



REF Sub-panel 7: Meeting 1b

8 January 2014

CCT-Venues, Smithfield, London

Minutes

Present:

Peter Burkill
Peter Cox
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Raymond Jeanloz
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Jon Davidson
Sarah Sweeney (adviser)

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting and introduced new panel members and output assessors.
- 1.2. The chair introduced the agenda. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Conflicts of interest

- 2.1. The panel reviewed the register of its declared major conflicts of interest and confirmed they were correct. Individuals agreed to update their conflicts of interest after the meeting.
- 2.2. The chair reminded panellists of the distinction between the actions required to register major and minor conflicts of interest. Panellists need to register major conflicts of interest via the Panel members' website (PMW) and keep this record updated, registering any new major conflicts of interest as they arise. By contrast panellists should register minor conflicts of interest by notifying the chair and secretary by e-mail. In each case of a minor conflict of interest the chair will decide what effect it shall have on a panellist's participation in the assessment. The REF definitions of what constitutes a major or a minor conflict of interest can be found in the "Declarations of interest guidance" published on the PMW.

3. Outline timetable

- 3.1. The panel considered the outline timetable (meeting schedule) provided (Paper 2). In particular, it was noted that the schedule requires Meeting 3 on 27th March to arrive at provisional scores for 50 per cent of outputs, meaning that panellists will need to have reviewed and scored 50 per cent of outputs in advance of that date.

4. Output allocation arrangements

- 4.1. The chair outlined the approach that he and the deputy chair had taken to the allocation of outputs to panel members and output assessors for assessment, highlighting that:
 - a) Each output will be reviewed by two panellists.
 - b) Panellists have been allocated outputs that are as close as possible to their immediate areas of expertise.
 - c) The deputy chair will make the allocation of outputs for institutions with which the chair has a major conflict of interest and vice versa.
- 4.2. The chair reported that a draft allocation of outputs was nearly complete and that panellists should be able to download their personal spreadsheets listing the specific outputs allocated to them from the PMW by 10th January.

5. Output assessment schedule

- 5.1. The panel discussed the arrangements that it will use to ensure that panellists assess the same sub-set of outputs ahead of the sub-panel meetings in February and in March. The panel agreed to sort outputs alphabetically by author surname, and proceed to assess outputs in this order.
- 5.2. The panel agreed to assess outputs according to the following schedule:
- a) Panellists to review/score outputs with authors A - Cla inclusive for in advance of Meeting 2 on 6th February, with a deadline of 3rd February agreed to allow the secretariat time to prepare data for the meeting.
 - b) Panellists to review/score outputs with authors Cle - L (with exact point to be agreed) for in advance of Meeting 3 on 27th March (with exact deadline to be agreed).
 - c) Panellists to review/score outputs with authors L (with exact point to be agreed) to Z for in advance of Meeting 4 on 27th May (with exact deadline to be agreed).

6. Outputs scoring system

- 6.1 The panel discussed and agreed the following scoring system:
- a) Each output will be assigned to two reviewers, recorded in the spreadsheet, and referred to here, as Panellist 1 and Panellist 2.
 - b) All panellists will be asked to read and provide assessment scores on all outputs assigned to them, whether as Panellist 1 or Panellist 2.
 - c) In order that outputs to be reviewed are reviewed by their pair of reviewers at roughly the same time, all panellists will be asked to review outputs assigned to them in order of author surname.
 - d) Panellist 1 and Panellist 2 will each be asked to provide a score for the output.
 - e) Panellists' scores should be recorded on their personal spreadsheets. Personal spreadsheets should be regularly uploaded to the PMW, or at any time after a significant amount of work has been done on them.
 - f) Once Panellist 1 has uploaded a version of his or her personal spreadsheet to the PMW with a score for a given output, he or she will be able to run a report that will enable him or her to see Panellist 2's score if one has been similarly uploaded (and vice versa).
 - g) If Panellist 1 and Panellist 2's scores are in sufficient agreement no further scoring activity is necessary on the part of the reviewers before the next sub-panel meeting.
 - h) If Panellist 1 and Panellist 2's scores do not agree, the two reviewers should hold a (telephone) conversation with a view to one or both of them agreeing to a new personal score such that the respective personal scores are sufficiently close to each other.

- i) If despite their conversation no such revision of scores can be arrived at between Panellist 1 and Panellist 2 scoring will be arbitrated by the SP7 Chair or Deputy Chair.

6.2 Two points would await further clarification after the meeting:

- a) The method by which panellists' revised scores, where applicable, will be recorded (it is not intended that panellists should overwrite the record of their original scores independently arrived at).
- b) The extent to which panellists will be able to undertake stages (f)-(i) above in advance of Meeting 2 on 6th February.

7. Double-weighting and cross-referral requests

- 7.1 The chair explained that submissions to the unit of assessment (UOA) included a significant number of outputs (252) where the submitting HEI had suggested cross-referral to another UOA. All these outputs would be allocated to the chair for review in the first instance.
- 7.2 By contrast there are only a small number of outputs (six) where the submitting HEI had requested double-weighting of the output. Again these outputs would be allocated to the chair for review in the first instance.

8. Output calibration

- 8.1. Prior to the meeting, the chair had selected a sample of 20 outputs to be used for the sub-panel's initial calibration exercise, which had been circulated to panel members and output assessors,. These outputs were selected so as to avoid major conflicts of interest for panellists. In addition, 10 of the submitted outputs were selected so as to avoid major conflicts of interest for Main Panel B members.
- 8.2. The chair outlined the aims of this calibration exercise, highlighting that these were to develop a common understanding of the star levels; to agree specific scores for the outputs in the calibration sample; and to form a consensus on how papers of different methods and in differing disciplines may be assessed equitably.
- 8.3. The chair recognised that asking panellists to consider all of the calibration sample sometimes took them outside of their immediate areas of expertise.
- 8.4. Panellists had submitted their scores to the secretary prior to the meeting. The secretary displayed the scores and the panel considered how far panellists had reached a consensus on each output. The panel discussed each output in turn and considered the characteristics of the quality levels provided in the criteria document and how these might be applied to provide differentiation for outputs

where scores diverged or panellists considered the output was borderline between star levels. Through this discussion the sub-panel reached an understanding on the score for each output and highlighted the reasons for those scores, with reference to the level descriptors.

8.5. Main Panel B had met on 7 January 2014 to consider a sample of 10 outputs from each sub-panel calibration exercise. The chair fed back the relevant main panel agreed scores and the panellists noted how they may have differed from the sub-panel agreed score and the reasons for this.

8.6. Panellists were instructed that the agreed scores must be discarded following the calibration and outputs must be assessed in the same way as all other outputs.

9. IT Briefing

9.1. The panel adviser presented an overview of the IT systems provided to support the assessment processes, including arrangements for access to outputs, the use of spreadsheets, and mechanisms for recording and reviewing assessment scores. The panel discussed the practical arrangements for the use of the IT systems.

10. Future meetings

10.1. The next panel meeting would be on 6 February 2014.

11. Any other business

11.1. No further business was reported.



REF Sub-panel 7: Meeting 2

6 February 2014

**Aston Business School Conference Centre, Aston Street,
Birmingham**

Minutes

Present:

Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Sarah Sweeney (adviser)
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Rod Graham

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting.
- 1.2. The chair introduced the agenda. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. The sub-panel confirmed that the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct.
- 3.2. The chair reminded panellists of the distinction between major and minor conflicts of interest, highlighting the following points.
- 3.3. Major conflicts of interest automatically bar panellists from reviewing any material from the HEI concerned, whereas minor conflicts of interest do not. Panellists need to register major conflicts of interest upfront via the Panel members' website (PMW) and keep this record updated. By contrast, minor conflicts of interest do not need to be declared upfront, but should be reported to the secretary by REF webmail if panellists have them in respect of work that they have been allocated.
- 3.4. A research interest may be regarded as either a major or minor conflict of interest depending on the nature and extent of the collaboration.
- 3.5. The chair advised that a number of reallocations of outputs had been made recently both to address minor conflicts of interest and to address the issue of duplicate outputs (in order to avoid the situation where the same output submitted by two different HEIs might be unnecessarily reviewed twice). As a consequence panellists were asked to regenerate their personal spreadsheets at or immediately following the meeting.

4. Individual staff circumstances

- 4.1. The chair explained that the individual staff circumstances information (for staff with clearly defined circumstances) provided by HEIs in respect of staff submitted with fewer than four research outputs was to be reviewed by the panel secretary and recommendations arising from that review process would be brought to future meetings of the sub-panel.

5. Cross-referrals

- 5.1. The chair explained that the sub-panel had received a large number of cross-referral requests from submitting HEIs (requesting cross-referrals 'out'). These had by and large been accepted by the sub-panel and requests already made to other sub-panels to accept the cross-referrals. It was hoped that the number of any further cross-referrals out from the sub-panel could be minimised. Panellists finding an output to be outside of their area of expertise were asked in the first instance to advise the chair, who would, again in the first instance, try to identify a third reader from within the sub-panel whose expertise might enable the output to be assessed without the need for cross-referral.
- 5.2. The chair also explained that the panel had received a number of cross-referral requests from other sub-panels (requesting cross-referrals 'in'). Where inward cross-referral requests from other sub-panels were accepted by the sub-panel, the process would require the nomination of a panellist reviewer from the sub-panel.

6. Review of output scores

- 6.1. In preparation for the meeting panellists had been asked to read and score a given number of allocated outputs. This process had resulted in 588 outputs having independent scores recorded from two panellist reviewers. Of these the pairs of scores for 537 outputs were in sufficient agreement, thereby, under the agreed approach to output assessment, not requiring further discussion for a provisional panel score to be determined.
- 6.2. The chair and secretary presented some analysis of the outcomes of the outputs scoring process to date, which provided reassurance that the process was working without there being any areas of particular concern. It was agreed that the analysis would be circulated to panel members following the meeting.
- 6.3. A breakout session was held where paired reviewers, whose individual scores did not sufficiently agree, were asked to hold conversations between themselves, with a view to one or both of them agreeing to a new personal score.
- 6.4. It was agreed that the existing outputs scoring system would be continued and that panellists would be asked to review and score outputs up to and including those with staff names beginning with L before the next meeting, again recording and uploading independent scores, before discussing with paired reviewers where scores do not sufficiently agree. Panellists changing their scores following those discussions with co-reviewers should amend their uploaded scores, but use the (first) comments column in their personal spreadsheets to record the fact that their original score had been changed.

- 6.5. Some queries were raised against a small number of particular outputs, where following the meeting further advice from the REF team would be sought by the secretary and communicated to panellists reviewing the outputs concerned.

7. Audit

- 7.1. The adviser gave a presentation outlining REF audit and data verification processes, which combine audit queries raised by the REF team and queries raised by sub-panels.
- 7.2. Panellists wishing to propose audit queries should e-mail the secretary specifying the name of the submission and the identity of the item and the specific data the panellist wishes to verify or what specific additional information is needed and why.
- 7.3. Audit will be a standing item on the agenda at future sub-panel meetings.

8. Preparation for impact assessment

- 8.1. The chair outlined the proposed approach of the sub-panel to impact assessment. An impact case study calibration exercise (similar to the output calibration exercise already undertaken) would be undertaken following the next sub-panel meeting.

9. Future meetings

- 9.1. The sub-panel received a schedule of future meeting dates and main agenda items. The next meeting would be on 27 March 2014.

10. Any other business

- 10.1. No further business was reported.



REF Sub-panel 7: Meeting 3

27 March 2014

**CCT Venues-Barbican, Aldersgate House, 135-137 Aldersgate Street,
London, EC1A 4JA**

Minutes

Present:

Ruth Allington (attending part time)
Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Roy Harrison
Rod Graham
Mark Hodson
Raymond Jeanloz
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Sarah Sweeney (adviser)
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Anthony Dore

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting including Main Panel B international member, Raymond Jeanloz. The chair explained that Sub-panel 7's two impact assessors had been invited to attend the meeting's afternoon session so that they could attend the impact assessment briefing (Item 8 on the meeting's agenda).
- 1.2. The chair introduced the agenda. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. The sub-panel confirmed that the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct.
- 3.2. The chair thanked panellists for declaring minor conflicts of interest against the outputs they had been allocated for review. Ninety such minor conflicts of interest had been declared to date. A register of these was being maintained and in each case the chair had made a decision, or would be making a decision, whether reallocation of the output to another reviewer was necessary. Necessary reallocations were being dealt with in batches and individual panellists would be notified of any changes affecting their allocations.

4. Update on cross-referrals

- 4.1. The chair provided an update on cross-referrals. Sub-panel 7 had cross-referred 419 outputs out to other sub-panels for advice and had accepted a similarly large number of cross-referral requests in, most significantly from Sub-panel 12 Aeronautical, Mechanical, Chemical and Manufacturing Engineering (178 outputs), Sub-panel 9 Physics (78 outputs) and Sub-panel 17 Geography, Environmental Studies and Archaeology (76 outputs). Sub-panel 7 members nominated to provide cross-referral advice to other sub-panels would have received REF webmails requesting the advice and providing instructions on whom to send the advice to by webmail.

5. Audit

- 5.1. The sub-panel received a paper providing full details of all panel-instigated audits raised to date and their current status. It was explained that updated versions of this report would be provided at each meeting.
- 5.2. One audit query on impact items had been raised to date and this had yet to be marked as complete. Four audit queries on outputs had been raised to date, three of which had been completed. Twelve audit queries on staff had been raised to date, nine of which had been completed, and all of which had been raised as a result of the review of individual staff circumstances (the next item on the agenda).

6. Individual staff circumstances

- 6.1. The secretary explained that the panel secretariat was undertaking a review of the clearly defined circumstances information provided in respect of the 329 staff that had been submitted to Sub-panel 7 with clearly defined circumstances (REF1b data). This review was approximately one third complete. As a result of the review process so far, 12 audit queries had been raised where insufficient information had been provided to confirm that the criteria for the requested reduction of outputs had been met and one case identified where it was judged that the criteria had not been met (resulting in one 'missing' output). The review would be completed before the next meeting, at which the sub-panel will be asked to approve the recommendations arising from the completed review.

7. Review of output scores

- 7.1. In preparation for the meeting panellists had been asked to have reviewed all their allocated outputs up to and including those submitted against staff with names beginning with L, uploading independent scores, before discussing with paired reviewers where scores did not sufficiently agree. Panellists changing their scores following those discussions had been asked to amend their uploaded scores, but use the (first) comments column in their personal spreadsheets to record the fact that their original score had been changed.
- 7.2. This process had resulted in 2518 outputs in total having independent scores recorded from two panellist reviewers. Of these, the pairs of scores for 2362 outputs now agreed sufficiently, thereby, under the agreed approach to output assessment, not requiring further discussion for a provisional panel score to be determined. This left 156 outputs with two scores where discussion was still needed.

- 7.3. The chair and secretary presented some analysis of the outcomes of the outputs scoring process to date, which provided reassurance that the process was working without there being any areas of particular concern.
- 7.4. A breakout session was held where paired reviewers, whose individual scores did not agree sufficiently, were asked to hold conversations between themselves, with a view to one or both of them agreeing to a new personal score.
- 7.5. It was agreed that the existing outputs scoring system would be continued and that panellists would be asked to review and score all their allocated outputs before the next meeting, again recording and uploading independent scores, before discussing with paired reviewers where scores do not agree sufficiently. As before, panellists changing their scores following those discussions with co-reviewers should amend their uploaded scores, but use the (first) comments column in their personal spreadsheets to record the fact that their original score had been changed.

8. Impact assessment briefing

- 8.1. Ruth Allington, one of Sub-panel 7's two impact assessors, joined the meeting for this item onwards. Apologies were received from Anthony Dore, the other of the sub-panel's impact assessors.
- 8.2. The adviser presented a detailed briefing on the assessment of impact in the REF, inviting any questions from panellists during the presentation. Discussion was held on a number of points, mainly related to the threshold criteria involved in the assessment of impact case studies.
- 8.3. Panellists were advised that the process of allocating impact material for review had been completed and panellists could now see their individual allocations by regenerating their personal spreadsheets and selecting the impact worksheet from within the workbook. If possible panellists were asked to "scan" their allocations before the next meeting, with a view to identifying candidates for items for audit with details to be e-mailed to the secretary.
- 8.4. It was noted that Earth Systems and Environmental Sciences was one of the disciplines covered by the REF impact pilot exercise held in 2010. The secretary agreed to circulate to panellists a weblink to the examples of case studies that had been published from that exercise.

9. Project plan

- 9.1. The sub-panel received an updated project plan and discussed requirements for the next meeting. Some concern was expressed at the amount of work being required of panellists. The chair explained that the work of the sub-panel had to

be organised so as to fit in with a given meeting schedule and the major agenda items required of those meetings.

9.2. The following deadlines were agreed:

- Panellists are to have completed their scoring of outputs and uploading of their independent scores by close of play on **Monday 19th May**.
- Panellists are to have completed their reconciliation exchanges with co-reviewers and uploaded any revised scores arising by close of play on **Friday 23rd May**.
- Panellists are to have completed and submitted their scoring for the impact calibration exercise by close of play on **Monday 19th May**.
- Panellists are asked to submit any audit requests for case studies based on a 'scan' of their impact case study allocation by e-mail to the secretary by close of play on **Monday, 19th May**.

9.3. An updated version of the project plan incorporating the above deadlines would be circulated to panellists.

10. Any other business

10.1. No further business was reported.

11. Next meeting

11.1. The next meeting will be 27-29 May 2014.



REF Sub-panel 7: Meeting 4

27-29 May 2014

**Selsdon Park Hotel, Addington Road, Sanderstead,
South Croydon, CR2 8YA**

Minutes

Present (Day 1):

Peter Burkill
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Walter Henning (Main Panel B international member)
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Sarah Sweeney (adviser)
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Peter Cox

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting including Main Panel B international member, Walter Henning.
- 1.2. The chair introduced the agenda, explaining that Day 1 and Day 2 of the meeting would be focused on matters related to the assessment of outputs, with Day 3, to which the sub-panel's impact assessors had additionally been invited, to be focused on matters related to the assessment of impact.
- 1.3. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. The sub-panel confirmed that the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct.
- 3.2. The chair thanked panellists for declaring minor conflicts of interest against the outputs they had been allocated for review. One hundred and one such minor conflicts of interest had been declared. A register of these had been maintained and in each case the chair had made a decision whether reallocation of the output to another reviewer was necessary. Necessary reallocations had been dealt with and individual panellists notified of any changes affecting their allocations.
- 3.3. It was noted that a similar process was being followed for minor conflicts of interest with respect to impact case studies and impact templates. Panellists should e-mail the panel secretary if they come across any minor conflicts of interest with impact material they have been allocated for review. The conflict will then be registered and the chair will make a decision whether reallocation of the item(s) in question to another reviewer is necessary.

4. Audit

- 4.1. The sub-panel received a paper providing full details of all panel-instigated audits raised to date and their current status. It was explained that updated versions of this report would be provided at each meeting.
- 4.2. One audit query on impact items had been raised to date and been completed. Seven audit queries on outputs had been raised to date, six of which had been completed. Thirty two audit queries on staff had been raised to date, all of which

had been completed in terms of HEIs supplying the additional information requested of them, and all of which had been raised as a result of the review of individual staff circumstances (the next item on the agenda).

5. Individual staff circumstances

- 5.1. The secretary explained that the panel secretariat had completed its review of the clearly defined circumstances information provided by submitting HEIs in respect of the 329 staff that had been submitted to Sub-panel 7 with clearly defined circumstances (REF1b data). As a result of the review process, 32 audit queries had been raised where insufficient information had been provided to confirm that the criteria for the requested reduction of outputs had been met, and two cases identified where it was judged that the criteria had not been met.
- 5.2. The sub-panel approved the recommendations arising from the completed review that, in all but the above 34 cases, all requested reductions of outputs on the grounds of clearly defined circumstances should be accepted.
- 5.3. The secretariat would review the additional information provided by HEIs in respect of the 32 audited cases and bring recommendations concerning these cases to the next meeting.

6. Review of output scoring

- 6.1. In preparation for the meeting panellists had been asked to have reviewed all their allocated outputs, uploading independent scores, before discussing with paired reviewers where scores did not agree sufficiently. Panellists changing their scores following those discussions had been asked to amend their uploaded scores, but use the (first) comments column in their personal spreadsheets to record the fact that their original score had been changed.
- 6.2. It was reported that this process meant that panel scores could at this stage be yielded for more than 95% of the outputs submitted to UOA7, but that by the same token there were still a number cases where there was insufficient information and/or consensus for a panel score to be arrived at. These cases included: 51 outputs where cross-referral advice from other sub-panels had been requested but had not yet been received; 44 outputs that were missing a score from one of their panellist reviewers; and 71 outputs where the two individual scores from panellist reviewers did not sufficiently agree.
- 6.3. It was agreed that the panel secretary would chase up the 51 pieces of missing cross-referral advice from other sub-panels, and that the outputs concerned should not be scored until that cross-referral advice had been received. (Note: A number of these missing pieces of cross-referral advice were actually received without prompting during the course of the meeting.)

- 6.4. A breakout session was then held where (i) any instances of missing scores from panellists were addressed, between the panellist concerned and either the chair, deputy chair, panel secretary or panel adviser; and (ii) paired reviewers, whose individual scores did not sufficiently agree, were asked to hold conversations between themselves, with a view to one or both of them agreeing to a new personal score.
- 6.5. This breakout session resulted in all issues of missing scores and/or scoring disagreements either being resolved or imminent actions being agreed for them to be resolved.
- 6.6. The chair and secretary presented some analysis of outputs scoring in terms of individual scoring patterns, which provided reassurance that there were no disparities between panellists that should cause any particular concern.
- 6.7. Different approaches to the question of how to map the scores from panellists to panel scores (U/1*/2*/3*/4*) were discussed and agreed.

7. HEI feedback statements (outputs)

- 7.1. Given the above agreement and following a short break in the meeting to allow data to be prepared, the sub-panel began to address the question of feedback statements for submitting units. Sub-panel 7, as with all sub-panels, is tasked with producing a concise feedback statement for each submission, which will be provided in confidence to the head of institution in January 2015. The purpose of these statements is to provide informative feedback to assist the institution in understanding the reasons for the profile it has been awarded. To this end, the feedback statements will provide a brief comment on each of the three sub-profiles (outputs, impact and environment).
- 7.2. The chair explained that the remainder of Day 1 of the meeting and the majority of Day 2 would be devoted to drafting comments for inclusion in the feedback statements institutions would receive on their outputs sub-profile. To this end, each of the 43 submissions to UOA7 would be discussed in turn.
- 7.3. Before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded.
- 7.4. A number of submissions were discussed during Day 1 and feedback statements drafted. In each case the following data was presented to the sub-panel to help inform its discussion: the size of submission (total number of FTE and total number of outputs); the provisional outputs sub-profile; the percentage of output scores on which the provisional outputs sub-profile was based (given updated data this was in the majority of cases greater than 95%), a breakdown of the

provisional outputs sub-profile by research groups (where the submission had been made using research groups); and the names of the panellists who had reviewed the outputs comprising the submission.

8. Any other business (Day 1)

- 8.1. No further business was reported.

Present (Day 2):

Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Sarah Sweeney (adviser)
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

None

9. Introduction

- 9.1. The chair welcomed Peter Cox who joined the meeting for Day 2, having sent his apologies for Day 1.
- 9.2. The chair provided a brief summary of the outcomes of Day 1 and an update on the substantial progress made with respect to missing panel scores. There were now only 31 cases overall of outputs where a panel score was not yet possible due to lack of information and/or consensus.

10. HEI feedback statements (outputs)

- 10.1. The sub-panel resumed its discussions concerned with drafting feedback statements for submitting units on their outputs sub-profiles, continuing to discuss each submission in turn.

- 10.2. Again before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded. Over the course of the two days this resulted in 27 instances of panellists being asked to leave the room.
- 10.3. All submissions not discussed on Day 1 were discussed during Day 2 and feedback statements drafted. Again in each case the following data was presented to the sub-panel to help inform its discussion: the size of submission (total number of FTE and total number of outputs); the provisional outputs sub-profile; the percentage of output scores on which the provisional outputs sub-profile was based (given updated data this was in the majority of cases greater than 95%), a breakdown of the provisional outputs sub-profile by research groups (where the submission had been made using research groups); and the names of the panellists who had reviewed the outputs comprising the submission.

11. Any other business (Day 2)

- 11.1. No further business was reported.

Present (Day 3):

Ruth Allington
Peter Burkill
Peter Costigan (Main Panel B user member)
Peter Cox
Jon Davidson
Ann Dowling (part-time) (Main Panel B Chair)
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Walter Henning (Main Panel B international member)
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Duncan Shermer (part-time) (REF team member)
Keith Shine
Sarah Sweeney (adviser)
Fredric Taylor
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Dorrik Stow
Ian Vann

12. Introduction and competence to do business

- 12.1. The chair welcomed all attendees to the meeting including those joining the meeting for Day 3 only, Ruth Allington (Sub-panel 7 impact assessor), Duncan Shermer (from the REF team) and Ann Dowling (Main Panel B chair).
- 12.2. The chair explained that Ian Vann had recently been appointed as an impact assessor to Sub-panel 7, but that unfortunately he was not able attend today's meeting.

12.3. The chair introduced the agenda, explaining that this would cover importantly the sub-panel's impact calibration exercise and planning for impact assessment.

12.4. In the light of the attendance, the sub-panel confirmed its competency to do business.

13. Minutes of the previous meeting

13.1. Now with the benefit of the impact assessor joining the meeting for Day 3, the sub-panel again confirmed that the minutes of the previous meeting were an accurate record.

14. Conflicts of interest

14.1. For the benefit of the impact assessor joining the meeting on Day 3, the technical distinction between a major and minor conflict of interest was explained and the respective processes for dealing with both were outlined. A major conflict of interest by definition is one that bars the panellist from reviewing any material from the submission concerned. By contrast a minor conflict of interest means a panellist can review some aspects of the submission. Unlike major conflicts of interest, minor conflicts do not need to be declared up front, but panellists should e-mail the panel secretary if they encounter any minor conflicts of interest with any (impact) material they have been allocated. The minor conflict of interest will then be registered and the chair will make a decision on how the minor conflict of interest is to be dealt with, in particular whether reallocation of the item(s) in question to another reviewer is required.

15. Impact calibration

15.1. In preparation for the meeting all panellists had been asked to have reviewed the same calibration sample comprising ten impact case studies and four impact templates, and submit their scores for the items on a nine point scale (U/0.5*/1*/1.5*/2*/2.5*/3*/3.5*/4*).

15.2. The chair and the secretary presented the results of the sub-panel's scoring with analysis that included the overall distribution of scores and individual panellists' means and standard deviations.

15.3. Each impact item was then discussed in turn, in the light of its distribution of scores from panellists and the views of panellists. A meeting calibration score was agreed for each item.

15.4. Some key points arising from the calibration discussion were as follows (15.5, 15.6 and 15.7).

- 15.5. The sub-panel should take care not to make higher grades harder to achieve in respect of impacts arising from public engagement activities than other forms of impact, and bear in mind that for historic public engagement activities HEIs won't have had the benefit of knowledge of the REF guidance concerning evidence of the significance of the impact at the time the public engagement activity was taking place.
- 15.6. The sub-panel should bear in mind that it is not a requirement for an impact to have reached its maximum potential for its case study to receive a four star grade.
- 15.7. The sub-panel should always keep in mind that impact case studies should be graded based on the reach and significance of the impacts evidenced within them, and not with reference to the degrees of success with which they clear the thresholds required in order to be eligible (e.g. the requirement for the underpinning research to be of predominantly two star quality), which, assuming the thresholds are met should not be factors in the grade the case study receives.

16. Impact audits

- 16.1. The panel adviser gave a brief presentation on the process for impact audits and the types of items which could be audited and which could not. Audit queries should only be raised for the following reasons: where a case study risks failing the threshold criteria unless further information is provided; where the quality of the underpinning research is doubted and the panellist has not otherwise been able to access the underpinning outputs; or where corroboration of impacts is required, but only if the panellist has reason to doubt the claims made in the case study, and not for further information.
- 16.2. Given that the next meeting on 16th and 17th July needs to address the production of draft impact profiles, panellists were asked to submit any requests for impact audits as soon as possible. Additionally panellists were asked not to withhold scoring on items where they had requested audits, but to continue to award provisional scores based on the assumption that the audit had been passed, which scores could then be revisited in the event that the audit is not passed.

17. Planning for impact assessment

- 17.1. Plans for scoring impact items in the lead up to the next meeting were discussed and the following points agreed (17.2 through to 17.11).
- 17.2. Each impact case study and each impact template has been assigned four reviewers.
- 17.3. Each reviewer should score all impact items assigned to them via their personal spreadsheet using the nine point scale (U/0.5*/1*/1.5*/2*/2.5*/3*/3.5*/4*) and upload all scores to the Panel Members Website (PMW) by close of play on

Monday 30th June. (Note: Personal spreadsheets will allow scores to one decimal place to be recorded, but panellists are asked not to use them and to stick to the nine point scale as detailed above.)

- 17.4. Comments should be included along with panellists' scores (in the first comments column) for the potential benefit of co-reviewers including, where applicable, any particular views on the panellist's certainty or uncertainty of their judgements.
- 17.5. On Tuesday 1st July, the chair and secretary will look at the scores received. If all four scores on an item agree within four points on the nine point scale (e.g. a set of scores ranging from 2.5 to 4 would pass this test, but a set of scores ranging from 2 to 4 would not) then an average score will be carried forward to the July meeting. If all four scores on an item do not agree within four points on the nine point scale that item will be added to a list of items requiring discussion and this list will be sent out to panellists on 1st July.
- 17.6. Against each item the chair and secretary will nominate one reviewer as the person to lead/initiate discussion with their co-reviewers, with a view to one or more reviewers revising their scores as a result of that discussion, so that all scores will then agree within a range of four points on the nine point scale.
- 17.7. It is expected that by and large these 'discussions' will be conducted by e-mail given four reviewers are involved in each case.
- 17.8. The people selected as leads on each item for discussion will typically be the outlier in terms of scoring.
- 17.9. The 'discussions' will need to be conducted during the period 1st July to 15th July, with any revised scores arising from the discussions uploaded to the PMW by noon on 15th July. (As with outputs scoring revised scores should take the place of original scores, but a note should be made in comments that the score has been revised.)
- 17.10. With this in mind all panellists were asked to let the secretary know if they will be out of e-mail contact for any significant time during the period 1st-15th July, so that this information can be passed on to all panellists on 1st July.
- 17.11. Any impact items where all four scores still cannot be agreed within a range of four points on the nine point scale by noon on 15th July will be discussed on Day 1 of the meeting on 16th July.

18. Project plan

- 18.1. The sub-panel received an updated version of the project plan.

19. Any other business (Day 3)

19.1. No further business was reported.

20. Next meeting

20.1. The next meeting will be 16-17 July 2014.



REF Sub-panel 7: Meeting 5

16-17 July 2014

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

Minutes

Present (Day 1):

Ruth Allington
Peter Burkill
Peter Costigan (Main Panel B user member)
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Sarah Sweeney (adviser)
Fredric Taylor
Ian Vann
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Georgina Mace
Dorrik Stow
Paul Wignall

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting including Main Panel B user member, Peter Costigan.
- 1.2. The chair introduced the agenda, explaining that that the substantial items of business were impact case study and impact template scoring, preparing draft impact feedback statements and planning for environment assessment.
- 1.3. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. It was noted that in the minutes of the previous meeting Peter Cox's name was missing from the list of attendees for Day 3. The secretary would ensure that this omission be corrected. The sub-panel confirmed that otherwise the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct.
- 3.2. The chair thanked panellists for declaring minor conflicts of interest against outputs and against impact items that they had been allocated for review. One hundred and one minor conflicts of interest had been declared against outputs and eight against impact items. A register of these had been maintained and in each case the chair had made a decision whether reallocation of the item to another reviewer was necessary. Necessary reallocations had been dealt with and individual panellists notified of any changes affecting their allocations.
- 3.3. It was noted that a similar process would be followed for minor conflicts of interest with respect to environment assessment. Panellists should e-mail the panel secretary if they come across any minor conflicts of interest with environment material they have been allocated for review. The conflict will then be registered and the chair will make a decision whether reallocation of the item in question to another reviewer is necessary.

4. Outputs assessment update

- 4.1. The chair reported that with the benefit of cross-referral advice and scoring from panellists received and/or requested since the last meeting, all of the 31 outstanding outputs without panel scores at the end of the last meeting were now in a position to be resolved.

5. Audit

- 5.1. The sub-panel received a paper providing details of all panel-instigated audits raised to date and their current status. It was explained that updated versions of this report would be provided at each meeting.
- 5.2. Four impact item audit queries had been raised, all of which had been completed. It was explained that in addition to these four impact item audits raised at the request of sub-panel members, six additional impact case study audits had been raised by the REF team to ensure that overall a given quota of impact material would be audited. Details for these additional audits were being covered by e-mail to panellists who were reviewers on the case studies concerned. Given these additional audits would be concluded after the meeting, the principle would be followed that the case studies concerned should be scored by the sub-panel as though the results of the audit had proved satisfactory and then in the event that the further information to be obtained through the audit did not prove satisfactory, scoring on the case study or studies concerned would be revisited.
- 5.3. No audit queries on environment had yet been raised. Seven audit queries on outputs had been raised, all of which had been completed. Forty audit queries on staff had been raised, all of which had been completed in terms of HEIs supplying the additional information requested of them, and all of which had been raised as a result of the review of individual staff circumstances (the next item on the agenda).

6. Individual staff circumstances

- 6.1. It was explained that the only outstanding matter from the review of clearly defined individual staff circumstances undertaken by the panel secretariat was in respect of the 40 cases with now completed audits (32 of which were audits raised by the panel secretariat and eight of which were audits raised by the REF team). The secretariat had reviewed the further information provided by HEIs in these cases and judged that sufficient information had now been provided in order that it could be confirmed that required criteria for the requested reductions had been met and the reductions correctly calculated. The panel accepted the secretariat's recommendation that therefore the requested reductions in the number of outputs to be assessed should be accepted in these 40 cases.

7. Impact item scoring

- 7.1. In preparation for the meeting panellists had been asked to have reviewed all their allocated impact case studies and templates, uploading independent scores, before discussing with co-reviewers on items where all four of the reviewers' individual scores on an item did not sufficiently agree. Panellists changing their scores following those discussions had been asked to amend their uploaded

scores, but use the (first) comments column in their personal spreadsheets to record the fact that their original score had been changed.

- 7.2. The chair thanked panellists for all their efforts in making the above procedure work as well as it had done. The sets of four scores on all but eight items now agreed sufficiently.
- 7.3. It was explained that each of these eight cases would now be discussed in turn with a view to one or more panellists revising their scores. Additionally a further three items had been identified as having issues that would benefit from group discussion in the context of the meeting. This meant that a total of 11 identified items would be discussed in turn.
- 7.4. During these discussions there were a total of five instances of panellists, having declared major conflicts of interest with respect to one of the HEIs whose impact items were being discussed, being asked to leave the room whilst the item from the HEI concerned was discussed.
- 7.5. The scoring on all the eleven identified items was resolved in discussion, with, where required, one or more panellists agreeing to revise their individual scores.
- 7.6. The chair and secretary then presented some analysis of impact scoring in terms of individual scoring patterns, which provided reassurance that there were no disparities between panellists that should cause any particular concern.
- 7.7. An overall impact profile was then presented to the sub-panel based on the panel score for each item being the average score of the individual marks for that item, rounded to the nearest half mark (so as for the panel score to be in terms of the nine point scale, U/0.5*/1*/1.5*/2*/2.5*/3*/3.5*/4*, as it needed to be). The panel discussed the overall impact profile yielded. It was agreed, that in the light of there being no score of 4.5 available on the nine point scale, a panel score of four should be attributed, in addition to items with an average score of 3.75 or higher, to items with a total score of 14 and where the lowest individual score was not lower than 3.

8. HEI feedback statements (impact)

- 8.1. The chair explained that Sub-panel 7, as with all sub-panels, is tasked with producing a concise feedback statement for each submission, which will be provided in confidence to the head of institution in January 2015. The purpose of these statements is to provide informative feedback to assist the institution in understanding the reasons for the profile it has been awarded. To this end, the feedback statements will provide a brief comment on each of the three sub-profiles (outputs, impact and environment).

- 8.2. The chair explained that the remainder of Day 1 of the meeting and the first part of Day 2 of the meeting would be devoted to drafting comments for inclusion in the feedback statements institutions would receive on their impact sub-profile. To this end, each of the 43 submissions to UOA7 would be discussed in turn.
- 8.3. Before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded.
- 8.4. A number of the submissions were discussed during Day 1 and feedback statements drafted. In each case the following data was presented to the sub-panel to help inform its discussion: the submission's overall impact sub-profile; a list of the submission's case studies and their panel scores; and the submission's impact template panel score.

9. Any other business (Day 1)

- 9.1. No further business was reported.

Present (Day 2):

Ruth Allington
Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace
Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Sarah Sweeney (adviser)
Fredric Taylor
Ian Vann
Paul Wignall
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Dorrik Stow

Observer part attending meeting Day 2:

Anna Dickinson, REF team

10. Introduction (Day 2)

- 10.1. The chair welcomed all attendees, including in particular those panellists joining the meeting for Day 2 and Anna Dickinson of the REF team who would be part-attending the meeting as an observer.
- 10.2. For the benefit of those joining the meeting on Day 2 in particular, the chair provided a summary of the business undertaken on Day 1.

11. HEI feedback statements (impact)

- 11.1. The sub-panel resumed the business of drafting comments for inclusion in the feedback statements institutions would receive on their impact sub-profiles. All of

the submissions that had not been addressed on Day 1 were addressed on Day 2, such that overall all 43 submissions were discussed and feedback statements for them drafted.

- 11.2. As with Day 1, before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded.

12. Overview report (impact)

- 12.1. Overview comments on impact case studies and templates submitted to UOA7 were discussed and agreed for potential inclusion in the impact section of the sub-panel's overview report.

13. Environment assessment

- 13.1. The chair, the adviser and the secretary provided the sub-panel with a brief presentation on environment assessment in the REF, importantly noting that the sub-panel's task was to arrive at a panel score for each of the four sections of each environment template (and not an overall panel score for each environment template).
- 13.2. The process for environment assessment in Sub-panel 7 was discussed and the following points agreed.
- 13.3. Each environment template would be allocated to five reviewers, meaning that each panellist would have around ten environment templates to review.
- 13.4. All panellists should upload their completed environment scores to the Panel Members' Website (PMW) by midnight on Sunday 31st August. .
- 13.5. On 1st September the chair or secretary would write to panellists with details of environment items (i.e. individual environment template sections) where the scores of the five panellist reviewers did not agree sufficiently on the nine point scale. Between 1st September and noon on 8th September, there would then be a window before the next meeting for panel members to discuss by e-mail any scoring where there is insufficient consensus and upload any revised scores resulting.
- 13.6. The reviewer allocated the Panellist 1 position would be the "lead reviewer" for each environment template, meaning that each panel member could expect to be the lead reviewer on two or three environment templates.
- 13.7. The lead reviewer for each template that they are the lead reviewer on should, following the 31st August deadline, refer to the scoring and comments of their co-

reviewers (via the PMW's report) and prepare a first draft HEI environment feedback statement to be e-mailed to the secretary by midnight on Sunday 7th September.

- 13.8. Full details of the above process and a summary of the guidance with regard to environment scoring would be e-mailed to panellists by the secretary as soon as possible following the meeting.

14. Project plan

- 14.1. The sub-panel received an updated version of the project plan.

15. Any other business (Day 2)

- 15.1. No further business was reported. In closing the meeting the chair in particular thanked impact assessors Ruth Allington and Ian Vann, today both attending their last meeting of the sub-panel, for their valued contributions to the work of the sub-panel.

16. Next meeting

- 16.1. The next meeting will be 9-10 September 2014.



REF Sub-panel 7: Meeting 6

9-10 September 2014

**Scarman House, University of Warwick, Gibbet Hill Road,
Coventry, CV4 7AL**

Minutes

Present (Day 1):

Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott
Georgina Mace

Christine Maggs
Ian Main
Kathryn Monk
David Price (chair)
Bob Sargent
Keith Shine
Dorrik Stow
Sarah Sweeney (adviser)
Fredric Taylor
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Paul Wignall

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting.
- 1.2. The chair introduced the agenda explaining that the substantial items of business were to agree panel scores for environment assessment, to conclude the drafting of environment feedback statements for HEIs and to discuss content for the sub-panel's overview report.
- 1.3. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. The sub-panel confirmed that the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct. No minor conflicts had been declared by panellists against any aspects of the environment material that they had been allocated for review.

4. Impact assessment update

- 4.1. The chair reported that the Sub-panel 7 overall impact profile had been well received at the Main Panel B meeting and that the sub-panel's results were in keeping with those of other Main Panel B sub-panels.
- 4.2. The panel reflected on the impact assessment process and discussed the merits or otherwise of possible changes to the impact assessment process for the next REF.

5. Audit

- 5.1. The sub-panel received a paper providing details of all panel-instigated audits raised to date and their current status. All such panel-instigated audits had now been completed.
- 5.2. It was noted that in addition to any panel-instigated audits, the REF audit team had undertaken a bulk audit process of environment data, whereby REF4a data (research doctoral degrees awarded) and REF4b data (research income) were evaluated against the related HESA data and HEIs were audited in the event there being discrepancies between the REF and HESA data beyond a set of given threshold criteria. This process had just been completed and had resulted in three data changes to three submissions to UOA7. The panellist reviewers of the submissions in question would be notified of these data changes and given the opportunity to amend their scores in the light of the changes. In the event of any such individual scoring changes being made, the scoring on the items in question would be revisited by the sub-panel.

6. Environment scoring

- 6.1. The environment scoring process requires the sub-panel to agree panel scores for each of the four sections of each of the environment submissions (and not an overall score for each submission) and therefore to agree panel scores for 172

environment 'items', that is, four section scores for each of the 43 environment submissions.

- 6.2. In preparation for the meeting panellists had been asked to have uploaded all their environment scores by 31st August. These scores had been reviewed by the chair and secretary and a list had been sent to panellists on 1st September of all instances of environment items where the five reviewers' individual scores did not agree sufficiently. Reviewers of such items were then asked to hold e-mail conversations with each other during the period before the meeting, with a view to reaching a greater consensus on the item in question and one or more of them uploading revised scores before noon on 8th September. Any items where such consensus could not be arrived at by this process would be discussed at the meeting.
- 6.3. The chair thanked panellists for submitting their scores for the pre-meeting deadline and for making the above process work as well as it had done. He reported that there remained only three environment items where sufficient consensus had not already been reached amongst their five reviewers.
- 6.4. These three items were discussed in turn. In each case, arising from the discussion, one or more panellists agreed to change their score so that all scores on the items concerned.
- 6.5. With the matter of these individual environment items for discussion addressed, the chair and secretary presented some analysis in terms of individual scoring. This provided reassurance that there were no disparities between panellists that should cause any particular concern and indicated a strong degree of existing consensus amongst reviewers.
- 6.6. An overall environment profile was then presented to the sub-panel based on the panel score for each environment item being the average score of the individual marks for that item, rounded to the nearest half mark (so as for the panel score to be in terms of the nine point scale, 4*/3.5*/3*/2.5*/2*/1.5*/1*/0.5*/U, as it needed to be). The panel discussed the overall environment profile yielded and agreed that no changes to the above method of arriving at the panel scores were necessary.

7. HEI feedback statements (environment)

- 7.1. The chair thanked panellists for submitting drafts for the HEI feedback statements on environment in accordance with the plans agreed at the last meeting. The chair explained that the majority of the remainder of Day 1 of the meeting would be devoted to reviewing these drafts and to this end, each of the 43 submissions to UOA7 would be discussed in turn.

- 7.2. Before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded.
- 7.3. All submissions were discussed and environment feedback statements reviewed and edited in accordance with the feedback from the panellist reviewers concerned. In each case the breakdown of the environment profile by section scores was presented to the sub-panel to help inform its feedback statement discussion.

8. Overall HEI profiles

- 8.1. The chair, adviser and secretary presented some analysis of overall HEI profiles that compared the performance of submissions in terms of their overall profile against their performance in each of the three REF elements, outputs, impact and environment. It was noted that some submissions had performed better in some elements than they had in other elements. Other aspects of the results presented were also discussed. It was agreed that further analysis would be prepared for discussion at the next meeting.

9. Any other business (Day 1)

- 9.1. No further business was reported.

Present (Day 2):

Peter Burkill
Peter Cox
Jon Davidson
Ian Fairchild
Mary Fowler (deputy chair)
Rod Graham
Roy Harrison
Mark Hodson
Tim Jickells
Hilary Lappin-Scott

Georgina Mace
Christine Maggs
Ian Main
David Price (chair)
Bob Sargent
Keith Shine
Sarah Sweeney (adviser)
Fredric Taylor
Lewis Williams (secretary)
Andrew Willmott

Apologies:

Kathryn Monk
Dorrik Stow
Paul Wignall

10. Introduction (Day 2)

- 10.1. The chair welcomed all attendees to Day 2 of the meeting and took the opportunity to reflect on the overall REF process and the work of the sub-panel. In particular, this led to a discussion of the question of overlap of material between sub-panels and cross-referral requests (of which there had been by far the highest number in Sub-panel 7 of any of the Main Panel B sub-panels), where it was felt lessons could be learnt for the next REF.

11. Overview report

- 11.1. In order to facilitate discussion of material for the sub-panel's overview report, the meeting was split into four sub-groups to hold discussions which would then be reported back to the meeting as a whole.
- 11.2. Each of the spokespersons for the four sub-groups presented a summary of points to the meeting and also submitted written notes capturing the main points of their sub-groups' discussions.
- 11.3. The chair and deputy chair would use the content of these discussions and notes to draft the Sub-panel 7 overview report for presentation to the next meeting.

12. Planning for next meeting

- 12.1. It was agreed that before the next meeting there would be a process whereby panellists would each be asked to review the collective HEI feedback statements for the two or three submissions on which they are the nominated lead reviewer (Panellist 1 reviewer). This would not be with a view to significant changes being made, but in order to 'sense check' the content of the three statements when considered together and when considered against the sub-profiles, and, in respect of the outputs sub-profile, its breakdown by research groups, where applicable.
- 12.2. In order to facilitate the above process the secretary agreed to provide panellists with the relevant information by 12th September. It was further agreed that panellists would respond with confirmation of the appropriateness of the feedback statements or changes to them by 14th October, in order that the returns could be collated in time for presentation at the next meeting.

13. Any other business (Day 2)

- 13.1. The secretary explained how the process for the eventual return of panellists' USB sticks would work. In line with its data retention schedule, the REF team is required to receive and erase all USB pens by the date of the publication of results. Panellists will each receive an addressed and pre-paid envelope in November to use to return their USB sticks to the REF team, who would

appreciate the return of USB sticks as soon as possible after panellists receive their return requests.

14. Next meeting

14.1. The next meeting will be 21 October 2014.

REF Sub-panel 7: Meeting 7

21 October 2014

**CCT Venues-Smithfield, Two East Poultry Avenue, Smithfield,
London EC1A 9PT**

Minutes

Present:

	Christine Maggs
Peter Burkill	Ian Main
Peter Cox	Kathryn Monk
Jon Davidson	David Price (chair)
Ian Fairchild	Bob Sargent
Mary Fowler (deputy chair)	Keith Shine
Rod Graham	Dorrik Stow
Roy Harrison	Sarah Sweeney (adviser)
Mark Hodson	Fredric Taylor
Tim Jickells	Lewis Williams (secretary)
Hilary Lappin-Scott	Paul Wignall
Georgina Mace	Andrew Willmott

Apologies: none

Observer part attending meeting: Graeme Rosenberg, REF Manager

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting.
- 1.2. The chair introduced the agenda explaining that the substantial items of business were to review the sub-panel's draft overview statement and to review the sub-panel's set of draft feedback statements for HEIs.
- 1.3. In the light of the attendance, the sub-panel confirmed its competency to do business.

2. Minutes of the previous meeting

- 2.1. The sub-panel confirmed that the minutes of the previous meeting were an accurate record.

3. Conflicts of interest

- 3.1. The sub-panel reviewed the register of members' declared major conflicts of interest and confirmed it to be correct.

4. Audit

- 4.1. The sub-panel received a paper providing details of all panel-instigated audits raised to date and their current status. All such panel-instigated audits had now been completed.

5. Environment assessment update

- 5.1. The chair reported that the Sub-panel 7 overall environment profile had been well received at the Main Panel B meeting and that the sub-panel's results were in keeping with those of other Main Panel B sub-panels.
- 5.2. The panel reflected on the environment assessment process and discussed the merits of the possibility of a more granular approach to environment scoring being available in future REFs.

6. Overall sub-panel and submission profiles

- 6.1. The chair and secretary presented the results of the work of Sub-panel 7 in terms of the overall sub-panel profile and sub-profiles, and submission profiles and sub-profiles. It was noted that Sub-panel 7 had assessed an overall total of 5,511 items (comprising 5,250 research outputs, 175 impact case studies, 43 impact templates and 43 environment templates).

7. Results process and confidentiality

- 7.1. The sub-panel received a presentation outlining the timetable for the results process, detailing the information that would be available to whom and when, and covering the confidentiality requirements on panellists. The chair stressed the importance of confidentiality requirements, including that REF results be kept absolutely confidential until publication.

8. Overview report

- 8.1. The sub-panel received the current draft overview report, which was discussed.
- 8.2. In order to facilitate further input from the sub-panel, the meeting was split into four sub-groups to hold discussions, which would then be reported back to the meeting as a whole.

- 8.3. Each of the spokespersons for the four sub-groups presented a summary of points to the meeting and also submitted written notes capturing the main points of their sub-groups' discussions.
- 8.4. It was agreed that the final version of the overview report would be prepared by the chair and deputy chair by Friday 24th October, taking into account of the above input.

9. HEI feedback statements (outputs, impact and environment)

- 9.1. The chair thanked panellists for their individual input in reviewing selected HEI feedback statements in accordance with the plans agreed at the last meeting. The chair explained that the remainder of the meeting would largely be devoted to the sub-panel as a whole reviewing all HEI feedback statements. To this end, each of the 43 submissions to UOA7 would be discussed in turn. For the discussion of each submission, the submission's overall profile, sub-profiles and feedback statements would be displayed on the screen, together with contextual information. The panel adviser would record any amendments to the text of the feedback statements agreed by the sub-panel.
- 9.2. Before the discussion of each submission any panellists with a major conflict of interest with respect to the institution concerned were asked to leave the room and were only recalled once the discussion concerning that institution had been concluded.
- 9.3. All submissions were discussed and their outputs, impact and environment feedback statements reviewed. Any agreed changes to the statements were made.

10. Any other business

- 10.1. In accordance with the change of policy on this matter, of which panellists had been advised by e-mail, the panel secretary collected USB sticks from panellists for return to the REF team. Those panellists not having their USB sticks with them for collection would receive a pre-paid padded envelope from the REF team with which to return their USB sticks.
- 10.2. In closing the meeting, the chair thanked the panel secretary and panel adviser for their work in supporting the work of the sub-panel, and thanked panellists for all their work in reviewing a very large number of items and preparing for and contributing to the sub-panel meetings.