SUMMARY REPORT OF THE IPCC CROSS-WORKING GROUP MEETING ON CONSISTENT EVALUATION OF UNCERTAINTIES AND RISKS

6-7 July 2010, Jasper Ridge, CA, USA

(Submitted by the Co-Chairs of Working Group II)
A key cross-cutting issue in IPCC assessments is the coherent treatment and communication of uncertainty across the Working Groups (WGs). It is recognized in IPCC assessments that uncertainty guidance can reduce confusion regarding the use of common terms that imply different meanings to different disciplines and/or in different languages.

The Guidance Notes for Lead Authors of the AR4 on Addressing Uncertainties, finalized in July 2005 and made available to all AR4 authors, outlined qualitative and quantitative approaches to describing uncertainties. These Guidance Notes built upon the first IPCC guidance paper (released in 2000 as part of the TAR process) and the 2004 IPCC Workshop on Describing Uncertainties in Climate Change to Support Analysis of Risk and of Options. However, the dividing line among the different metrics for assessing uncertainty was not completely clear, resulting in sometimes inconsistent use across the WGs and thus confusion among the readers of the AR4.

Qualitative assessment of uncertainty was based on the amount and quality of evidence (from theory, observations, or models) and the degree of agreement (the level of concurrence in the literature on a particular finding). This approach was used by WG III, using terms such as high agreement, much evidence; high agreement, medium evidence; medium agreement, medium evidence; etc.

Quantitative assessment of uncertainty was based on confidence (the correctness of underlying data, models, or analyses, determined by expert judgment) and likelihood (uncertainty in the occurrence of specific outcomes, determined by expert judgment and statistical analysis of observations or model results). WG II used a combination of confidence and likelihood assessments, and WG I predominantly used likelihood assessments.

In order to address this important issue in the preparation of the AR5, the Co-Chairs of all three WGs held a small cross-WG meeting 6-7 July 2010 at the Jasper Ridge Biological Preserve in Stanford, CA, USA. The meeting provided an important opportunity for all three working groups to discuss and evaluate the history, usage, and interpretation of IPCC uncertainties guidance. The outcome of the meeting was a decision to update the existing Guidance Notes with a goal of improving their consistent application across the WGs, and communication with the users of the AR5. These revisions are under way. The target is that the revised Guidance Notes should be available prior to the first lead author meeting for WGI, November 8-11, 2010.