



REF Sub-panel 16: Meeting 2 (Part 1)

10 February 2014

Ettington Chase, Stratford-upon-Avon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Andrew Ballantyne, Professor Peter Bishop, Mr John Cattell, Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Dr Clare Eriksson, Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mrs Katy McKen (Panel adviser), Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Ms Maggie Roe, Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Professor Tony Thorpe, Mrs Clair Thrower (Panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Professor Ghassan Aouad, Mr David Cormie and Mr William McKee.

1. Introduction and competence to do business

- 1.1. The chair welcomed existing members and new members and assessors to the meeting. Each member and assessor and the secretariat introduced themselves briefly.
- 1.2. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Conflicts of interest

- 2.1. The sub-panel reviewed paper 1, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists should inform the panel secretary and record them on the panel members' website (PMW).

- 2.2. The sub-panel noted paper 2, and discussed the proposed treatment of minor conflicts of interest. The sub-panel agreed that minor conflicts should be declared at the time they arose, the chair would take appropriate action and the panel secretary would keep a separate register.

3. Audit and data verification

- 3.1. The sub-panel noted paper 3, and agreed to send any potential output audit queries to the panel secretary.
- 3.2. Further, it noted that impact case studies requiring audit should be identified as soon as possible and by the end of the March meeting at the latest.

4. Cross-referral and specialist advice

- 4.1. The sub-panel noted paper 4, and agreed to review their reading lists to identify potential candidates for cross-referral. If, after consultation, both readers of an output agreed that they lacked the expertise necessary to assess it, the sub-panel agreed they should forward the output details to the chair for possible reallocation within the sub-panel, or cross-referral.
- 4.2. The sub-panel agreed to forward all requests for output and impact cross-referrals to the chair by **24 March 2014**.
- 4.3. The chair observed that some foreign language outputs had been submitted to the sub-panel, and specialist advice would be sought.
- 4.4. The sub-panel noted that in the case of both cross-referral and specialist advice, responsibility for scoring remained with the sub-panel to which the output had been submitted originally.

5. REF IT systems

- 5.1. The panel adviser gave a presentation covering the major items of IT to be used in the assessment phase, and promised to load a copy of the slides on the meeting area of the panel members' website (PMW).

5.2. Crucial points for panellists to note were identified as:

- Always using REF webmail for confidential communication.
- Never using the 'forgot password' option on the USB pen login screen.
- Always downloading REF work to the USB pen instead of a local drive.
- Uploading personal spreadsheets to the PMW very frequently.
- User support was available from the guidance section of the PMW.
- Alternative sources of support were FAQs, known issues and helpdesk.

6. Output calibration

6.1. The chair noted that an output calibration exercise had already been undertaken by the main panel, and had included some of the outputs also used for the sub-panel calibration. Noting that some guidance had already been circulated by the main panel, the chair reported the outcome of the main panel exercise, which included the following points:

- The exercise had focused on the characteristics of the assessment criteria.
- Outputs had not been given a score.
- Each output had been assigned to a rapporteur from a different sub-panel to lead the discussions.

6.2. The chair reminded the sub-panel that the outputs chosen for the calibration exercise had been selected to avoid major conflicts of interest.

6.3. The chair led a plenary discussion of the calibration outputs during which the following points relating to the published criteria were noted:

- i. All outputs submitted are expected to meet the REF definition of research, stated in Annex C of 'Assessment framework and guidance on submissions' (REF02.2011). They should also meet the generic requirements for submission laid out in Part 3 section 2 of 'guidance on submissions' and Part 1 of 'Panel criteria and working methods' (REF01.2012), paragraphs 40 to 53.
- ii. The sub-panel will reach its decisions in accordance with the guidance on assessing outputs in Part 2C, section C2 'Panel criteria and working methods' (REF01.2012), and in particular the guidance in paragraph 71 on the interpretation of generic level definitions for outputs and criteria of originality, significance and rigour.
- iii. That the full range of marks should be used in scoring outputs, from 4* to Unclassified. The use of half marks during the assessment had been agreed by Main Panel C, but that the final outcome for each output must be an integer in the range 4 to 0, 0 being equivalent to 'unclassified'.
- iv. If an output did not meet the definition of research, or fell below the standard required for 1* quality, it should be graded 'unclassified'.

- v. The sub-panel had received a large proportion of co-authored work, which should be assessed according to the arrangements in Section C2, paragraphs 42 to 49 of the 'panel criteria'. In particular, once the sub-panel was satisfied that the author submitting the output had made a "substantial research contribution" to it, the output should be assessed as a whole.

7. Lunch

8. Output calibration (continued)

- 8.1. With reference to paper 5, summaries of individual scoring outcomes, the sub-panel analysed differences in scoring patterns of individuals which prompted discussion including the following points:
 - i. The difficulty of agreeing scores when use of half marks; agreement was reached that any outputs with a scoring discrepancy of more than half mark following a discussion between the two readers should be discussed by the sub-panel.
 - ii. The challenges of assessing practice as research outputs; noting that further calibration for all output types would be undertaken when a sufficient number of each type had been assessed.
 - iii. The need for review of scoring patterns amongst panellists, to ensure consistency.
 - iv. That the assessment of outputs had to be completed by the end of July 2014, and interim deadlines were in place.

9. Tea

10. Agreement of aggregation process for environment scores

- 10.1. The chair summarised the work to be completed in Part 2 of the meeting, and thanked the sub-panel for the significant volume of work done in preparation for the meeting, namely each panellist assessing the environment template for every HEI with which they had no major conflict of interest.
- 10.2. The sub-panel reviewed the criteria for the research environment section, namely 'vitality and sustainability', and discussed approaches to interpreting the scores that had been gathered, and the effect this would have on the resultant profiles.

REF Sub-panel 16: Meeting 2 (Part 2)

11 February 2014

Ettington Chase, Stratford-upon-Avon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Andrew Ballantyne, Professor Peter Bishop, Mr John Cattell, Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Dr Clare Eriksson, Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mrs Katy McKen (Panel adviser), Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Ms Maggie Roe, Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Professor Tony Thorpe, Mrs Clair Thrower (Panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong

Apologies:

Apologies were received from Professor Ghassan Aouad, Mr David Cormie and Mr William McKee.

1. Environment discussion

- 1.1. The chair introduced the environment assessment, noting that submissions where no major conflicts of interest would be discussed in plenary first.
- 1.2. The sub-panel discussed in detail various possible approaches to scoring, and agreed a treatment of the use of half marks and in particular how to apply them consistently throughout the whole range of possible scores.
- 1.3. Once the method for producing profiles was agreed on the non-conflicted submissions, the sub-panel applied it consistently to the four sub-elements of the environment profile of all submissions including those where members had major conflicts.

2. Lunch

3. Environment discussion (continued)

- 3.1. The sub-panel reviewed the outcomes of the initial scoring in plenary, and reviewed any results which appeared anomalous.
- 3.2. According to paragraph 6 of Annex D of the 'panel criteria', 30 panellists and members of the secretariat withdrew from the room whilst institutions with which they had a major conflict of interest were discussed under this item.
- 3.3. The sub-panel agreed scores to be entered in the scoring spreadsheet under 'strategy', 'people', 'income' and 'collaboration' to create a recommended profile for each submission to be passed to Main Panel.

4. Output allocations and minor conflicts of interest

- 4.1. The sub-panel discussed the proposed treatment of minor conflicts of interest, and agreed that the panel secretary should keep a separate register.
- 4.2. The sub-panel discussed approaches to ensuring that the required proportion of outputs had received agreed scores, by the required dates. The sub-panel agreed a working method to achieve the target of 50 percent of scores agreed by both readers by the beginning of June 2014.

5. Impact calibration exercise and selection of case studies and impact templates for calibration

- 5.1. The chair summarised the approach to be taken in the assessment of impact:
 - i. A main panel impact calibration exercise would be undertaken, assessing both impact case studies and templates.
 - ii. A further sub-panel calibration involving both elements would be undertaken by the sub-panel, informed by the results of the main panel calibration.
- 5.2. The panel adviser gave a presentation summarising the key aspects for panellists to consider when judging whether an impact case study met the required thresholds for eligibility, and promised to add it to the PMW as a resource for future reference. She reminded the sub-panel that the primary source for information in the assessment of impact remained the guidance published in 'guidance on submissions' and the 'panel criteria', supplemented by the REF [FAQ](#).
- 5.3. The sub-panel agreed to skim read all the impact items allocated to them, and alert the chair of any problematic features by **28 February 2014**.
- 5.4. The sub-panel noted that full details of the impact calibration exercise would be provided soon after the meeting.

6. Items for information

- 6.1. The sub-panel noted paper 1, physical outputs, and the particular request that an institutional address for outputs should be given whenever possible, to avoid delivery problems.
- 6.2. The chair explained that an updated equality briefing paper was expected to be made available on the guidance section of the PMW shortly.
- 6.3. The sub-panel noted paper 2, schedule of future meetings.

7. Any other business

No other business was noted.



REF Sub-panel 16: Meeting 3 (Part 1)

24 – 25 March 2014

Ettington Chase, Stratford-upon-Avon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Ghassan Aouad, Professor Andrew Ballantyne, Professor Trevor Barnes (member of Main Panel C), Professor Peter Bishop, Mr John Cattell, Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Dr Clare Eriksson, Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Mr Mark Robson (member of Main Panel C), Ms Maggie Roe (24 March only), Mr Graeme Rosenberg (REF manager, 25 March only), Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Professor Tony Thorpe, Mrs Clair Thrower (panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Dr Martin Walsh (member of Main Panel C), Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Mr William McKee.

1. Introduction and competence to do business

- 1.1. The chair welcomed everyone to the meeting, and introduced the new sub-panel member, Mr Mike Napier, who had recently joined the sub-panel to supplement its expertise in the field of construction. The chair also welcomed three members attending from the main panel – Professor Trevor Barnes, Mr Mark Robson and Dr Martin Walsh) and invited to introduce themselves briefly.
- 1.2. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Minutes of the previous meeting

- 2.1. The minutes of the previous meeting (paper 1) were agreed as an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed paper 2, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists would record them on the panel members' website (PMW).

4. Impact templates

- 4.1. The chair summarised the preparatory work that had been done by the sub-panel in assessing impact templates, in accordance '*Panel criteria and working methods*' (REF 01.2012) Part 2C section C3.
- 4.2. The sub-panel discussed the section of the minutes from the previous main panel meeting relating to the assessment of impact, and decided to adopt the proposed methodology for agreeing scores on the half mark scale.
- 4.3. In a general discussion around the issues that had emerged the sub-panel noted that the quality of drafting varied significantly between submissions, and that adherence to, and interpretation of the published criteria were not consistent.
- 4.4. Input from the main panel members clarified that while the role of impact case studies in the REF assessment was to demonstrate change, whereas the role of the impact template was to describe strategies for impact, which could be future-focussed, though should still extend beyond dissemination.
- 4.5. The chair presented an analysis of the raw scores that had been collated ahead of the meeting, starting with the submissions where no major conflicts of interest existed. In the light of the prior discussion, final scores were agreed.
- 4.6. The sub-panel discussed the remaining submissions in turn, during which 34 attendees left the meeting as appropriate to their major or minor conflicts of interest.
- 4.7. The outcomes were recorded in the panel spreadsheet and uploaded to the Panel members' website (PMW).

5. Impact case study eligibility thresholds

- 5.1. The chair reminded the sub-panel of the content of the presentation on impact case study thresholds provided by the REF team and given by the panel adviser at the previous meeting, and that it was available on the PMW if necessary.
- 5.2. The chair asked the sub-panel to be ready to discuss any threshold issues that had arisen in their reading to the meeting on the second day, and noted that audit queries would be treated in the same way. The sub-panel agreed a working assumption that case studies would pass audit queries and eligibility thresholds and scored provisionally until the outcome was known.

6. Impact case study assessment calibration

- 6.1. Prior to the meeting, impact case studies had been allocated amongst a number of assessment groups according to expertise and research/impact subject areas. Each group included at least one user member or impact assessor expert in that subject area. The chair had asked all groups to read and score case studies for which they had no conflict of interest in advance of the meeting.
- 6.2. One case study from each group where individual scores varied greatly had been selected for the sub-panel calibration exercise, and the chair had asked the whole sub-panel (where no major conflicts of interest existed) to read these in preparation. The calibration set of case studies was discussed in plenary and the sub-panel agreed general assessment principles, and in conjunction with principles received from the Main Panel C meeting minutes, and the panel criteria REF 01.2012.

7. Agreement of impact case study scores

- 7.1. Each assessment group met separately to review individual scores and agree a group score for each case study. These were then reported to plenary and the sub-panel reviewed the overall scoring profile for each group. Where differences in group assessment were identified the chair asked groups to reconsider their scores in the light of the discussion. The sub-panel agreed a score for each case study where panellists had no major conflicts, provisionally in the case of those requiring audit.
- 7.2. Finally the sub-panel went on to agree a score for each case study for submissions with which panellists had conflicts of interest (during which 34 attendees left the room at appropriate points), using the same process.
- 7.3. A small number of case studies had been allocated a preliminary unclassified grade, which were discussed in plenary. The grades were either confirmed, or agreed to be subject to audit queries.
- 7.4. During the assessment of impact, the representatives from Main Panel C observed and participated in much of the proceedings. The sub-panel agreed that this had helped greatly in bringing the experience from main panel and other sub-panels to bear on the discussion.
- 7.5. The chair summarised the work to be completed in Part 2 of the meeting, and thanked the sub-panel for the significant volume of work done in preparation for the meeting.

REF Sub-panel 16: Meeting 3 (Part 2)

26 March 2014

Ettington Chase, Stratford-upon-Avon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Ghassan Aouad, Professor Andrew Ballantyne, Professor Peter Bishop, Mr John Cattell, Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Ms Maggie Roe, Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Mrs Clair Thrower (panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Mr William McKee and Professor Tony Thorpe.

1. Review of impact scores

- 1.1. The secretariat entered scores for each case study into the panel spreadsheet, and the sub-panel reviewed the effect on final impact profiles for each submission, starting in plenary with the set of submissions for which there were no conflicts, agreeing that the overall profile for the whole submission was reasonable and that in these cases the variations reflected a holistic assessment of impact of reach and significance.

2. Impact audit

- 2.1. The sub-panel noted the guidance that had been provided by the REF team. In the light of the discussions in Part 1 of the meeting, the sub-panel agreed a list of impact items to be audited, and noted that scores for those items would have a 'pending' status until the results of the audit were known.

3. Assessment of outputs

- 3.1. The chair summarised progress with outputs to date, observing that the sub-panel had devoted the majority of its time since the last meeting to the assessment of impact.

- 3.2. The sub-panel discussed matters arising from the assessment of outputs so far, including the treatment of duplicate outputs. The chair noted the difficulty of identifying all cases where the same output had been included in more than one submission, and the necessity to ensure consistent scoring.

4. Review of assessment to date

- 4.1. The sub-panel reviewed paper 1, and considered the range of scoring patterns recorded.

5. Future plans

- 5.1. The chair reminded the sub-panel of the main panel target proportion for agreed scores to be achieved following the next meeting.

6. Any other business

- 6.1. There being no further business the chair thanked the sub-panel for its contributions and declared the meeting closed.



REF Sub-panel 16: Meeting 4

2 – 3 June 2014

Ettington Chase, Stratford-upon-Avon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Andrew Ballantyne, Professor Peter Bishop (2 June), Mr John Cattell, Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Dr Clare Eriksson, Mr Bob Essert (2 June), Professor Dame Janet Finch (chair of Main Panel C, 2 June), Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Ms Maggie Roe, Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Professor Tony Thorpe, Mrs Clair Thrower (panel secretary), Professor Jeremy Till, Ms Linda Tiller (observer, 2 June), Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Professor Ghassan Aouad and Mr William McKee.

1. Introduction and competence to do business

- 1.1. The chair welcomed everyone to the meeting, and introduced the new sub-panel member, Mr Bob Essert, who had recently joined the sub-panel to supplement its expertise in the field of acoustics. The chair also welcomed the chair of Main Panel C, and the observer from HEFCW when they arrived.
- 1.2. The chair outlined the main business of the meeting, being to agree and record panel scores for outputs in line with the target proportion requested by the main panel.
- 1.3. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Minutes of the previous meeting

- 2.1. The minutes of the previous meeting (paper 1) were agreed as an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed paper 2, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists would record them on the panel members' website (PMW).

4. Audit and data verification - outputs

- 4.1. The secretary reported that a number of outputs had been identified for audit, of which most cases had been resolved before the meeting. Where necessary, errors in the provision of PDFs by HEIs had been corrected, and amendments made to the metadata held in the REF database.

5. Chair's update

- 5.1. The chair reported the discussions and outcomes of the most recent main panel meeting, which had examined emerging profiles for outputs from each sub-panel.

6. Review of sub-panel scoring pattern to date

- 6.1. The panel adviser presented an anonymised analysis of sub-panel scoring patterns, by individual and the whole sub-panel. The sub-panel discussed the possible reasons where discrepancies were observed, and the potential implications for the final quality profile. The chair encouraged the sub-panel to ensure it used the full range of marks available.

7. Assessment of outputs

- 7.1. Sub-panel members met in pairs to discuss outputs and agree proposed scores for outputs. In plenary session, these panel scores were agreed and recorded in the panel spreadsheet. During the discussions, 32 members of the sub-panel and secretariat left the room, due to major conflicts of interest.
- 7.2. The chair led a discussion on the subject of double-weighting requests, and referred to the guidance provided by the main panel and circulated prior to the meeting. The chair reiterated the distinction between judgements about the quality of an output and the decision about whether the output should be double weighted, in accordance with the provisions of Part 2C, paragraph 52 of 'Panel criteria and working methods' (REF 01.2012). Double weighting decisions must be based on the scale of the research and the scope of the output, panel members must read the double weighting statement but may also need to read the output to inform their judgement.

- 7.3. The sub-panel reviewed all requests for double weighting where a panel score for the output had been agreed at the meeting. Each request was discussed in plenary, during which ten members of the sub-panel and secretariat left the room due to major conflicts of interest.

8. Overview reports and feedback statements

- 8.1. The sub-panel noted paper 3, a briefing paper prepared by the REF team about the process for agreeing feedback statements for HEIs, and for collating the sub-panel's contributions to the main panel overview report.
- 8.2. The sub-panel agreed to work in small groups focussing on particular submissions, to be allocated following the meeting.

9. Audit and data verification - impact

- 9.1. The secretary gave a verbal report on the impact audits that had been requested at the last meeting. The majority had been completed, with a small number still to be finalised.
- 9.2. The sub-panel reviewed the evidence that had been provided and reached collective decisions about the outcomes to be recorded. Each item which would possibly be awarded an 'unclassified' score was discussed in plenary session by all sub-panel members without major conflicts.

10. Any other business

- 1.1. There being no further business the chair thanked the sub-panel for its contributions and declared the meeting closed.



REF Sub-panel 16: Meeting 5

14 – 15 July 2014

Wotton House, Dorking

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Ghassan Aouad, Professor Andrew Ballantyne, Mr John Cattell, Mr Paddy Conaghan, Professor Simin Davoudi, Mr Bob Essert, Professor Dame Janet Finch (chair, Main Panel C), Professor John Flint, Professor Brian Ford, Dr Michael Harris, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mr William McKee, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Ms Maggie Roe, Professor Koen Steemers, Professor Aileen Stockdale, Professor Carys Swanwick, Professor Robert Thorne, Professor Tony Thorpe, Mrs Clair Thrower (panel secretary), Professor Jeremy Till (14 July), Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Professor Peter Bishop, Professor Richard Coyne and Dr Clare Eriksson.

1. Introduction and competence to do business

- 1.1. The chair welcomed everyone to the meeting, and introduced Mr William McKee who had joined the sub-panel at late stage to supplement its expertise in town planning. The chair also welcomed the chair of Main Panel C.
- 1.2. The chair outlined the main business of the meeting, being to agree and record panel scores for outputs in line with the target proportion requested by the main panel.
- 1.3. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Minutes of the previous meeting

- 2.1. The minutes of the previous meeting (paper 1) were agreed as an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed paper 2, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists would record them on the panel members' website (PMW).

4. Audit and data verification - outputs

- 4.1. The secretary reported that a number of outputs had been identified for audit, of which the majority of cases had been resolved before the meeting. Where necessary, errors in the provision of PDFs by HEIs had been corrected, and amendments made to the metadata held in the REF database.

5. Review of sub-panel scoring pattern to date

- 5.1. The panel adviser presented an anonymised analysis of sub-panel scoring patterns, by individual and the whole sub-panel. The sub-panel discussed the possible reasons where discrepancies were observed, and the potential implications for the final quality profile. The chair encouraged the sub-panel to ensure it used the full range of marks available.

6. Assessment of outputs

- 6.1. Sub-panel members met in pairs to discuss outputs and agree proposed scores for outputs. In plenary session, these panel scores were agreed and recorded in the panel spreadsheet. During the discussions, 33 members of the sub-panel and secretariat left the room, due to major conflicts of interest.
- 6.2. The chair led a discussion on the subject of double-weighting requests, and referred to the guidance provided by the main panel and circulated prior to the meeting. The chair reiterated the distinction between judgements about the quality of an output and the decision about whether the output should be double weighted, in accordance with the provisions of Part 2C, paragraph 52 of 'Panel criteria and working methods' (REF 01.2012). Double weighting decisions must be based on the scale of the research and the scope of the output, panel members must read the double weighting statement but may also need to read the output to inform their judgement.
- 6.3. The sub-panel reviewed all requests for double weighting where a panel score for the output had been agreed at the meeting. Each request was discussed in plenary, during which eight members of the sub-panel and secretariat left the room due to major conflicts of interest.
- 6.4. The sub-panel reviewed scoring patterns across the sub-disciplines covered by the UOA, to ensure that the assessment criteria were being applied consistently.

7. Overview reports and feedback statements

- 7.1. The sub-panel noted paper 3, being a revised version of a briefing paper prepared by the REF team about the process for agreeing feedback statements for HEIs, and for collating the sub-panel's contributions to the main panel overview report.
- 7.2. The sub-panel agreed to work in small groups focussing on particular submissions, according to the timetable set out in the paper.

8. Individual staff circumstances

- 8.1. The sub-panel agreed to carry over this item of business until the next meeting.

9. Any other business

- 1.1. There being no further business the chair thanked the sub-panel for its contributions and declared the meeting closed.

REF Sub-panel 16: Meeting 6

18 – 19 September 2014

Radisson Blu, 12 Holloway Circus Queensway, Birmingham B1 1BT

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Peter Bishop (19 September), Mr Paddy Conaghan, Professor Richard Coyne, Professor Simin Davoudi, Professor John Flint, Professor Brian Ford, Professor Keith Jones, Dr Vicky Jones (REF team, 19 September), Professor Kevin Lomas, Mr William McKee, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Professor Koen Steemers, Professor Carys Swanwick, Professor Tony Thorpe, Mrs Clair Thrower (panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Professor Katie Williams, Professor Cecilia Wong.

Apologies:

Apologies were received from Professor Ghassan Aouad and Mr Paul Hildreth.

1. Introduction and competence to do business

- 1.1. The chair welcomed everyone to the meeting, and outlined the main business of the meeting, being to agree and record panel scores for the remaining outputs.
- 1.2. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Minutes of the previous meeting

- 2.1. The minutes of the previous meeting (paper 1) were agreed as an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed paper 2, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists would record them on the panel members' website (PMW).

4. Audit and data verification - outputs

- 4.1. The secretary reported that a handful of outputs had been identified for audit, of which the majority of cases had been resolved before the meeting. Where necessary, errors in the provision of PDFs by HEIs had been corrected, and amendments made to the metadata held in the REF database.

5. Review of sub-panel scoring pattern to date

- 5.1. The panel adviser presented an anonymised analysis of sub-panel scoring patterns in comparison to the emerging profiles across Main Panel C. A short discussion was held, and the sub-panel confirmed its confidence in the results being recorded.

6. Assessment of outputs

- 6.1. Sub-panel members met in pairs to discuss outputs and agree proposed scores for outputs. In plenary session, these panel scores were agreed and recorded in the panel spreadsheet. During the discussions, 24 members of the sub-panel and secretariat left the room, due to major conflicts of interest.
 - 1.1. The sub-panel reviewed all remaining requests for double weighting where a panel score for the output had been agreed at the meeting. Each request was discussed in plenary, during which 11 members of the sub-panel and secretariat left the room due to major conflicts of interest.
 - 1.2. The sub-panel reviewed the decision-making process for each output that had been awarded an 'unclassified' score, and agreed that the outcomes had been appropriate.
 - 1.3. The sub-panel noted a number of cases where co-authored outputs had been submitted more than once, both within the same submissions and by different HEIs. Each set of duplicate items was checked to ensure that the same rating had been applied to all members of the set.
- 6.2. The sub-panel reviewed scoring patterns across the sub-disciplines covered by the UOA, to ensure that the assessment criteria were being applied consistently.

7. Review of impact sub-profiles

- 7.1. The chair reported on a discussion about impact that had been held in the most recent main panel meeting.
- 7.2. With reference to a request received from the main panel, the sub-panel reviewed a sub-set of impact scores, and in the light of its discussions, made what adjustments as it considered appropriate.

8. Review and sign-off of sub-profiles

- 8.1. The panel adviser displayed a report prepared by the REF team, presenting an anonymised analysis of the sub-profiles. In accordance with guidance received

from the main panel, the sub-panel also viewed the quality profiles of each submission in turn, in plenary format. No discussion was held.

- 8.2. The sub-panel agreed that the sub-profiles represented an accurate reflection of its work, and should be sent to the main panel for endorsement.

9. Any other business

- 1.1. There being no further business the chair thanked the sub-panel for its contributions and declared the meeting closed.



REF Sub-panel 16: Meeting 7

23-24 October 2014

Selsdon Park, Croydon

Minutes

Present:

Professor Alastair Adair, Professor David Adams (deputy chair), Professor Peter Bishop, Mr Paddy Conaghan, Professor Richard Coyne, Professor John Flint, Professor Brian Ford, Mr Paul Hildreth, Professor Keith Jones, Professor Kevin Lomas, Mr William McKee, Mrs Katy McKen (panel adviser), Mr Mike Napier, Professor Alan Penn (chair), Professor Simon Pepper, Professor John Preston, Professor Koen Steemers, Professor Carys Swanwick, Professor Tony Thorpe, Mrs Clair Thrower (panel secretary), Professor Jeremy Till, Dr Nwola Oluwakemi Uduku, Professor Cecilia Wong.

Apologies:

Apologies were received from Professor Ghassan Aouad, Professor Simin Davoudi and Professor Katie Williams.

1. Introduction and competence to do business

- 1.1. The chair welcomed everyone to the meeting, and outlined the main business of the meeting, being to finalise any outstanding items and agree feedback statements and the overview report.
- 1.2. In the light of the attendance, the sub-panel confirmed its competence to do business.

2. Minutes of the previous meeting

- 2.1. The minutes of the previous meeting (paper 1) were agreed as an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed paper 2, the register of declared major conflicts of interest and confirmed it to be correct. It was agreed that if changes to the record of major interest were needed in future, panellists would record them on the panel members' website (PMW).

4. Chair's update

- 4.1. The Chair gave a brief update to the sub-panel following the main panel meeting on October 1st and noted that the main panel had had its first opportunity to compare results of the environment assessment across all the sub-panels.

5. Assessment of environment

- 5.1. The deputy chair reported on a discussion about environment that had been held in the most recent main panel meeting. Due to conflicts of interest, six members of the sub-panel left the room for the subsequent discussions.
- 5.2. With reference to a request received from the main panel, the sub-panel reviewed the process it had undertaken in arriving at sub-profiles for the research environment, and the outcomes recorded. In the light of the discussions, the sub-panel agreed that no adjustments were necessary.

6. Assessment of outputs

- 6.1. The chair reminded the sub-panel of the arrangements for the treatment of conflicts of interest, and accordingly five attendees left the room at the relevant points in the proceedings.
- 6.2. The sub-panel reviewed the single remaining request for double weighting in plenary and agreed a decision.
- 6.3. In plenary format, the sub-panel reviewed the scores that had been agreed by the allocated panellists for the remaining the handful of outputs, and recorded agreed panel scores for each.

7. Individual staff circumstances

- 7.1. The sub-panel noted paper 3, a briefing paper prepared by the REF team outlining the background to the individual staff circumstances arrangements.
- 7.2. The secretary presented an overview of the process by which individual staff circumstances had been evaluated, and confirmed that audits had been raised as necessary.
- 7.3. The sub-panel noted that all 'complex' individual staff circumstances had been reviewed by the Equality and Diversity Panel (EDAP), and the outcomes recorded in the panel spreadsheet. A minority of cases had not been accepted, and accordingly EDAP had awarded 'unclassified' grades to the 'missing' outputs.
- 7.4. The secretariat proposed that the majority of 'clearly defined' cases were accepted, which was agreed by the sub-panel. Where an 'unclassified' grade was proposed, the secretary explained the reasoning behind the recommendation. The sub-panel agreed all recommendations.

8. Review and sign-off of sub-profiles

- 8.1. The panel adviser displayed a report prepared by the REF team, presenting an anonymised analysis of the sub-profiles. In accordance with guidance received from the main panel, the sub-panel also viewed the quality profiles of each submission in turn, in plenary format. No discussion was held.
- 8.2. The sub-panel agreed that the sub-profiles represented an accurate reflection of its judgements.
- 8.3. According to paragraph 130 of 'Panel criteria and working methods' (REF 01.2012), the sub-panel agreed to recommend the overall quality profile for each submission to the main panel, confirming that:
 - 8.3.1. It had reached collective decisions, within the framework of the exercise and in accordance with the published statement of criteria and working methods. It had debated the reasoning behind the quality profiles in sufficient detail to reach such collective conclusions, and made recommendations to the main panel on the basis of its collective judgement. It had achieved a consensus on all the overall quality profiles recommended to the main panel.
 - 8.3.2. Each submission had been assessed against the published criteria for UOA16 (including in cases where parts of submissions have been cross-referred to other sub-panels for advice) and according to the published procedures.
 - 8.3.3. Each submission had been examined in sufficient detail to form robust judgements, and that appropriate expertise has been deployed in assessing submissions.

9. Feedback statements

- 9.1. The chair outlined the purpose of the feedback statements, being to give HEIs constructive comments that conveyed more than an articulation of the overall and sub-profile percentages. The sub-panel noted the guidance that had been received at the previous meeting. In a wide-ranging discussion, the sub-panel agreed a list of conventions to be used, to ensure that feedback given was appropriate and consistent.
- 9.2. The sub-panel then worked through feedback for a sample of submissions in plenary session, before working informally on feedback statements.

10. Overview report

- 10.1. The chair noted the constructive comments that had been received on the first draft of the overview report, and invited further comments as soon as possible after the meeting.

11. Information for sub-panel members post assessment

- 11.1. The chair reminded the sub-panel of the confidentiality arrangements surrounding the REF, and the need to maintain absolute confidentiality about the results and process both ahead of the publication of results, and in the period following publication.
- 11.2. The panel adviser gave a presentation, prepared by the REF team, outlining the timetable for results, giving an overview of the results website and reiterating the need for total confidentiality of assessment materials. It was agreed that a copy of the slides would be circulated to the sub-panel.

12. Arrangements for finalising documentation

- 12.1. The sub-panel noted that following the final main panel meeting, amendments to the feedback statements and overview report might be required. Accordingly, the sub-panel agreed to delegate approval of future changes, and sign-off of the minutes of the final meeting to chair's action.

13. Any other business

- 13.1. There being no further business the chair thanked the sub-panel for its contributions and declared the meeting closed.