



REF Sub-panel 15: Meeting 1b

8 January 2014

CCT-Venues, Smithfield, London

Minutes

Present:

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Ann Dowling (main panel chair)
Alicia El Haj
Stephanie Glendinning
Peter Goodhew
Geoffrey Hammond
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
John Robertson
Chris Rogers
Rajkumar Roy
Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Jan Sykulski
Colin Taylor
Tony Unsworth
Robin Wallace (deputy chair)
Dave Watson
Roger Woods
David York
Robert Young

Apologies:

Marian Wiercigroch

Lewis Williams (secretary)

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 their 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 to register any new major conflicts of interest as they arise through the Panel members' website (PMW).
- 2.3. The panel discussed the circumstances that may constitute a minor conflict of interest and the process that will be followed in notifying the chair and secretary of such conflicts. In each case the chair will decide what effect the existence of a minor interest shall have on a panel member's participation in the assessment.

3. Outline timetable

- 3.1. The panel considered the meeting schedule previously circulated.
- 3.2. The chair outlined the proposed deadline dates for having uploaded 10-20%, 50% and 100% of their output scores in line with Main Panel B requirements and upon reflection panel members agreed that the dates were achievable.

4. Output calibration

- 4.1. Prior to the meeting, the chair had selected and circulated a sample of 20 outputs to the members and output assessors, to be used for the sub-panel's initial calibration exercise. 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. Outputs were selected to represent a spread of the disciplines represented within the unit of assessment.

- 4.2. 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.
- 4.3. The chair recognised that asking panellists to consider all of the calibration sample sometimes took them outside of their immediate areas of expertise.
- 4.4. Panellists had submitted their scores to the secretary prior to the meeting. The adviser 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.
- 4.5. 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.
- 4.6. 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.

5. Output allocation arrangements

- 5.1. The chair outlined the approach that he 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 that a third member of the panel will make the allocation of outputs for institutions with which both the chair and deputy chair have major conflicts of interest.
- 5.2. The chair reported that a draft allocation of outputs had been made to enable panellists to begin scoring in advance of the sub-panel's next meeting on 5 February 2014. The chair asked panellists to review their allocation over the following two weeks and raise any issues with the panel secretary.

- 5.3. The panel discussed the arrangements that they will use to ensure that panellists assess the same sub-set of outputs ahead of the sub-panel meetings in February and in early April. The panel agreed to sort outputs alphabetically by author surname, and proceed to assess outputs in this order.

6. Double-weighting and cross-referral requests

- 6.1 The panel discussed the arrangements for addressing cross-referral requests from Higher Education Institutions, and cross-referral requests initiated by panel members. The panel agreed that the panellists assigned to assess the outputs should decide whether the output should be cross-referred, and send any requests for cross-referral to the panel secretary.
- 6.2 The panel has received one double-weighting request. The chair asked the two panellists assigned to assess the output to assess the double-weighting request and inform him of their decision.

7. Outputs scoring system

- 7.1 The panel approved the output scoring system detailed in Paper 3.
- 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 panel members' website (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 see Panellist 2's score if one has been similarly uploaded (and vice versa).
 - g) Allocations to Panellist 1 and Panellist 2 will be organised so that panellists will be partnered with the same one or two co-reviewers for as many outputs as possible.
 - h) If Panellist 1 and Panellist 2's scores agree no further scoring activity is necessary on the part of the reviewers before the next sub-panel meeting.
 - i) If Panellist 1 and Panellist 2's scores do not agree, the two reviewers should hold a (telephone) conversation with a view to agreeing a single score. If such a score can be agreed, Panellist 1 should record that score on his or her spreadsheet in the first 'comment' column (thus preserving the record of the

original two different scores). Panellists will be paired as far as possible in order that such conversations can be dealt with on a bulk basis.

- j) If despite their conversation, Panellist 1 and Panellist 2 cannot agree on a score then Panellist 1 should record this fact on his or her personal spreadsheet in the 'comment 2' column, and the scoring will be arbitrated by the SP15 Chair or Deputy Chair.

8. Output assessment schedule

- 8.1. The panel agreed to assess at least the first 10% of their output allocation, equating to approximately 80 outputs, before the next meeting on 5 February 2014.
- 8.2. The panel would need to have assessed 50% of their output allocation before the meeting on 26 March 2014, and 100% of their allocation before the meetings on 20-22 May 2014.

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 5 February 2014.

11. Any other business

- 11.1. No further business was reported.



REF Sub-panel 15: Meeting 2

5 February 2014

The Studio, 7 Cannon Street, Birmingham

Minutes

Present:

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Lianne Deeming
Alicia El Haj
Peter Goodhew
Geoffrey Hammond
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
John Robertson
Chris Rogers
Rajkumar Roy
Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Jan Sykulski
Colin Taylor
Tony Unsworth
Robin Wallace (deputy chair)
Marian Wiercigroch
Lewis Williams (secretary)
Roger Woods
David York
Robert Young

Apologies:

Stephanie Glendinning
Dave Watson

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. It was agreed that panellists would review their allocations of outputs with a view to identifying any minor conflicts of interest and e-mail the secretary with any identified minor conflicts of interest by 12th February (a week from the date of the meeting). (All necessary reallocations could then be made at the same time and as soon as possible after 12th February.)

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 it was hoped that the number of cross-referrals out from the sub-panel could be minimised, given the broad coverage of areas of expertise within the sub-panel.
- 5.2. It was agreed that in the first instance, panellists finding an output to be outside of their area of expertise could consult informally with other members of the sub-panel. To aid this process a list of members' areas of expertise would be circulated.
- 5.3. It was noted that the general nature of the sub-panel's remit made it unlikely that many cross-referral requests from other sub-panels would be received, and indeed, only a very small number had been received to date. In cases where inward cross-referral requests were accepted from other sub-panels, 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 1010 outputs having independent scores recorded from two panellist reviewers. Of these the pairs of scores for 219 outputs exactly agreed, thus yielding provisional panel scores for the outputs concerned without the need for further process.
- 6.2. Where panellists' pairs of scores did not agree, paired reviewers had been asked to hold conversations between themselves before the meeting with a view to agreeing a common score, which the reviewer designated "Panellist 1" would have responsibility for recording (in the comments column of his or her personal spreadsheet) and uploading to the PMW. This process had resulted in a further 732 provisional panel scores being determined.
- 6.3. 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 concern. It was noted that scoring differences between paired reviewers' respective original scores were typically small, with differences of greater than three points on the scale only occurring in less than five per cent of cases.
- 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 independent scores, before discussing with paired reviewers to arrive at an agreed score to be uploaded by the reviewer designated "Panellist 1" before

10am on Monday 24th March (to enable analysis of scores to be undertaken in time for the meeting on Wednesday 26th March).

- 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 secretary gave a short 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 26 March 2014.

10. Any other business

- 10.1. No further business was reported.



REF Sub-panel 15: Meeting 3

26 March 2014

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

Minutes

Present:

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Lianne Deeming
Ann Dowling (Main Panel B chair) (part-time attendance)
Alicia El Haj
Stephanie Glendinning
Peter Goodhew
Geoffrey Hammond
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
John Robertson
Chris Rogers
Wolfgang Rodi (Main Panel B international member)
Rajkumar Roy
Paul Shayler
Duncan Sherman (REF team) (part-time attendance)
Mike Short (impact assessor) (part-time attendance)
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Jan Sykulski
Colin Taylor
Tony Unsworth
Robin Wallace (deputy chair)
Dave Watson
Marian Wiercigroch
Lewis Williams (secretary)
John Wood

Roger Woods
David York
Robert Young

Apologies:

Geoff Kirk
Stephen Minger
John Wood

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting including Main Panel B international member, Wolfgang Rodi. The chair explained that Sub-panel 15's impact assessors had been invited to attend the meeting's afternoon session so that they could attend the impact assessment briefing (Item 9 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. One hundred and sixty three 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. As had been hoped, the number of cross-referrals out from the sub-panel had been kept to a minimum, with the sub-panel's approach being to utilise the broad coverage of areas of expertise within the sub-panel.

- 4.2. Sub-panel 15 had cross-referred a total of 37 outputs out to other sub-panels for advice as follows:

10 to SP1 Clinical medicine
8 to SP4 Psychology, Psychiatry and Neuroscience
1 to SP7 Earth Systems and Environmental Sciences
9 to SP10 Mathematical Sciences
7 to SP17 Geography, Environmental Studies and Archaeology (with 4 more to follow)
2 to SP35 Music, Drama, Dance and Performing Arts

- 4.3. Sub-panel 15 reviewers of the outputs concerned would receive, if they had not already done so, a suggested score and optional comment against each output from the nominated reviewers on the above sub-panels.

- 4.4. It was noted that the official deadline for raising new cross-referral requests was Friday 28th March, but that exceptionally it would still be possible to raise individual new requests after that date.

- 4.5. Sub-panel 15 had accepted only a very small number of cross-referrals in from other sub-panels. Sub-panel 15 members nominated to provide cross-referral advice to other sub-panels would have received REF webmails requesting the advice and providing them with 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. Two audit queries on outputs had been raised to date, further information from the HEIs concerned had been provided in both cases. Fourteen audit queries on staff had been raised to date, two of which had been completed, and twelve of which had been raised as a result of the review of individual staff circumstances (the next item on the agenda). One of the staff audit queries was likely to lead to a member of staff being removed from one HEI's submission on the grounds of ineligibility.

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 674 staff that had been submitted to Sub-panel 15 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. Duplicate outputs

- 7.1. Duplicate outputs are those that have been submitted to the sub-panel by two or more different HEIs against two or more different members of staff. Sub-panel 15 has 200 outputs that are duplicates with other outputs. On the grounds that these 200 duplicates would not themselves need to be reviewed (because the same output was already being reviewed) they were not currently allocated to pairs of panellist reviewers. However, the point had been made, and was well taken, that it would be theoretically possible for the same output to legitimately receive two different panel scores by virtue of the accompanying additional information about the significance of the output being different. This point was discussed and it was agreed that any pairs of reviewers with outputs that had duplicates should also get to see the additional statement that accompanied the duplicate instance of the output, at least in cases where the agreed scores that they had arrived at for the instance of the output they had reviewed were at the borders between star ratings, in case the different additional information would lead them to assign different scoring for the duplicate instance of the output.

8. Review of output scoring

- 8.1. 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 agree, with a view to agreeing a score between them that would then be recorded by the reviewer designated 'Panellist 1' (in the comments column of his or her personal spreadsheet) and uploaded to the Panel members' website. This process had worked well and as at 25th March had resulted in 4044 outputs having scores recorded from two reviewers and 4001 of these also having agreed scores recorded against them
- 8.2. 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 concern. It was noted that scoring differences between paired reviewers' respective original scores were typically small, with significant differences only occurring in less than five per cent of cases.
- 8.3. It was agreed that the analysis presented by the chair and secretary would be circulated to panel members and output assessors following the meeting.

- 8.4. 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 independent scores, before discussing with paired reviewers to arrive at an agreed score to be uploaded by the reviewer designated "Panellist 1" before close of play on **Tuesday, 13th May**.

9. Project plan

- 9.1. Discussion of this item was brought forward from its scheduled position on the agenda. The sub-panel received an updated project plan and discussed requirements and planning for the next meeting (being the three day meeting on 20th-22nd May at the Selsdon Park Hotel, South Croydon, where the first two days would address outputs and the third day impact).
- 9.2. The sub-panel was minded to begin the first day of the next meeting at a later start time (12pm) than the currently scheduled 10am start. This would avoid the need for some members to travel the night before and, because members would be staying at the Selsdon Park Hotel on 20th May, it would always be possible, if necessary, for the afternoon meeting on that day to extend beyond the scheduled finishing time of 4.30pm if the agenda required it.
- 9.3. It was agreed that initial work on writing the outputs feedback for HEIs should be undertaken during 20th-21st May. A group of panellists whose institutions had not made submissions to Unit of Assessment 15 might be assembled to lead on this task and members of that "non-conflicted" group might be asked to arrive at Selsdon on 20th May a little earlier than the 12pm start on that day.
- 9.4. In terms of panellist preparation for the 20th-22nd May meeting the following deadlines were agreed:
- As per 8.4 above, panellists are asked to have completed their scoring of outputs and reconciliation exchanges with co-reviewers and uploaded agreed scores by close of play on **Tuesday, 13th May**.
 - Panellists are asked to have completed and submitted their scoring for the impact calibration exercise by close of play on **Friday, 16th May**.
 - Panellists are asked to submit 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**.

10. Any other business

- 10.1. Discussion of this item was brought forward from its scheduled position on the agenda. No further business was reported.

11. Impact assessment briefing

- 11.1. Mike Short, one of Sub-panel 15's four impact assessors, joined the meeting for this item. Apologies were received from Geoff Kirk, Stephen Minger and John Wood, the other three of the sub-panel's impact assessors.
- 11.2. 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.

12. Next meeting

- 12.1. The next meeting will be 20-22 May 2014.

REF Sub-panel 15: Meeting 4

20 - 22 May 2014

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

Minutes

Present (Day 1):

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Alicia El Haj
Stephanie Glendinning
Peter Goodhew
Geoffrey Hammond
Stephanie Haywood
Jan Maciejowski
Anne Neville
Andrew Plummer
John Robertson
Chris Rogers

Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Jan Sykulski
Colin Taylor
Tony Unsworth
Robin Wallace (deputy chair)
Marian Wiercigroch
Lewis Williams (secretary)
Roger Woods
David York
Robert Young

Apologies:

Lianne Deeming
Philip Nelson (chair)
Rajkumar Roy
Dave Watson

1. Introduction and competence to do business

- 1.1. The deputy chair welcomed all attendees to the meeting and 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 been invited, to be focused on matters related to the assessment of impact.

- 1.2. 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 deputy chair thanked panellists for declaring minor conflicts of interest against the outputs they had been allocated for review. One hundred and ninety eight 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. No audit queries on impact items had yet been raised. Fourteen audit queries on outputs had been raised to date, 11 of which had been completed. Thirty three audit queries on staff had been raised to date, 15 of which had been completed.
- 4.3. It was explained that completed audits could fall into the category of "verified", meaning that the REF audit team had verified eligibility with regard to the aspect audited, or "further information provided", meaning that further information had been provided, but that the judgement as to whether the additional information provided evidence of eligibility with regard to the aspect audited was for the sub-panel to make.

- 4.4. A small number of the audits on outputs were identified as requiring further discussion before the sub-panel's judgement could be made as to whether the further information provided meant that the outputs in question satisfied the eligibility criteria or not. This discussion was postponed for another day of the meeting to allow panellists additional time to consider the further information provided.
- 4.5. All of the staff audits 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 674 staff that had been submitted to Sub-panel 15 with clearly defined circumstances (REF1b data). As a result of the review process, 33 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 (in each case resulting in one 'missing' output).
- 5.2. The sub-panel approved the recommendations arising from the completed review that, in all but the above 35 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 33 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 their independent scores, before discussing with paired reviewers where their respective scores on an output did not agree, with a view to arriving at an agreed score, which the reviewer designated "Panellist 1" was tasked with uploading using the (first) comments column on their spreadsheet for this purpose.
- 6.2. It was reported that, with some activity having been undertaken in the few days before the meeting to chase missing scores, the above process had worked extremely well, leading to the sub-panel having panel scores on virtually all of the 8699 outputs it was required to score.
- 6.3. The small number of cases of outputs without agreed scores (which number was down to 14 by Day 1 of the meeting) were addressed with panellists concerned

during a breakout session, and all issues were resolved or imminent actions were agreed for them to be resolved.

- 6.4. The deputy 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.
- 6.5. The deputy chair and secretary presented some analysis of scoring differences between paired reviewers' respective original scores and it was noted that these were typically small, with significant differences only occurring in less than five per cent of cases.
- 6.6. The deputy chair and secretary then presented the overall outputs profile based on scores from all but 14 out of 8699 outputs.
- 6.7. The outputs profile for each submission was then presented on an HEI by HEI basis and briefly discussed. 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. Overall this process led to 34 instances of panellists leaving the room for the discussion of particular HEIs' submissions due to major conflicts of interest.

7. Planning for Day 2 (HEI feedback statements (outputs))

- 7.1. It was agreed that in order to best facilitate the discussion towards the drafting of feedback statements on outputs sub-profiles for all of the 61 submissions made to UOA15 within the time available, the sub-panel would best be split into two concurrent sessions for a large part of Day 2 of the meeting.

8. Any other business (Day 1)

- 8.1. No further business was reported.

Present (Day 2):

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Alicia El Haj
Stephanie Glendinning
Peter Goodhew
Geoffrey Hammond
Stephanie Haywood
Jan Maciejowski
Anne Neville
Andrew Plummer
John Robertson
Chris Rogers

Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Jan Sykulski
Colin Taylor
Tony Unsworth
Robin Wallace (deputy chair)
Marian Wiercigroch
Lewis Williams (secretary)
Roger Woods
David York
Robert Young

Apologies:

Lianne Deeming
Philip Nelson (chair)
Rajkumar Roy
Dave Watson

9. Introduction

9.1. The deputy chair welcomed attendees to Day 2 of the meeting.

10. HEI feedback statements (outputs)

10.1. The deputy chair explained that Sub-panel 15, 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).

10.2. The chair explained that the majority of Day 2 of the meeting 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 61 submissions to UOA15 would be discussed in turn.

10.3. For the purposes of these discussions the meeting was then split into two concurrent sessions, with each session addressing half of the submissions. The

membership of the two groups had been arranged so as to maximise the number of reviewers of outputs from any given submission that were present to discuss the submission, and minimise the number of panellists that would need to leave the room due to conflicts of interest. (Although, a perfect solution not being possible, the practice of requiring panellists to leave the room whilst any submission from an HEI with which they had declared a major conflict of interest was, wherever applicable, followed strictly in both groups' sessions.)

- 10.4. The discussions of one group were chaired by the deputy chair and an arrangement had been made for another panellist to chair the discussions of the other group. Between the two groups all 61 submissions were discussed and feedback statements drafted. In each case the following data was available for presentation to the sub-panel to help inform its discussion: the size of submission (total number of FTE, total number of outputs); the outputs sub-profile; a listing of outputs that could be sorted by reference to panel score and/or research groups (with the latter where the submission had been made using research groups); and a list of the panellists that had reviewed outputs from the submission.
- 10.5. The sub-panel then reconvened as a whole and the outcomes of the above two sessions were reviewed.

11. Any other business

- 11.1. No further business was reported.
- 11.2. In declaring Day 2 of the meeting closed, the deputy chair, in particular, thanked the sub-panel's output assessors, who would then be leaving the meeting and not attending Day 3, for their hard work and invaluable input into the outputs assessment process.

Present (Day 3):

Jack Boyer (Main Panel B)
David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Lianne Deeming
Ann Dowling (Main Panel B)
Alicia El Haj
Stephanie Haywood
Geoff Kirk
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
Rajkumar Roy

Chris Rogers
Paul Shayler
Mike Short
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Colin Taylor
Robin Wallace (deputy chair)
Dave Watson
Marian Wiercigroch
Lewis Williams (secretary)
John Wood
Roger Woods
David York

Apologies:

Stephen Minger

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, in particular the sub-panel's impact assessors, as well as Jack Boyer (Main Panel B user member) and Ann Dowling (Main Panel B chair, joining the meeting for part of its time).
- 12.2. The chair introduced the agenda, explaining that this would cover importantly the sub-panel's impact calibration exercise and planning for impact assessment.
- 12.3. 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 assessors 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 assessors now attending, the sub-panel again received the register of members' declared major conflicts of interest and confirmed it to be correct.
- 14.2. Again for the benefit of the impact assessors now attending, 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 via Panel Members' Website (PMW), 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. A key point arising from the calibration discussion was that 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 1st and 2nd July needs to address the production of draft impact profiles, panellists were asked to submit any requests for impact audits not already raised 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 17.12).
- 17.2. Each impact template has been assigned four reviewers.
- 17.3. Each reviewer should score all impact templates assigned to them via their personal spreadsheet using the nine point (U/0.5*/1*/1.5*/2*/2.5*/3*/3.5*/4*) scale and upload all scores to the PMW by close of play on Monday 23rd 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. There is no need for panellists to discuss their impact template scores with their co-reviewers before the next meeting.
- 17.5. Each impact case study has been assigned three reviewers.
- 17.6. Each reviewer should score all impact case studies assigned to them via their personal spreadsheet using only the nine point (U/0.5*/1*/1.5*/2*/2.5*/3*/3.5*/4*) scale and upload their scores to the PMW.
- 17.7. Once a panellist has scored a case study independently they may look up the scores their co-reviewers have arrived at (via the P01b report that can be downloaded from the PMW).

- 17.8. All three reviewers should arrange to hold a (phone) conversation between themselves with a view to arriving at an agreed score for each case study.
- 17.9. The reviewer designated "Panellist 2" shall have the responsibility for convening these (phone) conversations and recording and uploading the agreed score using the (first) comment column in their personal spreadsheet. "Panellist 2"s should enter only numbers on the nine point scale for this purpose (and no text) in their (first) comment column.
- 17.10. All agreed scores should be uploaded by close of play on Monday 23rd June.
- 17.11. It follows that individual independent scores will need to have been uploaded sufficiently in advance of this date to enable the discussions leading to agreed scores to be held and the results uploaded by that date.
- 17.12. If panellists wish to record any draft comments for potential incorporation into the feedback statements that will ultimately be provided to HEIs to accompany their REF impact sub-profiles, panellists should record such comments in the "Comment 3" column, also uploading them to the PMW by the above deadline. These comments will be collated as the starting point for the feedback statement's discussion at the next meeting. (It follows that the "Comment 3" column should not be used for any other purpose.)

18. Project plan

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

19. Any other business

- 19.1. The issue first highlighted during Day 1, with regard to the further information provided through audit and the consequent eligibility or otherwise of an identified small number of outputs, was discussed under any business on Day 3. It was agreed that in the case of three identified outputs the further information provided had not assured the panel of the eligibility of the outputs and that therefore these three outputs would receive an unclassified grade.

20. Next meeting

- 20.1. The next meeting will be 1-2 July 2014.

REF Sub-panel 15: Meeting 5

1 - 2 July 2014

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

Minutes

Present (Day 1):

David Butler
Christopher Chatwin
Jan Cilliers
Lianne Deeming
Alicia El Haj
Stephanie Haywood
Geoff Kirk
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
Chris Rogers
Rajkumar Roy

Paul Shayler
Mike Short
Robert Sorrell (Main Panel B)
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Colin Taylor
Robin Wallace (deputy chair)
Dave Watson
Marian Wiercigroch
Lewis Williams (secretary)
John Wood
Roger Woods

Apologies:

Jonathan Cooper
Stephen Minger
David York

1. Introduction and competence to do business

- 1.1. The chair welcomed all attendees to the meeting including Main Panel B user member, Robert Sorrell.
- 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. 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 outputs and against impact items that they had been allocated for review. One hundred and ninety eight minor conflicts of interest had been declared against outputs and six 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 confirmed that all outputs submitted to UOA15 had been scored by the sub-panel and reported that the overall profile arising had been reported to Main Panel B without any concerns being raised.

5. Audit

- 5.1. The sub-panel received a paper providing details of all panel-instigated audits raised to date and their current status.
- 5.2. Fourteen impact item audit queries had been raised, ten of which had been completed. In the light of there therefore being a small number of audit queries on impact items awaiting completion, it was agreed that the principle would be followed that the items concerned should be scored by the sub-panel as though the results of the audit had proved satisfactory and in the event that the further information to be obtained through the audit did not prove satisfactory, scoring on the item(s) concerned would be revisited.

- 5.3. No audit queries on environment had yet been raised. Fourteen audit queries on outputs had been raised, all of which had been completed. Thirty three 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 33 cases with now completed audits. 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 33 cases.

7. Impact case study scoring

- 7.1. In preparation for the meeting panellists had been asked to have reviewed all their allocated impact case studies, uploading independent scores, before discussing with their two co-reviewers in each case on to arrive at a combined agreed score to be recorded by the reviewer designated Panellist 2.
- 7.2. The chair thanked panellists for all their efforts in making the above procedure work as well as it had done in yielding combined agreed scores on all case studies.
- 7.3. The chair and secretary then presented some analysis of impact case study scoring in terms of individual scoring patterns, which provided reassurance that there were no disparities between panellists that should cause any particular concern.
- 7.4. An overall impact case study profile was then presented to the sub-panel. 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 additionally to items with a recorded score of 3.5 where at least one panellist scored it a four, the next highest scoring panellist scored it at least a 3.5 and the lowest scoring panellist scored it not less than a three.

8. Impact template scoring/HEI feedback statements (impact)

- 8.1. In preparation for the meeting panellists had been asked to have reviewed all their allocated impact templates, uploading their independent scores. (Impact

templates in contrast to impact case studies were allocated to four reviewers, not three, and there was no requirement for the four reviewers to agree a combined score before the meeting.)

- 8.2. The chair reported that unfortunately eight of the impact templates were missing scores from one reviewer. Eight panellists were each assigned one of the eight templates concerned and agreed to read the template assigned to them and bring a score on it to Day 2 of the meeting. Any further discussion of the eight submissions concerned was postponed until Day 2 of the meeting.
- 8.3. 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 discussion of each impact submission in turn. The purpose of each of these discussions would be (a) to agree a panel score for the impact template, and (b) to draft comments for inclusion in the feedback statements institutions would receive on their impact sub-profile. In respect of (a) there was no plan for the possibility of impact template scores to be adjusted as impact case study scores had been and therefore the fact of there being no score of 4.5 available on the nine point scale would be need to borne in mind as panel scores were agreed. In respect of (b) it was explained that Sub-panel 15, 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).
- 8.4. 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.
- 8.5. A number of the submissions were discussed during Day 1 and impact template scores agreed and feedback statements drafted. In each case the following data was presented to the sub-panel to help inform its feedback statement 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):

David Butler
Christopher Chatwin
Jan Cilliers
Alicia El Haj
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
Chris Rogers
Rajkumar Roy
Paul Shayler

Mike Short
Robert Sorrell (Main Panel B)
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Colin Taylor
Robin Wallace (deputy chair)
Dave Watson
Marian Wiercigroch
Lewis Williams (secretary)
John Wood
Roger Woods

Apologies:

Jonathan Cooper
Lianne Deeming
Geoff Kirk
Stephen Minger
David York

10. Introduction (Day 2)

10.1. The chair welcomed attendees to Day 2 of the meeting.

11. Impact template scoring/HEI feedback statements (impact) continued

11.1. The sub-panel resumed the business of agreeing impact template panel scores and 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 at the conclusion of these discussions overall impact template scores and draft feedback impact statements were agreed for all 61 submissions to UOA15.

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. Environment assessment

12.1. 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).

- 12.2. The process for environment assessment in Sub-panel 15 was discussed and the following points agreed.
- 12.3. A “mini-calibration” exercise for environment assessment would be held by e-mail correspondence immediately following the meeting. Each panellist would be asked to score the same four environment templates and return their sets of scores to the secretary by close of play on Thursday 10th July. The secretary would on the day following the meeting create a spreadsheet form for this purpose and send it to panellists along with full details of the process agreed for the mini-calibration exercise, and would on receipt of returned scores provide panellists with a collated set of results from the mini-calibration exercise no later than Monday 14th July.
- 12.4. For the purposes of assessment proper, each environment template would be allocated to four reviewers, meaning that each panellist would have eleven or twelve environment templates to review.
- 12.5. All panellists should upload their completed environment scores and comments to the Panel Members' Website (PMW) by close of play on Monday 1st September.
- 12.6. “Lead reviewers” would be assigned to each environment template, meaning that each panellist could expect to be the lead reviewer on two or three templates.
- 12.7. Following the 1st September deadline, lead reviewers should refer to the scoring and comments of their co-reviewers (via the P01c report) and prepare a first draft HEI environment feedback statement to be e-mailed to the secretary by close of play on Friday 12th September.
- 12.8. Full details of the above agreed process and a summary of the guidance with regard to environment scoring would be e-mailed to panellists by the secretary.

13. Project plan

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

14. Any other business (Day 2)

- 14.1. No further business was reported.

15. Next meeting

15.1. The next meeting will be 16-17 September 2014.

REF Sub-panel 15: Meeting 6

16 - 17 September 2014

Doubletree Hotel, One Piccadilly Place, Manchester, M1 3DG

Minutes

Present (Day 1):

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Alicia El Haj
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer
Chris Rogers

Rajkumar Roy
Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Robin Wallace (deputy chair)
Marian Wiercigroch
Lewis Williams (secretary)
Roger Woods
David York

Apologies:

Lianne Deeming
Colin Taylor
Dave Watson

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 complete 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.
- 3.2. One panellist declared a minor conflict of interest with respect to one of the environment submissions. The chair ruled that the minor interest should be noted by the sub-panel, but that it should not affect the panel member's participation in assessing the submission.

4. Outputs assessment update

- 4.1. It was reported that a relatively small number of corrections (88 in total) had been necessary to the panel scores of outputs, due to a problem with a very small number of panellists having recorded some agreed scores in the wrong spreadsheet column. (This problem had been identified during checks made with the output scoring.) The issue had now been fully resolved and all necessary corrections arising had been made. The effect of the changes in terms of the overall distribution of scores was generally neutral. (For example, 18 scores had been corrected from two star to three star, but on the other hand 17 scores had been corrected from three star to two star.)

5. Impact assessment update

- 5.1. The chair reported that the Sub-panel 15 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.

6. Audit

- 6.1. 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.
- 6.2. 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 resulted in one data change to one submission to UOA15. The panellist reviewers of the submission in question had

been notified of this data change and given the opportunity to amend their scores in its light.

7. Environment scoring

- 7.1. The chair thanked panellists for submitting for the pre-meeting deadline their individual scores on environment template sections. He reminded the sub-panel that the environment scoring process required 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 that thereby the business of the sub-panel was to agree panel scores for 244 environment 'items', that is, four section scores for each of the 61 environment submissions.
- 7.2. 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 good degree of existing consensus amongst reviewers.
- 7.3. The chair and secretary then presented some analysis of what the sub-panel's overall environment profile might look like based on taking the averages of panellists' individual scores on items to be the panel scores. This analysis showed that as with the sub-panel's overall impact profile, FTE weighting would be likely to have a profound effect on the profile, with the un-weighted and FTE weighted distributions likely to differ greatly. The analysis also revealed that a large number of the average scores ended in .25 or .75 and that it would make a significant difference to the overall distribution which way these scores were settled (as panel scores needed to be agreed in terms of the nine point scale, $4^*/3.5^*/3^*/2.5^*/2^*/1.5^*/1^*/0.5^*/U$).
- 7.4. It was agreed that the scoring on each environment item would be discussed in turn and the panel scores agreed by the meeting, with the average score of the four panellist reviewers acting only as a guide.
- 7.5. 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.
- 7.6. At the conclusion of these discussions panel scores had been agreed for all of the 244 environment items that needed to be scored.

8. Overall profiles

- 8.1. Following a break in the meeting to allow upload of data to the Panel Member's Website, the chair and secretary presented the resulting overall sub-panel FTE weighted environment profile. As predicted by the 'dry run' analysis (7.3 above), the FTE weighted distribution showed a high proportion of four star results. However, this was believed to be accounted for by a small number of large submissions having performed well with environment. The secretary agreed to undertake some counterfactual analysis between Day 1 and Day 2 of the meeting to work out what the distribution would look like if it did not include the largest submissions.
- 8.2. The chair and adviser then 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.

9. HEI feedback statements (environment)

- 9.1. 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 remainder of Day 1 of the meeting and the first part of Day 2 of the meeting would be devoted to reviewing these drafts and, to this end, each of the 61 submissions to UOA15 would be discussed in turn.
- 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. A number of the submissions were discussed during Day 1 and 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.

10. Any other business (Day 1)

- 10.1. No further business was reported.

Present (Day 2):

David Butler
Christopher Chatwin
Jan Cilliers
Jonathan Cooper
Alicia El Haj
Stephanie Haywood
Jan Maciejowski
Philip Nelson (chair)
Anne Neville
Andrew Plummer

Chris Rogers
Rajkumar Roy
Paul Shayler
Sarah Spurgeon
John Stark
Sarah Sweeney (adviser)
Robin Wallace (deputy chair)
Marian Wiercigroch
Lewis Williams (secretary)
Roger Woods

Apologies:

Lianne Deeming
Colin Taylor
Dave Watson
David York

11. Introduction (Day 2)

11.1. The chair welcomed attendees to Day 2 of the meeting.

12. HEI feedback statements (environment) continued

12.1. The sub-panel resumed the business of reviewing comments for inclusion in the feedback statements institutions would receive on their environment sub-profiles. All of the submissions that had not been addressed on Day 1 were addressed on Day 2, such that at the conclusion of these discussions draft feedback statements on environment were agreed for all 61 submissions to UOA15.

12.2. 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.

13. Overview report

13.1. The chair introduced discussion to provide the content of the sub-panel's overview report, explaining that the aim was to agree a series of bullet points for the report under each of the three headings, outputs, impact and environment, which would then be drafted by the chair and deputy chair into a document to be presented at the next meeting.

- 13.2. To assist the discussion of content for the outputs section of the document some analysis was provided on which categories of research had received the highest percentage of four star panel scores.
- 13.3. To assist with the content for the impact section of the document, in addition to the input of panel members attending the meeting obtained through the discussion, it was agreed that the secretary should invite Sub-panel 15's impact assessors to provide any relevant comments by e-mail.

14. Planning for next meeting

- 14.1. 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. 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 their corresponding breakdowns (the outputs sub-profile by research groups, where applicable; the impact profile by individual items scores; and the environment profile by individual section scores.)
- 14.2. In order to facilitate the above process the secretary agreed to provide panellists with the relevant information by 26th September. It was further agreed that panellists would respond with confirmation of the appropriateness of the feedback statements or changes to them by 7th October in order that the returns could be collated in time for presentation at the next meeting.
- 14.3. Additionally the sub-panel agreed a brief guide for the consistent use of terms such as 'modest' and 'impressive' to describe environment data. This guide would be written up and circulated to panellists along with the other relevant information by 26th September.

15. Any other business (Day 2)

- 15.1. The secretary reported back to the meeting on the analysis he had undertaken following Day 1 of the meeting that showed that the high proportion of four star results in the overall sub-panel FTE-weighted environment profile was being driven by a small proportion of large and high scoring submissions. If the seven largest submissions were removed from the profile then the percentage of four star results in the FTE weighted overall environment profile drops by almost half.
- 15.2. 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.

16. Next meeting

16.1. The next meeting will be 15 October 2014.

REF Sub-panel 15: Meeting 7

15 October 2014

The Studio, 51 Lever Street, Manchester, M1 1FN

Minutes

Present:

David Butler	Paul Shayler
Christopher Chatwin	Sarah Spurgeon
Jan Cilliers	John Stark
Alicia El Haj	Sarah Sweeney (adviser)
Stephanie Haywood	Colin Taylor
Jan Maciejowski	Robin Wallace (deputy chair)
Anne Neville	Dave Watson
Andrew Plummer	Marian Wiercigroch
Chris Rogers	Lewis Williams (secretary)
Rajkumar Roy	Roger Woods

Apologies:

Jonathan Cooper
Lianne Deeming
Philip Nelson (chair)
David York

1. Introduction and competence to do business

- 1.1. The deputy chair welcomed all attendees to the meeting.
- 1.2. The deputy 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. It was reported that although the Sub-panel 15 overall FTE-weighted environment sub-profile had a high proportion of four star results, this needed to be viewed in the context of a small number of large submissions having performed well with environment. The non-FTE-weighted sub-profile had a much lower proportion of four star results. Both the FTE-weighted and non-FTE-weighted sub-profiles would be published by HEFCE, and Main Panel B had not asked Sub-panel 15 to look again at its environment assessment results.

6. Results process and confidentiality

- 6.1. 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 deputy chair stressed the importance of confidentiality requirements, including that REF results be kept absolutely confidential until publication.

7. Overview report

- 7.1. The sub-panel received the current draft overview report, which was discussed.
- 7.2. It was agreed that one of the 'user' members of the sub-panel would provide additional input to more fully capture the perspective of user panel members in the report.
- 7.3. 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.

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

- 8.1. The deputy chair thanked panellists for their individual input in reviewing selected HEI feedback statements in accordance with the plans agreed at the last meeting. The deputy 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 61 submissions to UOA15 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.
- 8.2. 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. During the period where the deputy chair was conflicted and therefore absent from the room, an arrangement had been made for another panellist to chair the meeting.
- 8.3. All submissions were discussed and their outputs, impact and environment feedback statements reviewed. Any agreed changes to the statements were made.

9. Any other business

- 9.1. In accordance with the change of procedure 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.
- 9.2. In closing the meeting, the deputy 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.