied they would be flexible on this issue.

44. One-third of respondents expressed concern about potential over-reliance on those who have greater opportunity to research productively, should there be a maximum of six outputs per person. Concern was expressed that researchers who produce more outputs, or have a track record of excellence, would receive more favourable treatment (in terms of funding, research time, reduced teaching workload and general university support), to the disadvantage of other staff, particularly mid and early career researchers who are more likely to require institutional support. It was also suggested that a maximum of six outputs could have negative implications on the diversity of staff represented in the output return. In particular, concerns were raised that those with individual staff circumstances might be under-represented in submissions. On this basis, some respondents suggested a maximum of four or five would more appropriately balance excellence and broader representation of a unit.

Non-portability of research outputs

45. Only half of those who commented on one or more aspects of Question 10 expressed explicitly their support for, or opposition to, introducing non-portability of research outputs in REF 2021. Of those who provided a clear view, around three-quarters did not support the introduction of non-portability rules. The remaining quarter expressed support for the proposal and agreed with the principle of recognising institutional support or welcomed efforts to address the 'transfer market', although this was often accompanied with some concerns about the practical implementation of, or consequences resulting from, its introduction.

46. Key areas of concern raised across the respondents:

a. Over 35 per cent of respondents raised concerns about the effect of non-portability on staff mobility and dynamism in the sector, sometimes reflecting on the risk to UK higher education that may result from a stagnant or ossified workforce.

b. Over 40 per cent of respondents reflected on gaming or the concept of the staff transfer market as a rationale for non-portability. While just under 25 per cent of them welcomed non-portability as an appropriate counter to the transfer market, over 60 per cent who commented on this raised concern that non-portability was not the appropriate answer

c. Around 25 per cent of respondents raised concern about the effect of non-portability on researchers' publishing behaviour, whereby output submission may be delayed in anticipation of a move. Some of these respondents reflected on the negative consequences for UK research overall if this occurred.

d. Around 20 per cent of respondents raised concerns about introducing non-portability mid-way through the REF cycle, with many suggesting it should not apply retrospectively and should (if anything) be delayed until the next exercise. Some respondents also suggested further piloting, testing or discussion was needed before introducing this change.

e. Over 10 per cent of respondents highlighted concerns about the potential for non-portability to introduce additional complexity or administrative burden into the process through the need to ascertain and evidence eligibility of outputs.

f. A range of comments were made in relation to ownership of outputs, with some objecting to an implication that outputs are owned by institutions, particularly where research was undertaken without the institution's support, and in some cases outlining the grounds of legal ownership (of intellectual property) by researchers.

47. Around 25 per cent of respondents offered suggestions for alternative ways to address the transfer market or provide recognition to institutions for their investment. The most commonly mentioned were: the introduction of a time window, usually for staff moving close to the census date, after which outputs would not be portable; the number of portable outputs could be capped; or outputs could be shared between both institutions.

Acceptance date

48. The vast majority of those who commented on using acceptance for publication as a marker to identify where outputs have been demonstrably generated, did not believe it to be suitable or workable. Over a third of those disagreeing with acceptance date as a marker felt that the publication date would be a preferable alternative; however, many also raised issues with this as a date as a marker of where an output has been demonstrably generated.

49. Frequently cited concerns around the use of acceptance date as a marker of demonstrable generation included:

a. How this might be applied to non-journal output types, with some suggesting this could affect institutions' decisions around what to submit. Respondents highlighted the differing publication practices across publication types, with some suggesting it would be difficult to identify a one-size-fits-all solution.

b. Potential complexity or burden around the processes and systems required to track output eligibility.

c. Data are not held by institutions, are not formally collected, and are usually evidenced only via correspondence between the author and publisher. This would have particular implications if evidence needed to be collected retrospectively. On a related point, respondents felt it would be challenging to gather evidence of eligibility for outputs by staff that have left. This was felt especially to apply to some output types (such as practice-based) where it would also be challenging to submit portfolio information. Respondents suggested that this could lead to a body of lost outputs that could not be submitted.

Impact on different groups

50. The vast majority of respondents who commented on any effects of non-portability on different groups expressed concern about early career researchers. This was often in relation to their relatively high mobility and likelihood to be on fixed-term contracts.

Without outputs as 'currency', it was argued, career progression for this group of staff would be negatively affected, with no incentives for institutions to retain them after their contract ends or recruit new early career researchers. Respondents frequently proposed an exception be made for this group. A small minority of respondents felt the effect would not be significant, was overstated, or would have positive benefits on recruitment approaches.

51.   Concerns were raised about disincentives for collaboration with those working outside of academia or for international mobility (sometimes mentioned in the context of Brexit). While there was support for exceptions for overseas academics, there was a small body of opinion concerned about introducing exceptions in view of concerns about gaming and a potential effect on UK researchers.

52.   Combined with comments in relation to the effect on fixed-term staff, some respondents highlighted potential concerns regarding equality and diversity more widely. Respondents reflected on the characteristics of staff who are more likely to be on fixed-term contracts, may need to move for non-career reasons (such as caring responsibilities), or because of discrimination encountered in employment.

Sharing outputs

53.   The consultation sought views on sharing outputs proportionally across institutions. Many respondents raised concerns or questions about how this might work in practice. Over a third of respondents indicated that they were not in favour of the proposal primarily because proportional sharing was perceived to be complex and burdensome to administer, with some also suggesting this may lead to disputes between institutions. Particular concerns were raised about how it would work for some disciplines or output types, and challenges in evidencing and assigning proportions. Some respondents (including those who disagreed) were supportive of the fairness in the principle of sharing outputs as a fair one (sometimes in preference to full non-portability).

Reserve output

54.   The consultation invited comments on the proposal to allow a reserve output in cases where the publication of the preferred output would post-date the submission deadline. The overwhelming majority of respondents supported the proposal on the grounds that it would give institutions flexibility and allow them to submit their best work, while reducing significantly the burden of monitoring the outputs falling into this category.

55.   A small number of respondents disagreed with the proposal. Opponents argued that there was a need for a clear submission deadline cut-off point and that this proposal would increase the complexity of the process and the burden on panellists.

Quantitative data

56.   Over two-thirds of those who commented on the proposal to use quantitative data to inform the assessment of outputs were in agreement. Many respondents, across all viewpoints, reflected on the importance of being sensitive to disciplinary differences both between and within UOAs. Specific concerns were raised about disciplines in the

arts, humanities and social sciences where, it was suggested, there were no suitable quantitative data available for the assessment of research outputs. It was also noted that the selection of appropriate indicators should involve disciplinary experts, through general consultation, dialogue with learned societies and subject associations, or seeking advice from the sub-panels themselves. A number of respondents argued that it was important that the sub-panels received support and guidance in the interpretation of any bibliometric indicators used.

57.   One-third of respondents were against the proposal and raised concerns about the quality of citation data and questioned the relationship between research quality and citation measures. They also noted that disciplinary differences in the use of citation data would compromise consistency between UOAs.

58.   Only a small number of respondents commented on specific indicators that could be used to support output assessment. Some remarked that the provision of contextualised citation counts in REF 2014 had worked well, and suggested this approach should be adopted for REF 2021. There were mixed views on the use of Field-Weighted Citation Impact, with some being supportive of its use, some suggesting it should only be used at aggregate level, and others expressing reservations about its use at all due to difficulties in defining to which field of research outputs belong. There were also mixed views about the use of journal-level indicators: several respondents argued strongly against their use while a small number suggested they had a role to play, especially in the assessment of research outputs published close to the end of the publication period for research outputs. There was some support for percentile-based citation indicators, although it was noted that these also need to be contextualised for research fields and that this can be challenging.

59.   Many responses noted the importance of following the recommendations of the Metric Tide report, and the principles of the Leiden Manifesto for Research Metrics[3]. There was also support for the work of the Forum for Responsible Metrics, and its published response to the consultation[4].

Interdisciplinary research

60.   Over three-quarters of respondents commented on the assessment of interdisciplinary research. The responses focused primarily on the three proposals identified in the consultation document, with almost a fifth explicitly expressing support for the implementation of all three proposals. A number of respondents highlighted the effectiveness of cross-referral arrangements for REF 2014 and saw no need for further changes. The constitution and training of panels was identified as crucial in supporting the fair and consistent treatment of interdisciplinary research.

---

[3] 'The Metric Tide. Report of the Independent Review of the Role of Metrics in Research Assessment and Management' (2015) is available online at www.hefce.ac.uk/pubs/rereports/year/2015/metrictide/. 'Bibliometrics: The Leiden Manifesto for research metrics' (2015) is available at www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351.

[4] Information about the forum is available online at www.universitiesuk.ac.uk/policy-and-analysis/Pages/forum-for-responsible-research-metrics.aspx. This includes its advice for the UK HE funding bodies on the use of quantitative indicators in the assessment of outputs in REF 2021.

61.   While there was clear support for the appointment of interdisciplinary 'champions' in principle, a number of issues were highlighted by respondents:

a.   There was a desire for clarity on the nature of the role, in particular whether champions would:

   • undertake active assessment of all interdisciplinary outputs, or

   • oversee and ensure fair and equitable treatment of interdisciplinary research within their sub-panel.

   There was clear preference for the latter, with reference made to the difficulty in recruiting a sufficient number of suitably experienced individuals to assess the full breadth of interdisciplinary research.

b.   Respondents identified a need to appoint champions early in the criteria development phase.

c.   A few respondents noted a preference for an interdisciplinary panel, rather than the appointment of champions. However, this view was not widely held.

62.   A significant majority of respondents expressed support for the proposal to make the 'interdisciplinary identifier' field mandatory. However, they drew attention to the need for a clear definition of interdisciplinary research and an indication of how this flag would be used in the assessment of outputs and any post-REF evaluation. It was noted that a system allowing a binary choice between inter- or monodisciplinary research could lead to the majority of research being flagged as interdisciplinary, and that a more sensitive system – one which identified the different disciplines covered by the output – may be more appropriate.

63.   There was wide support for the introduction of a specific interdisciplinary section in the environment template. However, concerns were raised that awarding it an independent score could privilege interdisciplinary research over monodisciplinary work. It was also stressed that this section must recognise that providing support for interdisciplinary research will not be relevant to every submitting unit, and there must be an option for them to explain why this is the case.

Institutional-level assessment

Informed by answers to:

Question 38. What are your views on the introduction of institutional-level assessment of impact and environment?

Question 39. Do you have any comments on the factors that should be considered when piloting an institutional-level assessment?

Question 40. What comments do you have on the proposed approach to creating the overall quality profile for each submission?

64. Just over 50 per cent of respondents to Question 38 agreed in principle with the introduction of an institutional element to the environment template; this support came with a lot of caveats. Views on the assessment of institutional-level impact were more negative than the responses to institutional-level environment, with over 60 per cent of respondents opposing the proposal. Concerns were raised that the purpose of institutional assessment of impact was not clear and that there was an implied conflation of the terms 'interdisciplinary' and 'institutional'. These concerns are outlined in greater detail in paragraphs 69-71 below.

65. The respondents expressing support for institutional-level assessment highlighted its potential to recognise strategic activity across an institution and the support offered to interdisciplinary research and broader collaboration.

66. There was some overlap in the concerns raised about institutional-level assessment in the environment template and impact element.

a. It was suggested that these proposals could lead to the masking of 'pockets' of excellence (and weakness) within an institution, which would run counter to the principle of the REF to identify excellence 'wherever it is found'. These responses highlighted the diversity of performance and approach at UOA level, which could vary according to quality but also between disciplinary approaches. In relation to the environment template, however, a number of respondents suggested that a distinct institutional element would allow the submitting unit to focus on unit-specific support within the institutional context and explain how the unit implements institution-wide policy frameworks.

b. Respondents argued that an institution-wide assessment might favour larger, multi-faculty institutions and raised concern that small, specialist HEIs or those with very few submitting units might be adversely affected due to increased burden. With specific reference to impact, it was felt that the submission of a single institutional case study posed a higher risk to those HEIs that only submitted to one or two UOAs. A number of respondents suggested that small and specialist institutions should be exempt from this element of the submission if it goes ahead.

c. Concerns were raised around the difficulties that would arise for institutions if these proposals are implemented at this stage in the REF cycle. This argument was also put forward by many of those who were supportive in principle but believed that the timing would not allow effective inclusion in REF 2021. There were also calls for there to be a degree of flexibility in the assessment to reflect the challenges posed by the timing.

d. Several responses questioned the proposed weighting of the institutional-level elements. Among these respondents, the majority were of the opinion that the

weighting should be lower, or that they should not carry any weighting. Further comments on the weighting of institutional-level impact are outlined in paragraphs 147-149.

e.   A small number of respondents requested further clarification on how institutional assessment would work in practice, including how it would impact HEIs submitting to only one UOA and what implications it would have for funding.

Environment template

67.   In addition to the shared issues outlined in paragraph 66, two additional key points were made with specific reference to institutional-level assessment in the environment template:

a.   Several respondents felt that the potential benefits would be outweighed by the administrative burden for the submission and the assessment processes, particularly if all sub-panels were required to read institutional-level information.

b.   Conversely, a larger proportion of respondents thought that this proposal would reduce the duplication of institutional information at UOA level, simultaneously reducing burden and increasing consistency.

68.   Among all respondents (supportive or otherwise) there were suggestions for implementation or alternative approaches:

a.   There was widespread support for an alternative approach: to include in the existing UOA environment template a section with institutional-level information and a narrative on the interaction of the submitting unit and the institution.

b.   A significant number of respondents highlighted the importance of clarifying the link between the UOA and HEI level in the guidance and assessment process to ensure complementarity. There were also calls for clear guidance on the data and information to be included.

c.   Several respondents called for careful consideration of who might assess institutional-level information, and how. Some expressed a preference for the process happening at main panel level.

d.   A number of references were made to the importance of piloting these changes (see paragraphs 72-77 below).

Impact

69.   A number of the concerns surrounding the institutional impact case study were expressed in relation to interdisciplinarity.

a.   There were significant concerns that 'institutional' and 'interdisciplinary' as terms had become conflated in the proposal and that this confusion obscured the aim of the institutional impact case study. It was suggested that if the intention of the case study is to assess institutional impact, rather than function as a mechanism for the assessment of interdisciplinary impact, then clearer framing is required.

b. Related to the previous point, there was general consensus that the assessment of impact in REF 2014 had been sufficiently open to incorporate interdisciplinary case studies. Institutional-level assessment that functions primarily to assess the impact of interdisciplinary research, then, would be a superfluous addition. A number of respondents also highlighted that, within their own institution, there were no case studies that could not be submitted because of their interdisciplinary nature.

70. Respondents highlighted concerns that high-quality UOA-level impact case studies may be 'poached' for the institutional submissions, leading to an internal conflict of interest and the potential to conceal areas of excellence at UOA level. A number of submissions also identified the risk that institutions may attempt to retro-engineer a submission by 'knitting together' existing case studies from individual submitting units.

71. Responses to this question generated few suggestions for alternative approaches. It was suggested that the institutional-level assessment should examine institutions' policies and approaches for supporting, embedding and developing institutional-level interdisciplinary impact at a strategic level. In this model, case studies would continue to be submitted in UOAs with the scope to refer to the institutional-level assessment submission and, where appropriate, flag and submit to multiple panels.

Pilot exercise

72. Over half of all respondents commented on the proposal to pilot institutional-level assessment, and an overwhelming majority supported this suggestion where an institutional-level assessment goes ahead. The key recommendations are summarised below.

73. Several respondents suggested that the pilot assessment must consider the implications of the proposal on different disciplines and institutions. A small number of responses also suggested that the pilot exercise consider the impact on joint submissions. Piloting different weightings and their impact on quality profiles was felt to be a key element of this. Respondents were very clear that the selection of HEIs for the pilot exercise should be diverse and representative of the whole sector. Several volunteered to take part in any pilot exercise.

74. Several respondents referred to the interaction between the UOA and institutional levels, mostly in relation to the institutional environment template. Respondents argued that any pilot exercise should consider the boundaries and interactions between the UOA and HEI-level assessments. A crucial part of this process would be to develop and test the guidance to minimise duplication across the assessments and identify areas of complementarity where information needs to be seen together. Respondents were clear that the institutional assessment could not be piloted in isolation but should be considered alongside the revised UOA-level environment assessment in order to explore implications for the UOA level.

75. Several respondents stressed that the pilot exercise should assess the burden of both the submission and assessment processes, and how this might differ across a range of institutions. Respondents also noted that the pilot exercise itself should not be overly burdensome, in order to attract a broad range of volunteers.

76. A significant number of concerns were raised regarding the timing of the pilot exercise. Some felt that such an exercise was not feasible given the timing of the next REF. Others

called for a pilot exercise to inform implementation of these proposals in the post-2021 REF. A slightly larger group was clear that any exercise should commence without delay so that guidance and criteria could be published for HEIs to make preparations ahead of REF 2021.

77.   Respondents were clear that the constitution of the pilot panel would be a key factor to consider in the pilot exercise, and it was felt that this would need to be representative and also contain the right level of expertise. Respondents had differing views on whether a single institutional panel was the best approach, whether there should be main panel grouping, or an integrated discussion at UOA level. They suggested that the pilot exercise might test this. Respondents also noted that the pilot exercise would need to test the relationship between the institutional-level panel and the sub-panels, including access to information across the two levels and how to ensure that institutional panel scores did not skew sub-panel scores.

Impact

Informed by answers to:

Question 19. Do you agree with the proposal to maintain consistency where possible with the REF 2014 impact assessment process?

Question 20. What comments do you have on the recommendation to broaden and deepen the definition of impact?

Question 21. Do you agree with the proposal for the funding bodies and Research Councils UK to align their definitions of academic and wider impact? If yes, what comments do you have on the proposed definitions?

Question 22. What comments do you have on the criteria of reach and significance?

Question 23. What do you think about having further guidance for public engagement impacts and what do you think would be helpful?

Question 24. Do you agree with the proposal that impacts should remain eligible for submission by the institution or institutions in which the associated research has been conducted?

Question 25. Do you agree that the approach to supporting and enabling impact should be captured as an explicit section of the environment element of the assessment?

Question 26. What comments do you have on the suggested approaches to determining the required number of case studies? Are there alternative approaches that merit consideration?

Question 27. Do you agree with the proposal to include mandatory fields (paragraph 96 [of the consultation document]) in the impact case study template, to support the assessment and audit process better?

Question 28. What comments do you have on the inclusion of further optional fields in the impact case study template (paragraph 97 [of the consultation])?

Question 29. What comments do you have on the inclusion of examples of impact arising from research activity and bodies of work as well as from specific research outputs?

Question 30. Do you agree with the proposed timeframe for the underpinning research activity (1 January 2000 to 31 December 2020)?

Question 31. What are your views on the suggestion that the threshold criterion for underpinning research, research activity or a body of work should be based on standards of rigour? Do you have suggestions for how rigour could be assessed?

Question 32. Evaluation of REF 2014 found that provision of impact evidence was challenging for HEIs and panels. Do you have any comments on the following:

    a. The suggestion to provide audit evidence to the panels?

    b. The development of guidelines for the use and standard of quantitative data as evidence for impact?

    c. Do you have any other comments on evidencing impacts in REF 2021?

Question 33. What are your views on the issues and rules around submitting examples of impact in REF 2021 that were returned in REF 2014?

78.   Overall, there was overwhelming agreement (95 per cent) with the proposal to maintain consistency where possible with the REF 2014 impact assessment process, including unanimous support from the HEIs who responded to the question. The main reasons for supporting the proposal were as follows:

a.   Consistency was perceived to reduce the burden on HEIs. This was the most commonly cited reason, and was mentioned by over 25 per cent of those who supported the proposal. It was also noted that many institutions have already begun to prepare for REF 2021 based on the assumption that the guidance will not change significantly.

b.   Around 20 per cent of those in favour of maintaining consistency expressed the opinion that impact is still a relatively new addition to the REF and requires time to embed further before substantial changes are made.

c.   Conversely, just under 15 per cent agreed with the proposal because they felt that impact is valued and well-established in the sector and therefore does not require change. Several respondents also indicated that the model used to assess impact in 2014 was suitable and should be maintained.

d.   Over 10 per cent of supporters agreed with the proposal because they felt that consistency with REF 2014 would facilitate comparison between different REF exercises and allow the tracking of performance and change.

Definitions

79.   Several respondents suggested that there was scope for incremental development of the assessment process based on lessons learned from 2014. In particular, there was significant support for broadening and deepening the definition of impact.

80.   A significant proportion of respondents commented on the need for clear guidance on the definitions of impact and the assessment criteria. There was widespread perception that institutions had been cautious in their choice of case studies, submitting those impacts that were easy to evidence or align with the criteria. In particular, this was felt to have affected impact through public engagement and case studies demonstrating cultural or social benefits.

81.   The following key points were made by respondents:

a.   Just under one-third of respondents commented on capturing impact on teaching. There was general agreement that teaching is a valid societal benefit and that impact on teaching should therefore be included. However, there was also some feeling that impact on teaching would be better captured in the Teaching Excellence Framework (TEF) or that it could be an important opportunity to link the REF to the TEF.

b.   A significant number of respondents highlighted the need for clearer guidance on capturing impact arising from public engagement. Overall, respondents were supportive of broadening definitions to be more inclusive of public engagement activity, but there was a lack of clarity about how such impacts would be assessed. A particular concern was raised about providing clarity on the distinction between dissemination and impact. Similar points were made regarding cultural and societal impacts, which were perceived to be challenging to evidence and measure.

c.   A number of respondents raised the issue of academic impact, with the vast majority feeling that it was best captured in the outputs and environment sections.

d.   There was overwhelming support for the proposal that the funding bodies and Research Councils UK (RCUK) align their definitions of academic and wider impact.

82.   Over 60 per cent of respondents commented on the assessment criteria of reach and significance, as used in REF 2014. The majority of them were content with the current definitions or expressed the opinion that changing them would be detrimental to maintaining consistency. However, just under 20 per cent of respondents expressed concerns. Among both positive and negative respondents, some key issues emerged:

a.   There was overwhelming support for clearer guidance on reach and significance in REF 2021. A number of respondents suggested providing worked examples or exemplar case studies demonstrating how reach and significance would be assessed. There was, however, acknowledgement that there could be variations among disciplines in how these criteria are defined and assessed, and a few respondents commented that it would be important to remain flexible with definitions across the disciplines. A small number suggested that the case study template could include specific questions requiring submitting units to explain how their case study demonstrates reach and significance.

b.   A significant number of respondents indicated that greater clarity was needed over how reach and significance were 'weighted' against one another. There was a perception that reach was considerably easier to evidence or measure than significance, and that this could create a hierarchy whereby reach is privileged as a more objective criterion or, conversely, that the narrative outlining significance could be regarded as more compelling than reach based on quantitative data.

Portability of impact

83.   The vast majority of respondents supported the proposal that impacts remain eligible for submission by the institution(s) in which the associated research has been conducted. Fewer than 15 per cent of all respondents disagreed with this proposal and under 10 per cent of HEIs.

84.   Those who supported the proposal believed that it would allow institutions to continue to use their existing infrastructure and impact strategies from REF 2014. It was also suggested that non-portability could incentivise investment and infrastructure within HEIs. A number of respondents noted that the non-portability of impact would protect institutions against the loss of individual researchers, which is essential to sustainable research units. Those who responded positively also offered some related comments and suggestions:

a.   There was broad support for some flexibility around sharing and collaboration between HEIs, and it was noted that further guidance on collaborations would be welcomed.

b.   There was concern over the ability to 'keep track' of impact over long time periods, in particular in those instances where a key individual has moved to another HEI.

c.   Exceptions to non-portability were suggested around early career researchers and new researchers.

85.   Negative responses to the proposal noted that impact generated by a body of work and developed over a long period of time may be difficult to attribute to one institution. Concerns raised by respondents focused on the potential for gaming by institutions, as well as the possible negative effects on researchers' career prospects if they are unable to take their impact with them to new institutions. A number of references were also made to the proposal to introduce non-portability of outputs and how this might affect the portability of impact.

86.   Calls were made across all types of respondents for flexibility that would enable institutions to share impact, where it occurs over a long period of time, and for exceptions to be made for early career researchers and new researchers.

Impact in the environment element

87.   There was broad support for the proposal to capture information previously provided in the impact template (REF3a) in an explicit section in the environment statement. It was

felt that this approach was consistent with the embedding of impact as a normal day-to-day activity for researchers and institutions. Key points to note were:

a.   A number of respondents highlighted the importance of ensuring that this section is distinct and of sufficient length for a comprehensive account of research impact strategies to be provided.

b.   To avoid duplication it was suggested that institutional support be noted in the institutional environment statement, and any specific unit-based support be noted in the UOA-level environment statement.

c.   It was recommended that the panels read case studies and the impact statement together to ensure a holistic assessment of impact.

88.   The small number of respondents who disagreed with the proposal or expressed no clear opinion cited concerns that 'condensing' the impact statement into the environment template would not enable a comprehensive account of impact activity within a unit to be provided. It was noted by some that, while the proposal had advantages, it would result in the impact sub-profile being driven entirely by the unit's case studies. This was connected to a concern that the inclusion of institutional impact cases might dilute the available pool of excellent UOA-level case studies.

Impact case study template

Mandatory fields

89.   The proposal to include mandatory fields in the impact case study template was supported by over 90 per cent of respondents to the question. A significant number believed that this would ease the burden on institutions and panels, particularly in the audit and assessment stages of the REF. Some respondents suggested that this proposal would improve consistency within and between panels, and would lead to greater transparency and clarity for submitting institutions. Respondents also noted that this proposal would make comparison of case studies easier than in REF 2014 during the assessment and post-REF analysis stages.

90.   Some concerns were raised both by those who agreed with the proposal and the small number of respondents who did not support it. The key points were:

a.   A small group of those who agreed with the proposal made it clear that they supported the use of mandatory fields for assessing eligibility, but did not support the use of these fields for assessing the quality of the case studies. Others stated the need for clear guidance on how these sections would be weighted and assessed.

b.   A few respondents indicated that the inclusion of mandatory fields should not be at the expense of the freedom that was previously allowed for the impact narrative in REF 2014.

c.   It was questioned whether the mandatory fields would be able to reflect sufficiently the key differences between disciplines, and there was a suggestion that it might be beneficial to include a 'not applicable' option for all 'mandatory' fields.

91. Several suggestions were made regarding the information to be included in the mandatory fields:

a. Some support was expressed for the inclusion of funding information as a mandatory field. This included information such as the funder grant reference number and other details about funding investment. Responses indicated that this information would be particularly useful for charities and representative bodies, to enable them to determine where their initiatives had added value.

b. Mixed views were expressed around the inclusion of a digital object identifier (DOI) in the mandatory fields. While some explicitly stated that they supported the inclusion of this field, a larger number raised concerns that this could appear to place emphasis on traditional outputs. It was suggested that the inclusion of a 'mandatory identifier' was acceptable, but that it should offer options to provide other means of identification.

Optional fields

92. There were mixed views on the proposal to include further optional fields in the impact case study template. Around one-fifth of respondents to this question expressed support for the proposal, with the view that it would enrich the content and value of the case studies and facilitate further post-REF analysis. Others felt that optional fields would provide additional clarification regarding what information is required from submitting units, and that the added structure that these fields would provide would be beneficial.

93. A number of conditions and concerns were also identified by respondents, many of whom stated that their support would depend on what would be covered by these optional fields and how this information would be used. The majority of these arguments overlap with those outlined in paragraph 90. Some additional points to note are:

a. A few respondents stressed that optional fields must remain truly 'optional' and that steps would need to be taken to ensure that institutions did not interpret them as being mandatory, and thereby increase burden on submitting units.

b. On a related point, it was suggested that the proposed 'mandatory' and 'optional' fields should be replaced by sections that are 'mandatory, where applicable'. Some respondents argued that, where there is a clear reason for requesting certain information, this should be made mandatory and, where is no clear reason, it should not be requested at all.

c. Concerns were also raised around the practicalities of standardising the optional fields, for example currency conversion rates. These concerns would apply equally to mandatory fields.

94. Several suggestions were made by respondents regarding the information to be collected in the optional fields. Of these, only the recommendation to include funding information was made with any frequency.

Required number of case studies

95. Almost half of the responses to Question 26 supported the principle of maintaining the volume of impact case studies overall. The majority recognised that this would affect the ratio of case studies required per FTE when applied alongside the submissions of all staff with significant responsibility for research. Respondents were keen to know the multiplier as soon as possible, to enable HEIs and submitting units to plan the number of case studies required.

96. A third of responses agreed that the minimum number of impact case studies per submission should be reduced to one. This was felt to be of particular benefit to smaller submitting units. However, a number of respondents discussed the risks associated with a minimum of one case study. The most commonly mentioned were:

a. It was suggested that small submissions which have only one case study would be vulnerable to the weighting this would carry in the final profile, especially if the impact template is relocated to the Environment section, and could distort a unit's overall quality profile.

b. There was a concern that a minimum of one case study would encourage institutions to submit their 'safest' case studies and potentially diminish the richness of impact submitted.

97. To mitigate these risks, some responses suggested that small submissions should be able to choose whether they would rather submit two; others suggested that the minimum should apply to each research cluster rather than a submitting unit; and nearly 5 per cent of those who commented suggested that maintaining a minimum of two outputs was preferable.

98. A few responses referenced the particular consequences for new departments, including the difficulty in producing impact case studies within the REF timeframe, and suggested that exceptions should be made for this group.

99. A number of responses discussed the practicalities of maintaining the overall volume of case studies given the likely increase in total staff returned. Apart from considering a lower minimum, the most common suggestion was to scale back the number of case studies required for larger submissions. This included introducing a maximum number of case studies per submission or increasing the staff to case study ratio for larger submissions. When considering a suitable ratio it was acknowledged that a less selective approach to staff submission would remove the problem of thresholds, as staff could not be excluded on the basis of number of case studies required. Nearly 10 per cent of responses favoured an approach which calculates the total number of case studies required at HEI, or main panel, level with flexibility afforded to the HEI as to where it submits its case studies. Most of these respondents acknowledged that appropriate ranges might be applied to each submitting unit depending on the relevant FTE.

Underpinning research

100.   A significant majority supported the proposals in Question 29 to include examples of impact arising from research activity and bodies of work, with only a small number explicitly expressing disagreement with the proposal.

101.   Respondents supporting the proposal acknowledged that connecting impact to specific outputs was problematic in REF 2014 and prevented institutions from submitting a wide range of case studies. It was suggested that a broadening of the criteria would provide a more holistic view of the ways in which UK research has wider impact. Several respondents identified benefits for specific disciplines, particularly where research is based around creative practice, collaboration with industry, or where knowledge exchange stems from research groups rather than specific outputs.

102.   Several respondents discussed the link between research and impact. The significant majority of them agreed that pathways to impact are often non-linear, and that some forms of impact cannot always be linked directly to a specific output or publication. This was highlighted by a cross-section of HEIs and subject representatives. However, a number of those who disagreed with the proposal argued that there was a value in retaining a link between the outputs and the impact, and suggested that removing this link may create vagueness and inconsistencies across the submission and assessment process. They believed that decoupling research outputs from impact was contrary to the mission of the REF to assess research, rather than the researcher. Respondents who did not support the proposal recommended that a strong justification would be required before a case study could be submitted without the relevant publications. They felt that if a body of work is submitted then related publications should be listed.

103.   Almost a quarter of all respondents commented on the need for guidance and clarity around the terms 'research activity' and a 'body of work'. Guidance should highlight how research excellence will be demonstrated, and should outline the types of evidence that will be required for the assessment process. Respondents raised concerns over the auditability of the current two-star threshold that was required for underpinning research in REF 2014, and how this would be appropriately evidenced if 'research activities' or a 'body of work' were included in underpinning research. It was recommended that panel members receive further guidance on how to assess case studies that do not have an output attached to them. Worked examples (across disciplines) would be useful to ensure that institutions are confident in the broadest conception of impact, and are not conservative in their interpretation of 'research activities' or a 'body of work'.

104.   A significant majority supported the proposed timeframe for the underpinning research activity (1 January 2000 – December 2020). Of the HEIs who replied to Question 30, over 90 per cent were in favour of the proposal. Several respondents acknowledged the benefits of ensuring consistency with the timeframe used for REF 2014.

105.   Of the respondents to Question 30, 14 per cent disagreed with the proposed timeframe, the majority of whom recommended a longer timeframe for underpinning research with several suggesting 1 January 1993 as an appropriate start date. Supporters of a longer timeframe for the underpinning research activity argued that impact is a long-

term endeavour and the timeframe should reflect this. It was suggested that the proposed changes to include 'research activity' and 'bodies of work' as underpinning research may also cause some problems in identifying the cut-off point for their origin.

106.   Almost two-thirds of those who responded to Question 31 disagreed with the proposal that the threshold criterion for underpinning research should be based solely on standards of rigour. Of the HEIs who responded to the question, over 60 per cent disagreed with the proposal, with just over 25 per cent in favour.

107.   Respondents in favour of the proposal highlighted that the criterion of rigour is essential for the public credibility of the exercise and should therefore be valued over originality and significance. Respondents recognised that using rigour as a criterion to assess underpinning research would increase the workload of the panels for REF 2021, and that it would be difficult to find a suitable measure that can be used across all disciplines.

108.   Responses from those who disagreed with rigour as a threshold criterion were mixed, and respondents put forward a number of suggestions of what (if any) threshold criterion there should be for underpinning research. Of those who disagreed with the proposal, over 30 per cent recommended keeping the broader quality threshold that was used for REF 2014. It was argued that this would maintain consistency across assessments, reducing burden and challenges for researchers, institutions and panellists.

109.   In addition, a fifth of respondents recommended that originality and significance should not be subsumed by rigour. Respondents recognised that establishing a threshold criterion of rigour is problematic and potentially controversial for many forms of practice-based research, where experimentation may be more valuable than conforming to established methods. It was also argued that definitions of rigour may differ between disciplines, and there was some feeling that approaches to assessing rigour seemed to favour scientific research.

110.   Several respondents argued that the focus of case studies should be on the resulting impact rather than on the underpinning research, and that the quality of research is demonstrated by the reach and significance of the impact itself. There were concerns that an artificial threshold of quality may remove some outstanding impact case studies from the exercise.

111.   A significant number of respondents provided suggestions on how rigour could be assessed. Over 10 per cent highlighted the importance of research methodologies, which should confirm that research is conscious, self-reflective and self-challenging, and is controlled by considerations and standards intrinsic to the discipline. Peer review was also identified as strongly supporting the assessment of methodological rigour, and a number of respondents recommended that rigour should be assessed through this means. Additional suggestions included demonstrating research funding; the use of metrics; collaborations with external stakeholders; and details of related publications.

112.   Almost 25 per cent of respondents indicated that the two-star threshold used in 2014 should be maintained in the next exercise to maintain consistency. It was argued that the criterion is well-understood by the sector and provides credibility to the exercise. However,

many of these respondents also acknowledged that this approach may be more difficult to assess given the potential inclusion of 'research activities' and 'bodies of work' in REF 2021.

113. A further 25 per cent of respondents recommended lowering the threshold or removing it entirely. Many of these respondents indicated that one-star research that is recognised at a national level is capable of delivering significant impact. It was noted that lowering the quality threshold to one star may also make it easier to assess 'research activities' and 'bodies of work'.

Evidence and audit

114. Almost half of respondents to Question 32 agreed with the proposal to provide audit evidence to the panel. However, over one-third of them had practical concerns about how this would be implemented. Strong views against the proposal were expressed by around one-third of respondents. Around one-tenth of comments stated that the process should be consistent with REF 2014. Many respondents requested clear guidelines on the type of audit evidence required, including the volume that may be submitted and information on how it would be used.

115. A number of concerns were raised across all respondent groups:

a. A large number agreed that providing audit evidence would cause a significant extra burden, particularly for the submitting institution, and commented on the effect of extra data on both HEI and REF systems.

b. Several respondents raised concerns that additional evidence could be used for assessment purposes, rather than simply for audit, and suggested that this could result in submission of impact case studies that have more easily assessable evidence.

c. Some responses questioned the practicalities of gathering extra evidence, including concerns around confidentiality and the difficulty in obtaining evidence held by external stakeholders.

116. The proposal to provide clear guidelines for the use and standard of quantitative data as evidence was supported by the majority of those who commented on this issue. However, two-thirds of those in favour had reservations, and one-third of respondents expressed strong views against the proposal. The most frequently cited concerns relate to:

a. The limited ability of quantitative evidence to demonstrate sufficiently the breadth of impact.

b. It was suggested that the potential privileging of easily quantifiable evidence could lead to a bias before submission in selecting those forms of impact that are more straightforward to measure.

c. Almost one-fifth of respondents raised concerns that quantitative evidence would not be suitable for all disciplines, citing in particular the arts, humanities, and social sciences.

117.   Several respondents stressed that, if the proposal were adopted, stringent guidelines should be produced, including examples of suitable evidence. Others recommended the inclusion an explicit statement that other forms of evidence are allowed (and valued) to mitigate against the creation of a 'hierarchy' of evidence.

118.   It was further suggested that only tried and tested metrics should be used but that evidence should not be standardised. A small number of respondents recommended that this proposal should be implemented after REF 2021.

Resubmission of case studies

119.   The overwhelming majority of respondents agreed with the proposal to allow the resubmission of impact returned in REF 2014. Under 1 per cent expressed explicit disagreement.

120.   Over half of respondents supported the requirement to demonstrate some form of 'additionality' where 2014 case studies are returned. However, a significant number expressed views against this on the grounds that all impacts should be judged equally on their merits. Some respondents also argued that continuation of impact itself represents additionality, and that both 'continuation' and 'new' impact should be eligible for submission. A number of respondents noted the difficulty in defining additionality and stated that a clear definition would be required in the guidance.

121.   Around 20 per cent of respondents suggested flagging previously submitted case studies, some of whom recommended that the panel have access to the REF 2014 submission. A small number recommended the insertion of an extra field to allow an explanation of additionality. Approximately 5 per cent of respondents, predominantly HEIs, did not believe that flagging submissions would be helpful to panel members, and argued that assessors should not have access to the 2014 score to reduce bias. All groups raised questions about the equitable assessment of resubmitted case studies.

122.   There was no consensus on whether to restrict the number of 2014 case studies that could be returned by a submitting unit. Some suggested that a proportion of total case studies submitted would be an appropriate limit but there was disagreement around what proportion would be appropriate, with recommendations ranging from 20 to 70 per cent. A slightly higher proportion of respondents did not agree with placing limitations on resubmitted case studies, and argued that there would be a natural attrition of case studies submitted as the eligible timeframe for underpinning research moves forward. They also noted that restrictions could prevent submission of the 'most excellent examples' of impact and 'dilute excellence' demonstrated by this element of the REF. They also raised the adverse effects this might have for small units.

Environment

Informed by answers to:

Question 34a. Do you agree with the proposal to improve the structure of the environment template and introduce more quantitative data into this aspect of the assessment?

Question 34b. Do you have suggestions of data already held by institutions that would provide panels with a valuable insight into the research environment?

123.   The majority of those who expressed an opinion were in favour of the proposal to improve the structure of the environment template and introduce more quantitative data. Many of those who offered further comment on Question 34a. indicated support for more structure, including those who answered 'no' to the broader question posed here. The majority of comments related to the use of metrics.

124.   By far the most common themes running throughout the arguments revolved around disciplinary and institutional differences and the importance of context for quantitative data, particularly bearing in mind that there are limitations to the evidence that can be provided by small datasets. There were suggestions that the sub-panels should decide which metrics are relevant or should be applied in their particular subject area, with the exception of equality and diversity which should be applied consistently across all sub-panels. It was also suggested that sub-panels should receive guidance to enable them to view the data in its particular institutional context. Furthermore, there was a suggestion that any quantitative data used should be normalised by 'eligible FTE' (averaged over the REF period) as opposed to 'submitted FTE'. It was argued that:

a.   This proposal favours large institutions with access to developed research infrastructures; it was pointed out that high-quality environments can exist in pockets and may not be university-wide.

b.   Data should be presented proportionally to the institution's size, for example, investment in facilities reported as either a proportion of research income or a ratio to QR funding. Similarly, metrics based on the total number of staff in the UOA would make the current metrics more meaningful.

c.   Social sciences and arts and humanities would be particularly disadvantaged by this use of metrics.

d.   The size of grants does not necessarily map onto 'excellence' as they may only reflect the needs of the subject.

125.   Several respondents argued that quantitative data alone would not demonstrate the breadth and richness of the research environment, such as facilitation of supportive relationships or mentoring early career researchers. A significant minority of this group opposed the proposal on the basis that the removal of the narrative could lead panels to

assess the quantity of research rather than the quality. Specific concerns expressed by opponents include:

a. Quantitative indicators being given a formal weighting.

b. The potential for quantitative data to be misleading.

c. Reliance on metrics before they have been shown to be fit for purpose.

126. Supporters of the proposal suggested that the introduction of quantitative data would improve comparability and consistency of assessment in REF 2021, enabling like-for-like benchmarking. Conversely, others believed that comparability and consistency with REF 2014 would be lost.

127. Those who supported the proposal pointed to the fact that REF 2014 allowed the presentation of HESA data in a separate document that had to be cross-referenced by panels to the environment template. It was argued that bringing them together would allow the data to inform the narrative. It was also suggested that the use of quantitative data would promote a more objective assessment of environment, making it easier to audit.

128. Three-quarters of respondents were in favour of the proposal on condition that burden was not increased. It was suggested that this could be achieved by using data that institutions already hold. When asked specifically about existing data, references to the following data sources were made, albeit with some accompanying reservations:

a. HESA data was suggested. However, it was noted that there was a need for more rigorous quality control and that the HESA data should be framed in an institutional context rather than at submitting unit level.

b. Data relating to staff profiles could be introduced, including proportions of academic members holding PhDs or professional doctorates, numbers of early career researchers, contract types and percentage of returners. A small number of respondents indicated they also supported the inclusion of a selection of esteem indicators. One respondent suggested that staff satisfaction rates should also feature as part of the environment assessment.

c. Roughly 10 per cent of those who provided suggestions proposed metrics around support given for researcher development, including sabbaticals or research leave provision, mentoring schemes and training statistics.

d. Several respondents recommended using data related to investment in research, with about half of these referencing spend on estates or research infrastructure. One commentator suggested that the Association of University Directors of Estates (AUDE) could provide the necessary estates data. Investment in library provision, including spend per discipline and funding for open access and research data management, was also suggested.

e. The use of surveys such as the Postgraduate Research Experience Survey (PRES), the Careers in Research Online Survey (CROS), and Principal Investigators and Research Leaders Survey (PIRLS) was recommended, although respondents recognised that they are not compulsory and the data might not be available for all institutions.

129.   The most cited metrics (over a quarter of suggestions) relate to knowledge exchange or collaborations with other disciplines, HEIs or external organisations. It was suggested that Higher Education – Business and Community Interaction (HE-BCI) data could be useful. However, it was noted that these data include a variety of activities that are not underpinned by research. Specific data that could be used include data on intellectual property and commercialisation, along with statistics on co-authorships.

130.   The next most cited metrics related to equality and diversity which, according to respondents, should be submitted in aggregate form or per submitting unit, with some already captured by HESA staff collection. A significant number of those who mentioned equality and diversity specifically proposed incorporating evidence from Athena Swan. Other proposals included using average promotion rates, pay differences, workload differences, and maternity and paternity leave statistics, as well as data on the support given to returners.

Open access and data sharing

Informed by answers to:

Question 36. Do you agree with the proposals for awarding additional credit to units for open access?

Question 37. What comments do you have on ways to incentivise units to share and manage their research data more effectively?

131.   Over 60 per cent of responses to the proposal to award additional credit to units for open access disagreed with the suggestion. In particular, the proposal was opposed by representative bodies, subject associations and learned bodies. Around 60 per cent of HEI respondents also expressed opposition to the proposal. Approximately 20 per cent of those who disagreed noted that the meaning of 'additional credit' is unclear, and further detail is required about how it will be captured and incorporated into the assessment.

132.   Over one-third of respondents who were opposed to the proposal stated that it would have disproportionate effects on HEIs, depending on their size and resources. Respondents argued that open access resources available at unit level are determined by institutional resources, policies and priorities, placing resource-rich HEIs at an advantage. A significant proportion mentioned the costs associated with publishing 'Gold' open access, which was suggested to be the quickest way for HEIs to demonstrate going 'above and beyond' the existing open access policy. Over a third of those who supported the proposal suggested that additional credit must take into account the ability of institutions to adopt and implement fully the open access practice which is being rewarded.

133.   Over a quarter of respondents noted that 'additional credit' at UOA level would have the potential to adversely affect certain disciplines where different publication types are prevalent. It was particularly noted that an open access model for monographs is

not yet sufficiently developed for universal adoption. A further issue noted by this group of respondents included the copyright and commercial restrictions on artistic outputs. Respondents stressed that these restrictions do not allow open access, and providing additional credit could disadvantage institutions who submit to UOAs such as UOA 35 (Music, Drama, Dance and Performing Arts). Similar concerns were raised by a significant number of those who supported the proposal.

134.   On a related point, several respondents pointed to the diversity of publishers, and noted that policies and practice may differ by country. A small number of respondents indicated that some disciplines, such as modern languages, publish most of their outputs outside of the UK. It was suggested that some publishers are disinclined to allow open access, and that additional credit could discourage international publishing.

135.   Almost a quarter of those against the proposal argued that the REF should remain primarily a means of assessing the quality of research. These respondents suggested that the publication and dissemination of research should be secondary to the measure of quality. This argument was put forward primarily by HEIs, subject associations and representative bodies.

136.   Further suggestions were made by a small number of respondents, including: restricting additional credit to those publishing 'green'; giving extra credit at HEI rather than submitting unit level (particularly if the institutional-level assessment is introduced); and rewarding policies and strategies for open access.

Sharing and managing data

137.   Over 200 respondents offered comments on ways to incentivise units to share and manage their research data more effectively, over one-third of which broadly agreed with the inclusion of some form of measure for open data in REF 2021. Around the same number broadly disagreed. Notably, of those who disagreed, almost half argued that REF is not a suitable driver for policy change and should focus on measuring research quality. Respondents across both groups indicated some key considerations when trying to incentivise open data practices:

a.   Several respondents noted that infrastructure for data sharing is still developing, and considerable investment from the sector is required. Costs of infrastructure and staffing were noted by a handful of respondents, and it was suggested that more funding is needed. Concerns were raised that incentivising open data practices through REF would advantage better-resourced HEIs. A number of respondents suggested that it would be more appropriate to assess provision of open data in the post-2021 REF.

b.   Over 10 per cent of respondents mentioned that open data incentives must consider legal, ethical and regulatory frameworks. This was mainly highlighted by HEIs, subject associations and representative bodies.

c.   Disciplinary differences were raised by a small number of respondents, who pointed out that further work is needed to define what open data might look like at a discipline level.

138.   In addition, several suggestions were made regarding the most effective way(s) to incentivise units to share and manage data effectively:

a.   Over 25 per cent of respondents suggested that progress toward open data should be captured in the environment narrative statement. Some thought this would sit best in an institutional-level environment statement, rather than at unit level. It was noted that crude metrics should not be used to assess progress towards open data.

b.   A small number suggested that submissions should demonstrate compliance with the Concordat on Open Research Data, and that policies and practice to demonstrate progress toward the concordat might incentivise its implementation.

c.   Several respondents recommended that clear guidance on datasets as outputs in REF 2021 should be provided, encouraging HEIs to submit outside of the traditional publication outputs. They recommended that guidance should confirm fair, equal assessment of this output type, and provide guidance on how dataset outputs would be assessed by panels.

d.   A few respondents suggested that data sharing requirements should mirror those of other funding bodies, such as RCUK, to avoid any additional burden on HEIs or researchers.

Recognising and supporting collaboration

Informed by answers to:

Question 15. What are your comments on better supporting collaboration between academia and organisations beyond higher education in REF 2021?

Question 35. Do you have any comment on the ways in which the environment element can give more recognition to universities' collaboration beyond higher education?

139.   Over 200 respondents offered suggestions on how best to support collaboration with organisations beyond higher education. The majority of respondents were positive about supporting and recognising collaborative activity, although most had caveats appended to their positive feedback.

140.   The following concerns were raised by both those who agreed and those who disagreed with proposals to support and increase recognition of collaboration:

a.   Over 10 respondents thought that it was important that definitional changes went further than the Dowling review to recognise the full range, depth and value of collaborations[5]. Respondents identified a need for clear guidance on the range of acceptable collaborating organisations that takes in a broad range of partners, rather than focusing narrowly on collaboration with industry.

---

[5] 'The Dowling Review of Business-University Research Collaborations' (2015) is available online at https://www.gov.uk/government/publications/business-university-research-collaborations-dowling-review-final-report.

b.   Respondents indicated that metrics are not yet sufficiently robust to enable the assessment of collaboration.

c.   Some respondents argued that collaboration was adequately demonstrated and assessed through impact case studies in REF 2014.

d.   There is a risk of double counting if information on collaboration is presented in both the impact and environment sections.

141.   A small number of respondents recommended that individuals moving into higher education from outside the sector should be treated as if they were early career researchers. Similarly, it was suggested that exceptions in output numbers be made for staff entering higher education from industry. Recruitment of panel experts from private, public and third sector backgrounds for the assessment of impact and environment was also deemed important.

142.   Many respondents welcomed the opportunity to raise the visibility of collaborative activity, and considered that the proposed merging of the impact template and the environment narrative was a suitable way to achieve this. A handful of respondents considered that this information was better collected at institutional level, since collaborations often extend beyond single disciplines. Some considered both UOA and institutional level to be relevant but recognised that duplication could be an issue.

143.   Over 10 per cent of respondents to Question 35 thought that institutional collaborative activity should have an explicit section similar to that for interdisciplinary research, and that the section should provide a clear definition of collaboration. The predominant view was that this should be located in the environment template.

144.   Approximately 20 per cent of respondents to Question 35 encouraged a flexible approach to the recording of collaborative outputs. Respondents advocated the need for data to be located alongside a narrative to capture the nature and scope of the collaborative activity, along with the strategic approach, and to enable HEIs to demonstrate the breadth and quality of collaborations.

Weightings

Informed by answers to:

Question 40. What comments do you have on the proposed approach to creating the overall quality profile for each submission?

Question 41. Given the proposal that the weighting for outputs remain at 65 per cent, do you agree that the overall weighting for impact should remain at 20 per cent?

Question 42. Do you agree with the proposed split of the weightings between the institutional and submission-level elements of impact and environment?

145. Over 200 respondents offered comments on the proposed approach to creating the overall quality profile, including around 90 per cent of HEIs. There was no widely accepted position regarding the proposals put forward in the consultation (HEFCE 2016/36, paragraphs 126-129 and Figure 1), with the majority of respondents demonstrating partial agreement or disagreement. More respondents agreed with the overall weightings for output, impact and environment than with the proposals for institutional assessment and weightings. Comments provided on weightings and quality profile were often influenced by specific concerns over institutional impact. Only those comments with direct relevance to weightings are included in this section. Comments relating more broadly to institutional-level impact assessment can be found in paragraphs 69-71 of this document.

146. Nearly 40 per cent of respondents broadly agreed with the consultation's proposed approach to creating the overall quality profile for each submission, 40 per cent of whom agreed with the split in weightings between outputs, impact and environment. Just over 25 per cent of those who agreed in general with the proposals did so because they support continuity with REF 2014. This argument was overwhelmingly made by HEIs.

Institutional-level assessment

147. Just over 40 per cent of respondents disagreed with the proposed approach to creating overall quality profiles. The primary reasons provided for disagreement centred on the introduction of institutional assessment, most notably the argument that its introduction would create distortion by failing to identify pockets of excellence and advantaging or disadvantaging certain types of institution (see paragraphs 64-66). Just over 25 per cent of those who disagreed, fully or partially, did so because they wanted to separate institutional assessment from UOA-level scores, while over 15 per cent wanted institutional assessment removed from REF 2021 entirely. Nearly 10 per cent of those who disagreed or partly disagreed wanted institutional weightings to be lowered.

148. These arguments were reflected in responses to the specific proposal (Question 42) to set the weightings for institutional-level elements of impact and environment at 5 per cent and 7.5 per cent respectively: two-thirds of respondents disagreed with the suggested split. A significant number of this group advocated the removal of institutional assessment or a reduction in its weighting. The preferred alternative for the environment element was 5 per cent, while there was no clear agreement on the ideal proportion for institutional-level impact assessment. A small number of respondents noted specifically that they supported the suggested environment weightings but not those for impact.

149. The third of respondents who supported the weightings for institutional-level assessment frequently set out conditions for their agreement, which centred primarily on the need to refine the concept of institutional-level assessment. Suggestions included consulting on institutional assessment, providing guidance on how institutional assessments would contribute to overall assessments and on how they would be assessed by panels. Those who referred specifically to impact recommended making institutional impact assessment about strategy and support (rather than case studies) and requested confirmation that duplication of information across UOA and institutional case studies would be permitted. Comments relating to the environment element argued that institutional-level assessment should be about policies and culture rather than facilities and infrastructure.

Impact

150.   Overall, there was strong agreement with the proposal to maintain the weightings of impact and outputs at 20 and 65 per cent respectively. The proposal was particularly strongly supported by HEIs and subject associations, while a smaller proportion of individuals and charities were in favour.

151.   The most frequent reason for this support was the proposed move of the impact template into environment, which respondents noted would effectively increase the weighting of impact overall. A desire for continuity from REF 2014 was the next most popular reason for support, followed by the argument that it would be premature to adjust the weighting of impact given that it was only introduced in the previous exercise.

152.   The majority of those who disagreed with the proposed weighting of outputs and impact were in favour of increasing the weighting for impact. Over 60 per cent of those making this point wanted impact weighting to be increased to 25 per cent, with five respondents citing the Witty report as evidence for this[6].

Timescales

Informed by answers to:

Question 3a. Do you agree that the submissions guidance and panel criteria should be developed simultaneously?

Question 3b. Do you support the later appointment of sub-panel members, near to the start of the assessment year?

Question 43. What comments do you have on the proposed timetable for REF 2021?

153.   Almost half of respondents were broadly supportive of the proposed timetable for REF 2021 with a third opposed to it, while a significant number (149) chose not to respond to this question. Many respondents noted that the timetable would be challenging; however, only a handful called specifically for a delay to the exercise. Several raised the issue of external factors that might potentially influence the development of the REF, such as Brexit, the Higher Education and Research Act, and the creation of Research England.

154.   A few respondents stated that the timetable would be too tight to enable the implementation of the recommendations made in the Stern report, and proposed a phased approach to introducing the changes across REF 2021 and the following exercise. On a related point, questions were raised about the dates of the pilot studies for institutional-level assessment and information on how they will fit into the timetable.

155.   A number of comments were made relating to the assessment period dates for publications and the census date for staff inclusion, including setting the same date for

---

[6] 'Encouraging a British invention revolution: Sir Andrew Witty's review of universities and growth' is available online at https://www.gov.uk/government/publications/universities-and-growth-the-witty-review.

'staff in post' and the 'end of the publication period'; aligning assessment period dates for impacts, outputs, environment and staff; and moving the census date for staff submission to the end of July to align with other data periods and the HESA reporting period. It was also noted that any movement from a census date to a rolling or time-weighted average (such as for numbers of outputs or impact case studies required) would cause significant administrative burden.

Submissions guidance and panel criteria

156.   A significant number called for the timely publication of the guidelines on submission, suggesting that mid-2018 would be too late to allow institutions to adapt their current plans and strategies, should this be necessary. Specific guidance was requested around staff submission, portability of outputs and institutional-level assessment. Respondents also requested early confirmation of the month in which these would be published.

157.   Over two-thirds of respondents to the consultation supported the proposal that the submissions guidance and panel criteria be developed simultaneously. Many in this group indicated that this would create additional clarity, coherence and consistency between the two documents. Several respondents stressed that simultaneous development should not be allowed to delay the timetable and that there should be no further changes to the documents (for example, through frequently asked questions, FAQs) as this would increase burden. A significant number commented on the need to extend involvement beyond sub-panel chairs. This issue is explored further in paragraphs 165-167.

158.   Just over 50 respondents opposed the proposal to develop the submissions guidance and panel criteria simultaneously. The primary concerns were around the potential delay to guidance, particularly in the context of the changes proposed by Lord Stern. Others argued that the objectives of the activity need to be established before specific criteria can be drawn up.

Units of assessment

Informed by answers to:

Question 2. What comments do you have about the unit of assessment structure in REF 2021?

159.   Three-quarters of those who commented on the UOA structure in REF 2021 expressed support for the proposal to retain largely the same structure as 2014. The key reasons given for support were to retain continuity and comparability with the 2014 outcomes, to avoid further major changes (in recognition of the associated burden), and to support consistency across panels.

160.   Nearly one-fifth of respondents commented on the proposal for sub-panels to identify particular areas for which a discrete output sub-profile could be provided. The majority were

supportive of the proposal, with some caveats around the implementation. A small number expressed ambivalent views, or did not support the proposal, due to the potential for burden and complexity.

161.   Around one-quarter of respondents raised concerns about or reflected on interdisciplinary research and mechanisms for cross-referral.

162.   A number of respondents raised issues relating to UOA 17 (Geography, Environmental Studies and Archaeology). The majority of these comments advocated revising the UOA, primarily recommending the separation of 'Geography and Environmental Studies' from 'Archaeology'.

163.   Several comments were made on the four engineering UOAs, with mixed views put forward on their structure in 2021. There was some support expressed for retaining the 2014 structure, and General Engineering in particular. A slightly higher number of responses advocated a revision to the structure, with the most common suggestion being to merge the UOAs into a single engineering UOA.

164.   Smaller numbers raised concerns about the visibility of outcomes for individual subject areas within each of the following UOAs. In most cases, the weight of opinion was not towards a restructure:

a.   UOA 3: Allied Health Professions, Dentistry, Nursing and Pharmacy.

b.   UOA 4: Psychology, Psychiatry and Neuroscience. Concerns were also raised in relation to coverage, assessment and funding outcomes for the disparate disciplinary areas covered by this UOA.

c.   UOA 28: Modern Languages and Linguistics.

d.   UOA 35: Music, Drama, Dance and Performing Arts.

e.   UOA 36: Communication, Cultural and Media Studies, Library and Information Management. Comments focused on the distinctiveness of both 'Communication, Cultural and Media Studies' and 'Library and Information Management', with the balance of opinion in favour of reviewing this UOA.

Panel recruitment

Informed by answers to:

Question 3a. Do you agree that the submissions guidance and panel criteria should be developed simultaneously?

Question 3b. Do you support the later appointment of sub-panel members, near to the start of the assessment year?

Question 4. Do you agree with the proposed measures outlined at paragraph 35 [of the consultation document] for improving representativeness on the panels?

Question 5a. Based on the options described at paragraphs 36 to 38, what approach do you think should be taken to nominating panel members?

Question 5b. Do you agree with the proposal to require nominating bodies to provide equality and diversity information?

Question 6. Please comment on any additions or amendments to the list of nominating bodies.

Timing

165.   Just over 60 per cent of respondents to Question 3b. did not support the later appointment of sub-panel members, arguing that they must be in place earlier in order to set the panel criteria. This was deemed essential to ensure adequate subject coverage, tackle areas of disciplinary complexity, and to maintain the credibility of the exercise among subject communities. It was highlighted that, over sequential assessment exercises, the sector has gained confidence in how the main and sub-panels work together to develop, consult on and contribute to criteria and working methods. It was suggested that consultation of subject communities by panel chairs would not be an adequate alternative.

166.   Several respondents raised concerns around resourcing, noting that institutions and individuals must be able to plan in advance for their reduced availability during the assessment period. Concerns were also raised that late appointment would result in reduced time for training, including equality and diversity and induction into any new metrics that might be introduced. Some respondents recommended that, if this proposal is adopted, a core representative group from each sub-panel should be recruited at an earlier stage.

167.   The comments provided by the 40 per cent of respondents who supported the proposal suggested that it would reduce the cost and burden of the exercise and might lead to greater impartiality of the sub-panel members. They also noted that later appointment could ensure that the expertise available in the panels reflects the submissions received. However, this group also indicated that some of the concerns around securing appropriate disciplinary expertise and providing adequate training, would have to be addressed.

Nominations process

168.   Over half of respondents to Question 5a., predominantly HEIs and subject associations or learned bodies, agreed that the nominations process should follow the approach taken in REF 2014, rather than opening up nominations to all organisations and individuals. The main reasons cited for not opening up the nominations were:

a.   The increased burden of managing the larger number of nominations.

b.   Trust that the existing nominating bodies represent the views of the subject community.

c.   The perceived impartiality of academic associations and their independence from HEIs.

d.   The belief that a wider candidate pool will not necessarily lead to increased representativeness.

169.   A significant minority believed that the nominations process should be opened up to all organisations and individuals (with a number of caveats). The majority of this group believed that this would lead to a larger, more diverse and potentially more representative pool of candidates. Some respondents acknowledged the increased level of burden but felt that the benefits outweighed their concerns. Many respondents also commented that they did not believe the academic associations to be truly representative of their subject communities; therefore, if the aim is to increase representativeness, they should not be the only bodies permitted to nominate. A number acknowledged that nominations should be accompanied by evidence to indicate support of the subject community beyond the nominating body.

170.   While there was some support for allowing HEIs to nominate, a number of caveats and suggestions were provided:

a.   HEIs should be given only a small number of panel member nominations.

b.   HEIs should be able to nominate individuals only where it has been recognised (by the sub-panel chair) that a particular demographic group is underrepresented. It was also suggested that a small number of spaces should be 'reserved' for HEIs specifically for this purpose.

c.   Support for the nomination would need to extend beyond an individual HEI.

171.   A small number of respondents commented specifically on self-nominations, a third of whom supported this suggestion. The majority opposed the idea as it could increase burden and lead to the over-representation of certain types of institution and individual on panels.

Improving representativeness on panels

172.   There was overwhelming support among all categories of respondent for the measures proposed in paragraph 35 of the consultation (HEFCE 2016/36) to improve the representativeness of the panels. A few respondents went further, to say that equality and diversity considerations should be embedded throughout the entire process to avoid the risk of becoming a 'tick-box exercise'. The issue of burden was raised by a couple of respondents but was felt to be proportionate to the task of increasing representativeness.

173.   While over 200 respondents offered further comments on improving representativeness on panels, relatively few addressed the specific measures proposed in the consultation. Those who did offered the following views:

a.   Around 30 respondents commented on the proposal to continue to appoint main and sub-panel chairs via an open application process with appropriate equality and

diversity training for selection panels. The majority of these respondents supported the proposal.

b.   The majority of respondents who commented on the appointment of panel members and assessors agreed that, given the scale of the appointments, it would be disproportionately burdensome and unworkable to change the process and that it would have little impact on the outcomes. Respondents commented on the need to ensure that selection panels were also representative, and on the importance of transparency in the selection process.

c.   A few respondents commented specifically on the nominations process and the requirement to include mandatory demographic information; the majority of them were generally supportive of the proposal. A small number suggested that demographic information should be used for selection, as well as monitoring, purposes. It was also noted that, while gathering this information is useful, the key issue is to ensure that a range of applicants apply or are nominated.

d.   The majority of those who commented supported the proposal that main and sub-panel chairs should receive equality and diversity briefings and unconscious bias training before selecting panel members. There was a suggestion that this training should be extended to panel members. There were only a handful of negative comments, the majority of which argued that training alone will not improve representativeness.

174.   Many respondents acknowledged a tension between ensuring panel expertise and providing the widest opportunity to enhance inclusivity. There was a strong feeling that, for the exercise to have credibility, care must be given to ensure the best people are nominated and any perception that panel members are chosen because of their characteristics, rather than their academic record, is to be avoided. Some suggested that if there are a number of candidates of equal merit, this could be the point at which due regard is given to the need to diversify the panel.

175.   While gender underrepresentation was recognised as one of the central issues by respondents, there was equal focus on the need to improve representation with reference to age, ethnicity, disability and other protected characteristics. A number of respondents stated that more consideration needs to be given to early career researchers. Over ten respondents, including the Equality Challenge Unit (ECU), suggested that consideration be given to introducing targets to increase the representativeness of panels. Reference was made to RCUK's 'Action Plan for Equality, Diversity and Inclusion' as a guiding framework. ECU also commented that panels should be mindful of not over-allocating responsibility to people from underrepresented groups.

176.   A number of respondents commented that the definition of 'representativeness' needs to be clarified, as there are separate issues to consider under this term that may require different approaches. These are:

a.   Equality and diversity considerations of individual panel members.

b.   Representativeness of institution type. A small number of respondents were keen to see greater representation of post-1992 and modern universities.

c.   Representativeness across the entire UK landscape.

d.   Representativeness of the specific subject areas and communities.

e.   Representativeness of the breadth of research disciplines and approaches.

f.   Considerations around newly developing research fields.

177.   Several respondents commented that thought needs to be given to the way in which under-represented groups are invited to participate, to ensure the recruitment process is as open and inclusive as possible. It was also suggested that the criteria for appointment should be clear and explicit, and that nominating bodies should be required to demonstrate that they have fairly considered all nominees against those criteria.

Further points

Informed by answers to:

Question 44. Are there proposals not referred to above, or captured in your response so far, that you feel should be considered? If so, what are they and what is the rationale for their inclusion?

178.   Over half of all respondents suggested further issues and proposals that should be taken into consideration when developing REF 2021. Where possible, they have been incorporated into the relevant sections above. Those summarised below were raised by 10 or more respondents.

179.   A small number of respondents drew attention to the Teaching Excellence Framework, which was mentioned in the context of incentivising research-led teaching and minimising burden on HEIs. It was stressed that an aligned approach is necessary to avoid creating a division between teaching and research.

180.   A few respondents recommended extending the principle of double-weighting to an acceptance of triple-weighting and quadruple-weighting for exceptionally extensive or complex projects in the REF. Most respondents welcomed double-weighting and the retention of the double-weighting of monographs regardless of changes to the average output numbers. It was suggested that more outputs should be double-weighted in Main Panels C and D, and more detailed guidance should be produced regarding portfolios in Main Panel D.

181.   There were several comments relating to the starred levels for reporting outcomes, in particular the extent to which they offer a nuanced, granular assessment. Suggestions included the introduction of a new starred level, and a half-level grading system.

Annex A

Breakdown of respondents by question and respondent type

Note: All paragraph references in this annex relate to the consultation document, HEFCE 2016/36.

Question 1. Do you have any comments on the proposal to maintain an overall continuity of approach with REF 2014, as outlined in paragraphs 10 and 23?

Respondent type	
Individual	33
Business	2
Charity	8
Department or research group	9
HEI	144
Other	11
Public sector organisation	6
Representative body	31
Subject association or learned society	62
Total response	**306**
No comments	*74*

Question 2. What comments do you have about the Unit of Assessment structure in REF 2021?

Respondent type	
Individual	33
Business	2
Charity	5
Department or research group	8
HEI	144
Other	7
Public sector organisation	3
Representative body	27
Subject association or learned society	59
Total response	**288**
No comments	*92*

Question 3a. Do you agree that the submissions guidance and panel criteria should be developed simultaneously?

Respondent type	Yes	No	No response
Individual	46	3	23
Business	2	0	2
Charity	4	0	7
Department or research group	7	2	4
HEI	119	24	4
Other	5	2	10
Public sector organisation	4	0	4
Representative body	22	3	14
Subject association or learned society	44	17	8
Total response	**253**	**51**	**76**

Question 3b. Do you support the later appointment of sub-panel members, near to the start of the assessment year?

Respondent type	Yes	No	No response
Individual	34	14	24
Business	1	0	3
Charity	1	2	8
Department or research group	4	4	5
HEI	50	91	6
Other	3	6	8
Public sector organisation	2	2	4
Representative body	10	13	16
Subject association or learned society	13	47	9
Total response	**118**	**179**	**83**

Question 4. Do you agree with the proposed measures outlined at paragraph 35 for improving representativeness on the panels?

Respondent type	Yes	No	No response
Individual	41	9	22
Business	2	0	2
Charity	5	0	6
Department or research group	8	0	5
HEI	135	7	5
Other	7	1	9
Public sector organisation	5	0	3
Representative body	22	1	16
Subject association or learned society	60	4	5
Total response	**285**	**22**	**73**

Question 5a. Based on the options described at paragraphs 36 to 38, what approach do you think should be taken to nominating panel members?

Respondent type	
Individual	33
Business	1
Charity	6
Department or research group	7
HEI	140
Other	5
Public sector organisation	3
Representative body	24
Subject association or learned society	58
Total response	**277**
No comments	*103*

Question 5b. Based on the options described at paragraphs 36 to 38, what approach do you think should be taken to nominating panel members?

Respondent type	Yes	No	No response
Individual	42	8	22
Business	2	0	2
Charity	5	0	6
Department or research group	8	1	4
HEI	127	15	5
Other	6	0	11
Public sector organisation	4	1	3
Representative body	20	2	17
Subject association or learned society	49	11	9
Total response	**263**	**38**	**79**

Question 6. Based on the options described at paragraphs 36 to 38, what approach do you think should be taken to nominating panel members?

Respondent type	
Individual	5
Business	1
Charity	5
Department or research group	3
HEI	88
Other	4
Public sector organisation	4
Representative body	17
Subject association or learned society	33
Total response	**160**
No additions or amendments	*220*

Question 7. Do you have any comments on the proposal to use HESA cost centres to map research-active staff to UOAs and are there any alternative approaches that should be considered?

Respondent type	
Individual	30
Business	1
Charity	6
Department or research group	9
HEI	146
Other	7
Public sector organisation	2
Representative body	30
Subject association or learned society	59
Total response	**290**
No additions or amendments	*90*

Question 8. What comments do you have on the proposed definition of 'research-active' staff?

Respondent type	
Individual	45
Business	0
Charity	6
Department or research group	9
HEI	146
Other	6
Public sector organisation	3
Representative body	30
Subject association or learned society	55
Total response	**300**
No comments	*80*

Question 9. With regard to the issues raised in relation to decoupling staff and outputs, what comments do you have on:

a. The proposal to require an average of two outputs per full-time equivalent staff returned?

Respondent type	
Individual	53
Business	0
Charity	6
Department or research group	9
HEI	145
Other	6
Public sector organisation	3
Representative body	26
Subject association or learned society	63
Total response	**311**
No comments	*69*

b. The maximum number of outputs for each staff member?

Respondent type	
Individual	51
Business	0
Charity	5
Department or research group	9
HEI	143
Other	4
Public sector organisation	3
Representative body	25
Subject association or learned society	54
Total response	**294**
No comments	*86*

c. Setting a minimum requirement of one for each staff member?

Respondent type	
Individual	48
Business	0
Charity	5
Department or research group	8
HEI	146
Other	6
Public sector organisation	4
Representative body	28
Subject association or learned society	57
Total response	**302**
No comments	*78*

Question 10. What are your comments on the issues described in relation to portability of outputs, specifically:

a. Is acceptance for publication a suitable marker to identify outputs that an institution can submit and how would this apply across different output types?

Respondent type	
Individual	52
Business	2
Charity	7
Department or research group	7
HEI	147
Other	7
Public sector organisation	2
Representative body	26
Subject association or learned society	52
Total response	**302**
No comments	*78*

b. What challenges would your institution face in verifying the eligibility of outputs?

Respondent type	
Individual	31
Business	2
Charity	1
Department or research group	7
HEI	143
Other	4
Public sector organisation	1
Representative body	24
Subject association or learned society	30
Total response	**243**
No comments	*137*

c. Would non-portability have a negative impact on certain groups and how might this be mitigated?

Respondent type	
Individual	59
Business	1
Charity	6
Department or research group	9
HEI	143
Other	6
Public sector organisation	4
Representative body	28
Subject association or learned society	60
Total response	**316**
No comments	*64*

d. What comments do you have on sharing outputs proportionally across institutions?

Respondent type	
Individual	50
Business	0
Charity	4
Department or research group	9
HEI	141
Other	4
Public sector organisation	1
Representative body	25
Subject association or learned society	54
Total response	**288**
No comments	*92*

Question 11. Do you support the introduction of a mandatory requirement for the Open Researcher and Contributor ID to be used as the staff identifier, in the event that information about individual staff members continues to be collected in REF 2021?

Respondent type	Yes	No	No response
Individual	24	17	31
Business	4	0	0
Charity	6	0	5
Department or research group	3	2	8
HEI	104	34	9
Other	7	0	10
Public sector organisation	3	1	4
Representative body	18	5	16
Subject association or learned society	34	16	19
Total response	**203**	**75**	**102**

Question 12. What comments do you have on the proposal to remove Category C as a category of eligible staff?

Respondent type	
Individual	19
Business	0
Charity	2
Department or research group	5
HEI	126
Other	3
Public sector organisation	2
Representative body	25
Subject association or learned society	32
Total response	**214**
No comments	*166*

Question 13. What comments do you have on the definition of research assistants?

Respondent type	
Individual	19
Business	0
Charity	3
Department or research group	6
HEI	130
Other	5
Public sector organisation	1
Representative body	21
Subject association or learned society	42
Total response	**227**
No comments	*153*

Question 14. What comments do you have on the proposal for staff on fractional contracts and is a minimum of 0.2 FTE appropriate?

Respondent type	
Individual	39
Business	0
Charity	5
Department or research group	7
HEI	145
Other	6
Public sector organisation	4
Representative body	25
Subject association or learned society	48
Total response	**279**
No comments	*101*

Question 15. What are your comments on better supporting collaboration between academia and organisations beyond higher education in REF 2021?

Respondent type	
Individual	25
Business	2
Charity	6
Department or research group	6
HEI	138
Other	8
Public sector organisation	7
Representative body	28
Subject association or learned society	48
Total response	**268**
No comments	*112*

Question 16. Do you agree with the proposal to allow the submission of a reserve output in cases where the publication of the preferred output will postdate the submission deadline?

Respondent type	Yes	No	No response
Individual	37	9	26
Business	2	0	2
Charity	1	1	9
Department or research group	6	3	4
HEI	135	9	3
Other	7	0	10
Public sector organisation	2	1	5
Representative body	18	3	18
Subject association or learned society	52	2	15
Total response	**260**	**28**	**92**

Question 17. What are your comments on the assessment of interdisciplinary research in REF 2021?

Respondent type	
Individual	31
Business	3
Charity	5
Department or research group	9
HEI	142
Other	8
Public sector organisation	6
Representative body	26
Subject association or learned society	62
Total response	**292**
No comments	*88*

Question 18. Do you agree with the proposal for using quantitative data to inform the assessment of outputs, where considered appropriate for the discipline? If you agree, have you any suggestions for data that could be provided to the panels at output and aggregate level?

Respondent type	Yes	No	No response
Individual	24	23	25
Business	2	0	2
Charity	5	1	5
Department or research group	1	6	6
HEI	111	26	10
Other	6	2	9
Public sector organisation	3	1	4
Representative body	12	9	18
Subject association or learned society	28	24	17
Total response	**192**	**92**	**96**

Question 19. Do you agree with the proposal to maintain consistency where possible with the REF 2014 impact assessment process?

Respondent type	Yes	No	No response
Individual	33	10	29
Business	2	0	2
Charity	5	0	6
Department or research group	9	0	4
HEI	141	0	6
Other	10	0	7
Public sector organisation	6	1	1
Representative body	26	0	13
Subject association or learned society	56	2	11
Total response	**288**	**13**	**79**

Question 20. What comments do you have on the recommendation to broaden and deepen the definition of impact?

Respondent type	
Individual	39
Business	2
Charity	7
Department or research group	8
HEI	146
Other	13
Public sector organisation	8
Representative body	29
Subject association or learned society	56
Total response	**308**
No comments	*72*

Question 21. Do you agree with the proposal for the funding bodies and Research Councils UK to align their definitions of academic and wider impact? If yes, what comments do you have on the proposed definitions?

Respondent type	Yes	No	No response
Individual	30	13	29
Business	3	0	1
Charity	6	0	5
Department or research group	7	0	6
HEI	138	5	4
Other	12	0	5
Public sector organisation	6	1	1
Representative body	28	0	11
Subject association or learned society	51	2	16
Total response	**281**	**21**	**78**

Question 22. What comments do you have on the criteria of reach and significance?

Respondent type	
Individual	21
Business	1
Charity	5
Department or research group	6
HEI	136
Other	11
Public sector organisation	4
Representative body	23
Subject association or learned society	43
Total response	**250**
No comments	*130*

Question 23. What do you think about having further guidance for public engagement impacts and what do you think would be helpful?

Respondent type	
Individual	24
Business	1
Charity	7
Department or research group	7
HEI	143
Other	11
Public sector organisation	6
Representative body	26
Subject association or learned society	53
Total response	**278**
No comments	*102*

Question 24. Do you agree with the proposal that impacts should remain eligible for submission by the institution or institutions in which the associated research has been conducted?

Respondent type	Yes	No	No response
Individual	24	19	29
Business	2	0	2
Charity	4	0	7
Department or research group	8	2	3
HEI	127	13	7
Other	8	0	9
Public sector organisation	3	1	4
Representative body	19	2	18
Subject association or learned society	37	16	16
Total response	**232**	**53**	**95**

Question 25. Do you agree that the approach to supporting and enabling impact should be captured as an explicit section of the environment element of the assessment?

Respondent type	Yes	No	No response
Individual	25	11	36
Business	2	0	2
Charity	4	0	7
Department or research group	7	2	4
HEI	135	6	6
Other	9	1	7
Public sector organisation	5	0	3
Representative body	20	3	16
Subject association or learned society	49	3	17
Total response	**256**	**26**	**98**

Question 26. What comments do you have on the suggested approaches to determining the required number of case studies? Are there alternative approaches that merit consideration?

Respondent type	
Individual	21
Business	0
Charity	4
Department or research group	7
HEI	142
Other	6
Public sector organisation	2
Representative body	22
Subject association or learned society	46
Total response	**250**
No comments	*130*

Question 27. Do you agree with the proposal to include mandatory fields (paragraph 96) in the impact case study template to support the assessment and audit process better?

Respondent type	Yes	No	No response
Individual	25	10	37
Business	3	0	1
Charity	5	0	6
Department or research group	5	2	6
HEI	135	8	4
Other	7	1	9
Public sector organisation	5	0	3
Representative body	24	0	15
Subject association or learned society	46	2	21
Total response	**255**	**23**	**102**

Question 28. What comments do you have on the inclusion of further optional fields in the impact case study template (paragraph 97)?

Respondent type	
Individual	10
Business	1
Charity	4
Department or research group	7
HEI	134
Other	5
Public sector organisation	4
Representative body	20
Subject association or learned society	32
Total response	**217**
No comments	*163*

Question 29. What comments do you have on the inclusion of examples of impact arising from research activity and bodies of work as well as from specific research outputs?

Respondent type	
Individual	22
Business	1
Charity	5
Department or research group	9
HEI	142
Other	11
Public sector organisation	5
Representative body	25
Subject association or learned society	54
Total response	**274**
No comments	*106*

Question 30. Do you agree with the proposed timeframe for the underpinning research activity (1 January 2000 to 31 December 2020)?

Respondent type	Yes	No	No response
Individual	27	10	35
Business	1	0	3
Charity	4	0	7
Department or research group	9	0	4
HEI	130	13	4
Other	6	0	11
Public sector organisation	3	1	4
Representative body	18	3	18
Subject association or learned society	37	13	19
Total response	**235**	**40**	**105**

Question 31. What are your views on the suggestion that the threshold criterion for underpinning research, research activity or a body of work should be based on standards of rigour? Do you have suggestions for how rigour could be assessed?

Respondent type	
Individual	27
Business	0
Charity	5
Department or research group	7
HEI	138
Other	8
Public sector organisation	3
Representative body	21
Subject association or learned society	49
Total response	**258**
No comments	*122*

Question 32. Evaluation of REF 2014 found that provision of impact evidence was challenging for HEIs and panels. Do you have any comments on the following:

a. The suggestion to provide audit evidence to the panels?

Respondent type	
Individual	16
Business	1
Charity	4
Department or research group	8
HEI	138
Other	6
Public sector organisation	4
Representative body	21
Subject association or learned society	45
Total response	**243**
No comments	*137*

b. The development of guidelines for the use and standard of quantitative data as evidence for impact?

Respondent type	
Individual	19
Business	3
Charity	4
Department or research group	8
HEI	140
Other	8
Public sector organisation	2
Representative body	24
Subject association or learned society	47
Total response	**255**
No comments	*125*

c. Do you have any other comments on evidencing impacts in REF 2021?

Respondent type	
Individual	13
Business	1
Charity	3
Department or research group	5
HEI	91
Other	7
Public sector organisation	4
Representative body	14
Subject association or learned society	22
Total response	**160**
No comments	*220*

Question 33. What are your views on the issues and rules around submitting examples of impact in REF 2021 that were returned in REF 2014?

Respondent type	
Individual	19
Business	1
Charity	5
Department or research group	10
HEI	140
Other	9
Public sector organisation	3
Representative body	24
Subject association or learned society	50
Total response	**261**
No comments	*119*

Question 34a. Do you agree with the proposal to improve the structure of the environment template and introduce more quantitative data into this aspect of the assessment?

Respondent type	Yes	No	No response
Individual	18	18	36
Business	1	0	3
Charity	4	0	7
Department or research group	3	3	7
HEI	114	25	8
Other	4	3	10
Public sector organisation	2	0	6
Representative body	16	4	19
Subject association or learned society	34	14	21
Total	**196**	**67**	**117**

Question 34b. Do you have suggestions of data already held by institutions that would provide panels with a valuable insight into the research environment?

Respondent type	
Individual	10
Business	0
Charity	4
Department or research group	3
HEI	111
Other	3
Public sector organisation	2
Representative body	21
Subject association or learned society	28
Total response	**182**
No suggestions	*198*

Question 35. Do you have any comment on the ways in which the environment element can give more recognition to universities' collaboration beyond higher education?

Respondent type	
Individual	11
Business	1
Charity	6
Department or research group	4
HEI	127
Other	5
Public sector organisation	4
Representative body	21
Subject association or learned society	33
Total response	**212**
No comments	*168*

Question 36. Do you agree with the proposals for awarding additional credit to units for open access?

Respondent type	Yes	No	No response
Individual	13	25	34
Business	1	1	2
Charity	4	2	5
Department or research group	5	3	5
HEI	54	82	11
Other	3	5	9
Public sector organisation	3	1	4
Representative body	7	17	15
Subject association or learned society	8	39	22
Total	**98**	**175**	**107**

Question 37. What comments do you have on ways to incentivise units to share and manage their research data more effectively?

Respondent type	
Individual	12
Business	1
Charity	5
Department or research group	1
HEI	121
Other	6
Public sector organisation	3
Representative body	23
Subject association or learned society	31
Total response	**203**
No comments	*177*

Question 38. What are your views on the introduction of institutional-level assessment of impact and environment?

Respondent type	
Individual	25
Business	1
Charity	9
Department or research group	10
HEI	143
Other	11
Public sector organisation	5
Representative body	27
Subject association or learned society	48
Total response	**279**
No comments	*101*

Question 39. Do you have any comments on the factors that should be considered when piloting an institutional-level assessment?

Respondent type	
Individual	16
Business	2
Charity	6
Department or research group	4
HEI	125
Other	3
Public sector organisation	4
Representative body	18
Subject association or learned society	31
Total response	**209**
No comments	*171*

Question 40. What comments do you have on the proposed approach to creating the overall quality profile for each submission?

Respondent type	
Individual	11
Business	0
Charity	4
Department or research group	4
HEI	132
Other	3
Public sector organisation	3
Representative body	18
Subject association or learned society	37
Total response	**212**
No comments	*168*

Question 41. Given the proposal that the weighting for outputs remain at 65 per cent, do you agree that the overall weighting for impact should remain at 20 per cent?

Respondent type	Yes	No	No response
Individual	21	17	34
Business	0	0	4
Charity	2	1	8
Department or research group	8	2	3
HEI	126	15	6
Other	6	3	8
Public sector organisation	4	1	3
Representative body	17	3	19
Subject association or learned society	46	5	18
Total	**230**	**47**	**103**

Question 42. Do you agree with the proposed split of the weightings between the institutional and submission-level elements of impact and environment?

Respondent type	Yes	No	No response
Individual	15	18	39
Business	0	0	4
Charity	1	2	8
Department or research group	3	4	6
HEI	42	97	8
Other	1	2	14
Public sector organisation	1	2	5
Representative body	6	11	22
Subject association or learned society	11	28	30
Total	**80**	**164**	**136**

Question 43. What comments do you have on the proposed timetable for REF 2021?

Respondent type	
Individual	24
Business	1
Charity	4
Department or research group	6
HEI	133
Other	5
Public sector organisation	1
Representative body	19
Subject association or learned society	38
Total response	**231**
No comments	*149*

Question 44. Are there proposals not referred to above, or captured in your response so far, that you feel should be considered? If so, what are they and what is the rationale for their inclusion?

Respondent type	
Individual	23
Business	1
Charity	7
Department or research group	4
HEI	96
Other	5
Public sector organisation	4
Representative body	21
Subject association or learned society	28
Total response	**189**
No comments	*191*

List of abbreviations

AUDE   Association of University Directors of Estates

CROS   Careers in Research Online Survey

DOI   Digital object identifier

ECU   Equality Challenge Unit

FTE   Full-time equivalent

HE-BCI   Higher Education – Business and Community Interaction

HEFCE   Higher Education Funding Council for England

HEI   Higher education institution

HESA   Higher Education Statistics Agency

ORCID   Open researcher and contributor identification

PIRLS   Principal Investigators and Research Leaders Survey

PRES   Postgraduate Research Experience Survey

QR   Quality related (research funding)

RCUK   Research Councils UK

REF   Research Excellence Framework

TEF   Teaching Excellence Framework

UOA   Unit of assessment