

## UEA – CRU REVIEW

### INITIAL TEAM MEETING, 12 JANUARY 2010

1. The meeting was hosted in the Royal Society of Edinburgh, where Muir Russell (MR), Geoffrey Boulton (GB), Peter Clarke (PC) and Jim Norton (JN) were present. They were joined via video link by David Eyton (DE) and later by Mike Granatt (MG).
2. MR updated the Team on two matters that had arisen on his exploratory meetings at UEA on 18 December 2009:
  - First, his conversation with Sir John Beddington, on Friday 8 January. This had clarified what Sir John had in mind in terms of a “side investigation”. It appeared that, following a conversation with Trevor Davies, Pro VC at UEA and a former head of CRU, Sir John saw advantage in an exercise to look at the CRU work without the “adjustments” to data, of which much had been made by critics. This would test whether the adjustments made any significant difference to the conclusions – Sir John’s expectation as advised by Professor Davies was that they would not, which in their view would be helpful in responding to criticisms. The proposal was that a separate sub-group of respected statisticians would be invited by the Review Team to carry out this work.  
**ACTION – see below**
  - Secondly, the discussion he had had with Police Superintendent Gregory in Norwich on 18 December. It was clear that the police were taking the matter seriously: Supt Gregory is the County Director of Intelligence. The police had taken possession of the Unit members’ laptops, and were having the data independently analysed. As of 18 December it was not clear whether the loss of data was a hack or a leak – there might be more information now. The police were keen to co-operate with the review. They had been approached by the Information Commissioner and had proposed that the next stage should be a tripartite meeting with him.  
**ACTION – MR to trigger meeting between Team (MR and JN), Police and Info Commissioner.**
3. The Team agreed to proceed in stages, essentially: gathering data; analysis, involving experts as necessary; developing conclusions. They would set out a work plan, which would provide a basis for initial public presentation of the approach being taken and would indicate how those with a legitimate interest would have the opportunity to make an input of relevant evidence.
4. The Team envisaged at this stage that their recommendations would be directed to UEA, addressing the elements of the terms of reference; but that there might well be matters about the handling of research data that would be of wider relevance to the research community. For example there could be implications for what might be termed “public interest science” in a world where data could so readily be exchanged; and for the handling and preservation of raw data that could be regarded as relevant to the nation, rather than being the preserve of individual organisations.
5. The Team saw their work as testing both the honesty and the rigour with which CRU had operated. (This would address, where appropriate, issues of data

handling at the University level, not only the Unit level.) The US National Academy report, that Geoffrey Boulton had circulated, offered some principles to apply to the handling of research data, relating to integrity, accessibility and stewardship; to which it would be appropriate to add issues of data manipulation, publication (including the part played by peer review), and public communication. Approaching the Review from this direction would have a number of advantages:

- It would place the initiative with the Review Team, who would be setting the agenda and defining the terms of the process.
  - It would establish a conceptual framework within which judgements could be reached and comment made about key issues such as the level of uncertainty inherent in all science, and specifically the confidence limits associated with the CRU work.
  - It would provide a context within which to focus on the allegations made against CRU, helping provide a basis for inviting evidence in a way that concentrated on the subject matter of the Review.
  - It would also provide a context for asking whether the CRU results were consistent with those of other relevant groups of researchers, and seeking to determine whether the underlying thinking (about models, mechanisms and so on) was similar
6. The Team agreed that the first step should be to develop a work plan, which would outline, with appropriate flexibility, the approach envisaged for the collection of evidence on allegations.
  7. The Team concluded against any attempt to convene a group to re-do CRU's work with raw/unadjusted data (as per Prof Beddington's suggestion). They saw more merit in running "sensitivity analyses" to determine just how sensitive the outcome predictions were to limited variations in the base data. [Subsequent to the meeting it was decided to include elements of this in the Review's own trial analysis]
  8. **ACTION:**
    - **MR to draft workplan and circulate for comment by end week (incorporating PC input on data handling issues).**
    - **GB to speak to Sir John Beddington about the Team's conclusions on his suggestion.**
    - **MR/GB to draft first thoughts on the set of allegations" that might form the basis of a request for evidence.**
  10. With Mike Granatt present, the Team agreed that this approach made sense as a basis for a public statement of intent on how the Review would be conducted. The work plan should be put on a dedicated public website, on which evidence submitted would be posted in due course. This would not be allowed to become a site for blogs and comments. The work plan would be launched with a briefing for relevant journalists expected to have a serious interest in the issue. One specific suggestion was that it would be worthwhile to see if the interest of a high impact journal, such as Nature, could be engaged.
  11. **ACTION:**
    - **MG to review workplan etc as it develops**
    - **MG to consider who should be involved in briefing – eg Nature**
    - **MG to consider Luther hosting the website**

12. **TIMESCALE:** It was agreed that the work plan (MR) and allegations (MR/GB) should be circulated in draft by the end of the week. The aim should be to break surface with the work plan at the suggested briefing and launch of the website by the last week of January.

A M RUSSELL

14 January 2010