BROAD OUTLINE OF THE AR5 SYNTHESIS REPORT

Output from Scoping meeting for the Fifth Assessment Report (AR5) of the IPCC, Venice, Italy, 13-17 July 2009

(Submitted by the IPCC Secretariat)
BROAD OUTLINE OF THE SYNTHESIS REPORT (SYR)

1 Introduction

The mandate for consideration of the SYR at the scoping meeting was defined in decision 1 taken at the 30th session of the IPCC held in Antalya on the 21st-23rd of April 2009:

“The scoping of the AR5 Synthesis Report (SYR) and the identification of cross-cutting issues begins with the first scoping meeting, but, in line with past procedure, provision is made for a special meeting dedicated to scoping the SYR structure and content. It is expected that the scoping meeting in Venice (13-17 July 2009) would come up with chapter outlines for the Group contributions to the AR5 and prepare a broad outline for the SYR.”

In the preparation for this meeting the Secretariat had invited governments to provide suggestions on the structure and content of the SYR. These suggestions are compiled in AR5-SCOP/INF. 1 (26 June 2009) that was prepared by the IPCC Secretariat. In AR5-SCOP/INF. 1 a common suggestion was that the report should be a synthesis and not just a cut and paste job. However, there were mixed views on whether the report should be framed around questions or topics. While the relevant government submissions were taken into account and were considered in developing this material, it is suggested that the Secretariat of the IPCC manage a comparison of the AR5-SCOP/INF. 1 relevant government submissions with the proposals outlined in this paper, for consideration at the SYR scoping meeting.

2 Structure, timing and implementation

Government Feed-back
It is suggested that governments be invited to provide feedback on the process, and the general structure, as well as providing further comments on material to be covered under the individual broad headings. The questions provided by governments should also serve as guidance in the preparation of the SYR.

Length
It is suggested that the synthesis report would be a short document similar in length to the AR4 synthesis report. As mandated by the IPCC procedures the complete output would consist of an SPM and a longer report.

Topics rather than questions
It is suggested that the SYR would be framed around a series of topics rather than questions (it may be recalled that the TAR was framed around questions whereas the AR4 was framed around topics).

Frequently ask questions (FAQs)
The Scoping meeting also discussed the usefulness of a set of FAQs within the framework of the SYR. It was agreed that there is value-added in having FAQs, either in the main text or added as an appendix at the end of the text. It is suggested that any FAQs would be developed by the SYR author team in consultation with the Working Group Co-Chairs.

Timing
The possibility of significant new information or data appearing between the WGI SPM approval and the AR5 SYR approval was noted. The proposed period between WGI SPM and AR5 SYR approval of 12 months minimizes the risks this would occur.

It was proposed that the AR5 SYR scoping meeting would be held before the WGI LA1 meeting which is scheduled to be held in August 2010.
Implementation
These are suggested steps to be taken in order to complete the AR5 SYR:

- Selection of the initial core author team (drawn from all three Working Groups) soon after approval of the AR5 SYR outline. At a later stage in the process the core author team may be augmented by other authors from the Working Groups.
- A Technical Support Unit for the AR5 SYR should be established headed by an appropriate expert. It would be desirable for at least one member of this TSU to be appointed before the AR5 SYR scoping meeting.

3 Broad Outline for the Synthesis Report

It is suggested that the Synthesis Report be organized under four broad headings: 1. Observed Changes and their Causes; 2. Future Changes (in the Short and Long-Term); 3. Response; and 4. Transitions and Transformations.

Material that could be covered under each of these headings includes:

\( i. \) Observed Changes and their Causes
Observed changes in climate, natural and human systems, and their effects; Drivers of change in these systems (attribution and linkage).

\( ii. \) Future Changes (in the Short and Long-term)
Future drivers; Future changes in climate, natural, and human systems (due to other causes as well as climate change), and key risks (this material on changes and key risks would be framed around representative scenarios, including Representative Concentration Pathways); The wider context – including sustainable development; Reasons for concern (e.g. high risk uncertain probability, impacts on society and ecosystems, limits to adaptation…).

\( iii. \) Response
Reduction of vulnerabilities; The solution space; Risk Management and framing of response (noting this is a dynamic process, and is informed by the on-going policy process under the UN Framework Convention on Climate Change (UNFCCC) including consideration of Article 2); Effect of existing climate-related policies; Adaptation options, including technologies (food security, fresh-water and terrestrial ecosystems, coastal and marine ecosystems, human health, built environment (all sectors), and urban and rural communities); Mitigation options (policies and measures, technologies; all sectors and systems - land-use, energy, transport (including aviation and shipping), agriculture, industry, built environment); Co-benefits and externalities; Bottom-up and top-down Integration; Greenhouse gas metrics; Multi-metric valuations; Reduction of scientific uncertainty to assist decision-making; Investment in R&D to expand technological options and reduce response cost; “Geoengineering” proposals (e.g. carbon removal from the atmosphere, radiative forcing management); Equity and sustainable development dimensions; Interactions between adaptation, mitigation and development.

\( iv. \) Transitions and Transformation
Pace and scale (dynamics); Equity dimensions over different time and space scales; Development pathways including a global transition to a climate-resilient, low carbon society; Behavioural and societal changes; Benefits and costs (including co-benefits); Governance and institutional arrangements; Investment needs; Development issues; Climate and security.

Notes: The development of material for the future change section and the response section will pick up on and be influenced by outcomes of COP15 of the UNFCCC (Copenhagen, December 2009). Issues to be addressed in several sections include: Extremes, Commitment, Reversibility, Inertia, and Lock-in. More detailed consideration needs to be given to how regional aspects are addressed within the AR5 SYR. Note that “Transitions and Transformation” includes both adaptation and mitigation.
4 Issues for Consistent Treatment across Working Groups

In developing the broad outline, the SYR Breakout Group noted several issues for which a consistent treatment by all three Working Groups is highly desirable so that a coherent synthesis can be developed. These issues include: Risk (short and long-term); Uncertainty / confidence; Regions; Sectors; Ethics and value systems (recognizing pluralism in these); Cost framework and metrics; Technologies; Timescales; Sustainable development perspective; Scenarios; and Extremes and Reversibility.