REF 2021 – Summary of draft panel criteria and working methods (July 2018)

Part 1 – Overview (paragraphs 23-57)

- This section sets out the structure of the expert panels and the differing roles and responsibilities for main and sub-panels, the appointment process (including for additional sub-panel members and assessors) and a summary of what will be assessed (i.e. outputs, impact and environment).

Part 2 - Unit of assessment descriptors (paragraphs 58-167) (SEE CONSULTATION QUESTION 1)

- The unit of assessment descriptors provide a short description of the disciplines covered by the UoAs, often with indications of the boundaries for the UoA. The consultation invites suggestions for refining the descriptors (see consultation question 1). The descriptions can be found in the draft panel criteria and working methods in the following paragraphs:
  - Main panel A - Medicine, health and life sciences (UoAs 1-6) – paragraphs 59-76
  - Main panel B - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraphs 77-92
  - Main panel C - Social sciences (UoAs 13-24) – paragraphs 93-129
  - Main panel D - Arts and humanities (UoAs 25-34) – paragraphs 130-167

Part 3 - Assessment criteria (paragraphs 168-354)

Section 1 – Submissions (SEE CONSULTATION QUESTION 2)

- Interdisciplinary research (paragraphs 168-171) - For the purposes of the REF, interdisciplinary research is understood to achieve outcomes (including new approaches) that could not be achieved within the framework of a single discipline. The sub-panels expect that outputs flagged as interdisciplinary would normally incorporate research crossing main panel areas, but recognise that flagged outputs may also span disciplines across the sub-panels within a main panel, as well as sometimes within a sub-panel – particularly where UOAs cover a broad range of disciplines. The assessment process for interdisciplinary research is set out in paragraphs 379-386. Interdisciplinary outputs will be assessed in the sub-panels to which they are submitted. The interdisciplinary advisers on each sub-panel will offer guidance on the assessment of these outputs and in addition, they will work with their counterparts on other sub-panels to undertake an initial calibration of interdisciplinary outputs and to jointly consider outputs where appropriate. Along with the main panels, the Interdisciplinary Research Advisory Panel (IDAP) will oversee the process to ensure that the agreed principles and process for assessment are applied and that there is consistency in approach across panels.

- Work on the boundaries between UOAs (paragraphs 172-183) – There is a recognition that the UOAs do not have firm or rigidly definable boundaries, and that aspects of research span the boundaries between individual UOAs. The UoA descriptors indicate some of these boundary areas but it is recognised that there may be other overlaps. There is an acceptance that some submissions may contain some work that overlaps UOA boundaries, for example, where submissions are linked to administrative units within a HEI which do not map neatly onto a UOA. Institutions will not be penalised where some overlap exists in these cases. There is specific guidance on the assessment of research in these two areas:
  - Criminology (main panel C)
  - Pedagogic research (all main panels)

- Multiple submissions (paragraphs 184-191) – Institutions may exceptionally request to make more than 1 submission to the same UoA. These requests are not expected except in the following sub-panels:
  - Sub-panel 22 (Anthropology and Development Studies). This typically applies where institutions have separate Anthropology and Development Studies departments.
For Sub-panel 12 (Engineering), Institutions can request output sub-profiles for distinct areas of engineering. Requests for multiple submissions in other Main Panel D (Arts and humanities) sub-panels may be made but are expected to be a rare occurrence.

Section 2 – Outputs (SEE CONSULTATION QUESTION 3)

- Outputs assessment criteria, including additional guidance for interdisciplinary research (paragraphs 192-206) – the same overarching criteria (originality, significance and rigour) apply, but there is supplementary guidance for interdisciplinary outputs (paragraph 197) which will work in parallel with – rather than replace – the generic criteria. This states that originality and significance can be identified in one, some, or all of the constituent parts brought together in the work, or in their integration; they do not need to be demonstrated across all contributing areas/fields. The main panels have provided supplementary definitions of the assessment criteria to guide sub-panels within their remit, which are very similar and in some cases identical to REF 2014 definitions:
  - Main panel A - Medicine, health and life sciences (UoAs 1-6) – paragraphs 198-202
  - Main panel B - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraph 203
  - Main panel C - Social sciences (UoAs 13-24) – paragraph 204
  - Main panel D - Arts and humanities (UoAs 25-34) – paragraphs 205-6

- Output types (paragraphs 207-213 and Annex C for Main Panel D only) – All forms of output that fulfil the eligibility criteria for REF are welcomed and will be considered equitably. No sub-panel will use journal impact factors or any hierarchy of journals in their assessment of outputs. No output will be privileged or disadvantaged on the basis of the publisher, where it is published or the medium of its publication.

Main panel D - Arts and humanities has provided supplementary criteria on:
  - Outputs submitted which encompass a number of different output types
  - A new classification of translation that constitute original, significant and rigorous research.

- Outputs with significant material in common (paragraphs 214-215) - where two or more research outputs within a submission include significant material in common, the sub-panels will assess each output taking account of the common material only once. Where a sub-panel judges that they do not contain sufficiently distinct material and should be treated as a single output, an unclassified score would be given to the ‘missing’ output. Where an output has significant material in common with an output published prior to 01/01/2014, a statement must be provided explaining the extent of the revision to incorporate new material.

- Co-authored contribution (paragraphs 216-226) - Institutions may only attribute co-authored outputs to individual members of staff who made a substantial research contribution to the output. Institutions may be requested through an audit to verify that an author made a substantial contribution. The main panels have provided supplementary criteria on what information they require about the author’s contribution:
  - Main panel A - Medicine, health and life sciences (UoAs 1-6) – paragraphs 221- 224 – additional information is required where there are more than 10 co-authors and the submitted member of staff to whom the output belongs is not the lead or corresponding author.
- **Main panel B** - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraph 225 - additional information of author contribution is required for outputs with more than 25 co-authors.
- **Main panels C & D** - Arts and humanities (UoAs 25-34) – paragraph 226 – No information on co-author contribution is required and will be disregarded if received.

- **Double-weighted outputs** (paragraphs 227-239) – Requests for double weighting must be accompanied by a 100 word statement explaining how the criteria for double-weighting has been met. Sub-panels will only double weight an output where the institution has made a request and this request has been approved by the sub-panel. The consideration of this request will be made separately from the assessment of the output’s quality. The main panels have provided supplementary criteria as follows:
  - **Main panel A** - Medicine, health and life sciences (UoAs 1-6) & Main panel B - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraphs 232-233 – requests are expected only exceptionally for outputs which derive from substantial academic endeavour. Journal articles and conference papers will not normally embody work of this nature.
  - **Main panels C & D** are keen to encourage submission of outputs of extended scale and scope for consideration as double-weighted outputs. They have identified some common characteristics which might be applicable to the research associated with double weighted outputs. It is expected that most books, monographs, novels or longer-form outputs warrant double weighting, although claims will not automatically be accepted.

- **Additional information for outputs** (paragraphs 240-262 and Annex B) – The additional information is typically required for non-text or practice outputs where evidence of the research process or content is not evident from the output itself, but there are specific requirements at main panel and sub-panel level. This information must not include citation data or journal impact factors and if received, this will not be used. Outputs in languages other than English submitted to all sub-panels must provide a short abstract (100 words) in English describing the content and nature of the work. The panel specific guidance is available in the following paragraphs:
  - **Main panel A** - Medicine, health and life sciences (UoAs 1-6) – paragraphs 244-245
  - **Main panel B** - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraphs 246-250
  - **Main panel C** - Social sciences (UoAs 13-24) – paragraphs 251-254
  - **Main panel D** - Arts and humanities (UoAs 25-34) – paragraphs 255-262

- **Citation data** (paragraphs 263-270) – Citation data will be used by a selection of sub-panels as an indicator of academic significance. This will be 1 element to inform the assessment of quality and not a primary tool. Where used, sub-panels will be mindful of the limitations of such data and will only use data provided by the REF team. The usage of citation data by panels is as follows:
  - **Main panel A** - Medicine, health and life sciences (UoAs 1-6) – paragraph 265 – All sub-panels will use citation data.
  - **Main panel B** - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraphs 266-267 – Sub-panels 7 (Earth Systems and Environmental Sciences), 8 (Chemistry), 9 (Physics) and 11 (Computer Science and Informatics) will receive citation data and may make use of the data to inform judgements about academic significance. Sub-panels 10 (Mathematical Sciences) and 12 (Engineering) will not receive or make use of citation data.
  - **Main panel C** - Social sciences (UoAs 13-24) – paragraphs 268-269 – Only sub-panel 16 (Economics and Econometrics) will receive citation data where it is available. Where
appropriate, it will be considered as an additional piece of supplementary evidence to support the initial assessment of outputs, not as a determining factor.

- Main panel D - Arts and humanities (UoAs 25-34) – paragraphs 270 – citation data will not be used by any sub-panels in Main Panel D.

Section 3 - Impact (SEE CONSULTATION QUESTION 4)

- **Introduction and criteria** (paragraphs 271-280) – the main panels acknowledge the diversity of pathways to impact and encourage the submission of a broad range of impacts. The examples provided in the guidance should not be read as exhaustive, prescriptive or limiting. In terms of the criteria, in common with REF 2014, the sub-panels will assess the reach and significance of the case studies.

- **Continued impact case studies** (paragraphs 281-284) – The main panels have provided the following supplementary criteria:
  - Main panel A - Medicine, health and life sciences (UoAs 1-6) – paragraph 282 – Main Panel A encourages the submission of new case studies, which will reflect the acknowledged vitality and vibrancy of the UK HEIs’ biomedical, health and life sciences sector. In addition, those continued case studies that describe significant and developing impact within the current assessment period will be considered, recognising the long lead-in time for certain biomedical and life sciences impacts.
  - Main panel B, C & D - paragraphs 283-284 - Main Panels B, C and D encourage submitting units to submit their strongest case studies irrespective of whether they are new examples or represent continuing impact from those submitted in REF 2014. The sub-panels will assess each case study on merit and do not wish to receive information on how any continued case study relates to that submitted to REF 2014. If any such information is provided, the sub-panels will not take it into account during the assessment process.

- **Range of impacts** (paragraphs 285-292) – Annex A of the panel criteria provides a guide of the range of potential impacts that may be eligible as case studies but this list is neither exhaustive nor exclusive. There is specific guidance in three areas:
  - Public engagement (paragraph 288) – sub-panels will welcome and assess equitably case studies which describe impacts achieved via public engagement, either as the main impact or as a facet of a wider range of impacts.
  - Impact on teaching within the submitting unit (paragraphs 290-1) - There is additional guidance on assessing the significance and reach of impacts on teaching within the submitting unit (paragraph 290) and it is expected that such impact will form a component of a wider case study including impact beyond the institution.
  - Public scrutiny (paragraph 292) – Main Panel C particularly acknowledges that there may be impacts arising from research within Main Panel C disciplines which take forms such as holding public or private bodies to account or subjecting proposed changes in society, public policy, business practices, and so on to public scrutiny. This may lead to a change not occurring or an organisation’s approach being questioned or modified.

- **Evidence of impact** (paragraphs 293-304) – The evidence provided should be in support of the impact achieved and so far as possible, be independently verifiable. Main panels have provided supplementary criteria on the forms of evidence they would expect and the form in which this would be most usefully provided:
  - Main panel A - Medicine, health and life sciences (UoAs 1-6) – paragraph 299.
  - Main panel B - Physical sciences, engineering and mathematics (UoAs 7-12) – paragraphs 300-1.
  - Main panel C - Social sciences (UoAs 13-24) – paragraphs 302.
  - Main panel D - Arts and humanities (UoAs 25-34) – paragraphs 303-304.
- **Underpinning research** (paragraphs 305-315) – Some supplementary main panel specific guidance is provided on the types of indicators that may be used to demonstrate that the 2* quality threshold has been met.

- **Preparing impact case studies** (paragraphs 316) – The following list of characteristics are provided to guide the development of impact case studies:
  
  o All the material required to make a judgement should be included in the case study template (REF3) – no further reading should be required. URLs should only be included for the purpose of verifying or corroborating claims made in the submission. Panels will not follow URLs to access additional evidence or information to supplement the submission.
  
  o There should be a clear definition of the beneficiaries, and what has changed as a result of the research.
  
  o The narrative should be coherent, clearly explaining the relationship between the researchers, the underpinning research, the impact, and the nature of the changes or benefits arising (noting that narratives differ according to the areas of impact claimed).
  
  o Indicators used should be relevant, contextualised and precise in support of the case study, and the evidence should be verifiable, focused and concise.
  
  o There should be a brief explanation of what is original or distinctive about the research insights that contributed to the impact.
  
  o Specific and appropriate sources of corroborating information, independent of the submitting HEI, should be supplied.
  
  o Where the research was carried out in collaboration with other HEIs, or was part of a wider body of research, this should be acknowledged and the specific contribution to the impact of the submitting unit’s research clearly described. In such cases, units (whether within or across HEIs) may provide common descriptions of the impact arising, where they so wish.

**Section 4 - Environment** (SEE CONSULTATION QUESTION 5)

- **Environment criteria and section weightings** (paragraphs 321-3) – In common with REF 2014, the sub-panels will assess the vitality and sustainability of the environment. The sub-profile for environment will be formed on the basis of the assessments for the four sections of the environment template (and data, see paragraphs 352-3). Main panels A, B and C will weight the 4 components of the environment template equally when forming quality profiles. Main Panel D weights people at 30% and income at 20%.

- **Institutional-level environment template** (paragraphs 324-327) - The sub-panels will use the information provided in the institutional-level statement to inform their assessment of the relevant sections of the unit-level template. The institutional-level statement will not be separately assessed or scored by the sub-panels. The sub-panels do not expect to see a repetition of material covered in REF5a in REF5b.

- **Unit-environment template - use of indicators** (paragraphs 331-3) – In addition to the core Environment data (PhDs awarded, research income, research income in-kind), submitting units may include further quantitative indicators and are advised to draw on the advice and examples produced by the Forum for Responsible Research Metrics. These examples should not be regarded as mandatory or a checklist of requirements.

- **Unit-environment template - template requirements** (paragraphs 334-351) - The expectations are described for each of the sections of the environment template. The information requested is largely consistent across all main panels, much more so than in REF 2014. Where this information was already required in REF 2014, the requirements have remained largely the same. Where new areas are added (e.g. open research) or existing areas developed (e.g. equality and diversity, interdisciplinary research, research integrity) further detail is provided on the expectations. The main panel specific guidance is as follows:
  
  o **Unit context and structure, research and impact strategy** (paragraphs 336-337)
Main Panel D – Arts and Humanities (UoAs 25-34) – it is recognised that open research poses particular challenges for arts and humanities and submitting units are asked to provide examples in this context.

People (paragraphs 338-344)
- Main panel A - Medicine, health and life sciences (UoAs 1-6) – Submitting units are advised to consider including details of the effective integration of clinical academics and NHS-employed active researchers; research career development of both non-clinical and clinical researchers and the role of clinical researchers.
- Main panel C - Social sciences (UoAs 13-24) – are asked to disaggregate the total number of doctoral degrees awarded into PhDs and research-based professional doctorates in a specified format.

Income, infrastructure and facilities (paragraphs 345-347)
- Main panel B - Physical sciences, engineering and mathematics (UoAs 7-12) – data should be provided on usage within the assessment period (1 August 2013 to 31 July 2020) of major national and international facilities not supported by the Research Councils which was awarded to an investigator in the submitted unit after competitive review by a panel of internationally recognised experts.
- Main panel D - Arts and humanities (UoAs 25-34) – Submissions should detail funding that has been received through sources not reported in Higher Education Statistics Agency returns, such as commissions from artistic organisations, and how these relate to the research activities of the submitting unit.

Collaboration and contribution to the research base, economy and society (paragraphs 348-351)
- Main panel A - Medicine, health and life sciences (UoAs 1-6) – submitting units are invited to include details of category C staff and their contribution to the research environment. They are also invited to consider providing evidence of 1) their approach to encouraging and developing best practice in undertaking research that is reproducible, including any papers that are reproducing key papers in the field and 2) the extent of collaboration or integration with external bodies, such as NHS Research and Development, and/or with industry, government agencies, where appropriate.
- Main panel D - Arts and humanities (UoAs 25-34) – request this section is a narrative rather than a series of lists.

Environment data (paragraphs 352-354) – the data provided on research doctoral degrees awarded will inform the assessment of the ‘People’ section of the Environment template and the data on research income will inform the assessment of the section on ‘Income, infrastructure and facilities’.

Part 4 – Panel Procedures (paragraphs 355-359) (SEE CONSULTATION QUESTION 6)

- This section briefly records how the panel will:
  - consider and affirm its competence to do business (e.g. be quorate at meetings with the appropriate range of expertise)
  - deal with absences of the chair
  - manage conflicts of interest (refer also to Annex D)
  - manage confidentiality agreements (refer also to Annex E)

Part 5 – Panel working methods (paragraphs 360-399) (SEE CONSULTATION QUESTION 7)

- This section details the working methods of both the main and sub-panels for the planning and assessment phases of REF 2021. The key responsibilities are as follows:
- Main panels - This includes the responsibilities the main panels have in supporting and overseeing the work of sub-panels, in appointing cross panel members where required, in undertaking calibration exercises, reviewing emergent outcomes and deciding on the final outcomes (i.e. endorsing the recommendations of sub-panels).

- Sub-panels – The appointment of full assessment panels in early 2020, the allocation of work by sub-panels, the calibration of assessment standards, the assessment of submissions and the recommendation of quality profiles for each sub-profile of each UoA submission. In relation to the quality profiles, rules are given for how the outputs sub-profile will be calculated in the event that elements of the submission are deemed to be ineligible or missing (paragraph 394).

There are specific sections which detail the working methods for the assessment of:

- Interdisciplinary research (paragraphs 379-386) – refer to pages 1&2 above.

- Cross-referral (paragraphs 387-392) – the sub-panels preferred option is to assess work in the sub-panel to which it was submitted and to appoint further members and assessors to enable this. Exceptionally, where in the sub-panel’s opinion they do not have the expertise to assess specific parts of a submission, they may refer them to other sub-panels for advice. Institutions may request cross-referral but decisions to cross refer will be made by sub-panels and the REF director. Only specific outputs may be cross-referred and not entire submissions. Where cross referral does occur, the advice sought will relate only to the quality of the output and responsibility for the final recommendations of the quality profiles for all work submitted in its UoA.