

## **Evidence from Review Editors for Chapters 3 and 6 of the IPCC Fourth Assessment Report on “The Physical Science Basis”**

1. The activities of two members of CRU in Working Group 1 of the IPCC AR4 have been the subject of allegations relevant to the remit of the Review. Professor Jones was one of two Coordinating Lead Authors for chapter 3 (Surface and Atmospheric Climate Changes), and Professor Briffa was one of 14 Lead Authors for chapter 6 (Palaeoclimate).
2. Professor Sir Brian Hoskins was one of three Review Editors for chapter 3 and Professor John Mitchell one of two for chapter 6. It was decided to conduct telephone interviews with them to understand the way in which the two author groups worked as important context for our investigations of allegations. The Annex to Appendix A of the “Principles Governing IPCC Work” indicates the broad roles and responsibilities of Coordinating Lead Authors (CLAs), Lead Authors, Contributing Authors, Expert Reviewers and Review Editors, but it does not define their responsibilities or ways of working in detail. The questions were designed to establish the way in which the teams responsible for preparing Chapters 3 and 6 worked in order to understand what the CRU members’ roles could have been.
3. The responsibility of Review Editors is, amongst other things, to “advise lead authors on how to handle contentious/controversial issues and ensure that genuine controversies are reflected adequately in the text of the Report”.
4. The interviews were related to the CCER Team’s remit “to review CRU’s policies and practices for acquiring, assembling, subjecting to peer review and disseminating data and research findings, and their compliance or otherwise with best scientific practice” “Best scientific practice” at the interface between scientific understanding and policymaking must be to ensure that uncertainties are clearly transmitted to those that have the responsibility for deciding on any contingent actions.

### **A. Interview with Professor Sir Brian Hoskins (1 May 2010)**

#### **Background for Professor Hoskins**

5. The above rationale for the interview was explained and allegation about Professor Jones, that as Coordinating Lead Author, he excluded important, relevant papers from consideration in preparation of the IPCC AR4 Working Group 1 first and second drafts of Chapter 3 because they conflicted with his view of the cause of the recent temperature rise, and only reluctantly incorporated them in the final draft together with an unsubstantiated, “invented” comment.
6. Professor Hoskins was asked to explain the pattern of work of the group responsible for preparing the drafts of Chapter 3 of AR4, in determining what should be included and what excluded from drafts and the final wording of drafts for which the group was responsible.

#### **Professor Hoskins’ evidence**

7. The Lead Authors (LAs), working individually and as small groups, were responsible for the collation and primary assessment of material relevant to the topics for which they were responsible. The coordinating Lead Authors (CLAs) led the meetings and discussions of the LAs, and they led the process of overall collation of the Chapter material and the production of the initial drafts of the First and Second Draft Reports and the Final Draft Report of the Chapter. These drafts were discussed and agreed during plenary meetings of the whole writing team.

8. The role of the Review Editors, of which Professor Hoskins was one of three for Chapter 3, was to ensure that all comments from expert and government reviewers were given appropriate consideration, to advise lead authors how to handle contentious and controversial issues and to ensure that genuine controversies were reflected adequately in the text. There were a very large number of comments from reviewers, of which a majority were from a relatively small group of reviewers. The Review Editors made sure that they were all given proper consideration, and that they were each responded to by a change in the text or that an adequate reason was given for no such response.
9. Led by the two CLAs for Chapter 3, Professors Jones and Trenberth, the writing team for this chapter were assiduous in dealing with comments. The IPCC records should show when and why a paper was rejected for further consideration. Professor Hoskins, as a Review Editor, took part in the Chapter 3 discussions and ensured that conflicting views were addressed during full meetings of the CLAs and LAs.
10. It is vitally important to ensure that the IPCC reports and the summaries for policymakers in particular, which are designed to be accessible to non-experts, adequately reflected scientific uncertainties that emerged from the assessment of the underlying science.
11. It is important to note however that the IPCC science process is one of assessing science, not reviewing it. The levels of confidence and uncertainty reflected in the drafts were based on the consensus of a group of CLAs and LAs who were chosen for their expertise and experience in relevant fields. Irrespective of whether a paper is published in a peer reviewed journal, it is the responsibility of the whole team to assess whether a paper's conclusions are robust and justify its arguments carrying weight in the assessment. These decisions for each draft were taken in plenary sessions of the whole team. It is inconceivable that a paper making significant claims relevant to the work of IPCC and the Chapter 3 team, would not be considered by the team as a whole.
12. The basis for rejecting one of the papers that is a focus of the allegation, Mckitrick and Michaels (2004), should be included in IPCC records. Decisions about the inclusion of this paper would have been taken by the whole team. Professor Jones' voice would have been one amongst many.
13. Professor Hoskins was very impressed by Professor Jones' attention to detail, and the rigour of the Chapter 3 process.

## **B. Interview with Professor John Mitchell (1 June 2010)**

### **Background for Professor Mitchell**

14. The evidence sought relates to the allegations that in his role as a "Lead Author" for chapter 6 (Paleoclimate) in the WG1 report for AR4, that Professor Briffa:
  - a) made excessive efforts to include a paper by Wahl and Amman that claimed to disprove the results of McIntyre and McKitrick (2003), notwithstanding clear IPCC rules about the status of papers that could be used as a basis for assessment, and that these efforts included breaking contemporary IPCC rules about the eligibility of published papers, and that the motive for doing so was his desire to ensure that the MM2003 paper's conclusions could be dismissed in the AR4 document;
  - b) passed on, confidentially to Wahl, who had no formal role in IPCC, copies of IPCC drafts on which he sought Wahl's comments.

15. We have been told that the practices of different IPCC writing teams varied considerably in detail. It would be helpful to understand the particular practices of the chapter 6 writing team as follows:

In view of your oversight of the work of the team,

1. to what extent was it regarded as acceptable that unpublished material, or material whose publication status was uncertain, could be used in making the assessment?
2. was it acceptable to ask for comments on drafts from those with no formal IPCC role? The email in the annex to this document was read to Professor Mitchell, who was asked if he thought this approach was improper.
3. to what extent would it be possible for individual team members to ensure inclusion of material in a report without oversight or challenge by other team members?

### **Professor Mitchell's responses**

#### Question 1

5. I was not aware of the debate about whether the Wahl and Amman paper had or had not met the deadline for the 2<sup>nd</sup> order draft for chapter 6 until after the event. This issue however misses the point, as the use of unpublished material is permitted under IPCC rules. In earlier assessments, there had been a relatively liberal regime in using unpublished material provided that there was a sound basis for regarding it as rigorous or reliable, although priority was always given to finding published sources. In AR4 the regime was tightened significantly but the use of unpublished material was not prohibited.
6. It must also be recognised that if only published sources were used, the report would be two years old by the time of publication. In a fast-moving area such as climate change research, assessments could be significantly behind the times if important, but as yet unpublished new results could not be used. The dilemma between using only published material and being out of date, or using more recent unpublished material was increased in AR4 as the "latest publication date" was about 12 months earlier than in the process than in the previous assessment.

#### Question 2

7. The email is problematic. On the one hand it appears to reflect an honest request to an expert for a comment about the extent to which the author is being balanced and fair. On the other hand, it stresses the need for confidentiality in three places, implying that the author realizes that the approach may be improper. There was also a leak of an early draft of the WG1 report to the press which led to IPCC emphasizing the need to maintain confidentiality in general which may have been at the back of the author's mind.
8. In principle however there is nothing in IPCC rules that prevents an author from seeking external help, comment or judgement on text through consulting his peers. It is questionable whether expert reviewers' comments, in some\* ways analogous to the comments of a peer reviewer for a journal, should be shared with a third party without their consent. (\*Note that unlike most peer-reviewed journals, IPCC reviewers names and comments are made available at the end of the process)

#### Question 3

8. The palaeoclimate chapter depends on inputs from a wide variety of scientific fields. The early stage of assembly of evidence was done by individuals and groups of authors according to their discipline. It was then assembled into a first draft on which expert reviewers comments were received. The review editors were involved in plenary meetings prior to the second order and final drafts, where they ensured that reviewers comments had been properly dealt with.
9. All the authors would meet at least two or three times in each of the meetings I attended to discuss main issues in the chapter, the wording of the summary and cross chapter issues (I missed the beginning of the Bergen meeting). There were over a thousand comments in each review, and over sixty pages in the final chapter, so it was not practical or the best use of time for everyone to go over every part of the chapter line by line. (Nevertheless, I think after the first review, I think most of the authors went through most of the reviewers' comments together at the beginning of the New Zealand meeting). The so-called "hockey stick" curve of Mann et al (1998) was widely discussed, as was the relevant wording. The executive summary was reviewed by the whole group to ensure that it accurately represented the evidence presented in the chapter, and it is the whole group that should be regarded as responsible, rather than any one person.
10. In particular, it was accepted, including by Briffa, that the original Mann et al (98) paper had flaws relating to the particular use of principle components. Other papers either used Mann's approach without using the flawed method of applying principal components, or used a different approach altogether, and it was on these papers that assessment of the last 1000 years was based. Many of the critical comments were directed at the Mann et al (98) paper which was acknowledged to be problematic. Nevertheless, before the second meeting, I noted the reviewers' concerns to both the convening lead authors and the other review editor before the Bergen meeting to make sure they were aware of the issues being raised, and to ensure they were discussed in the wider group.

ANNEX - Email: 18 July 2006 (1153470204), Briffa to Wahl:

*"Gene I am taking the liberty (confidentially) to send you a copy of the reviewers comments (please keep these to yourself) of the last IPCC draft chapter. I am concerned that I am not as objective as perhaps I should be and would appreciate your take on the comments from number 6-737 onwards, that relate to your reassessment of the Mann et al work. I have to consider whether the current text is fair or whether I should change things in the light of the sceptic comments. In practise this brief version has evolved and there is little scope for additional text, but I must put on record responses to these comments - any confidential help, opinions are appreciated . I have only days now to complete this revision and response. note that the sub heading 6.6 the last 2000 years is page 27 on the original (commented) draft. Cheers Keith"*