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SCOPING PAPER FOR THE REVISION OF THE "REVISED 1996 IPCC GUIDELINES FOR NATIONAL GREENHOUSE GAS INVENTORIES"

(Submitted by the TFB Co-chairs)

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Revision of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories: Scoping Paper Submitted to IPCC-XXI

1. In accordance with the IPCC XX decision 8 (see box below), an Expert Scoping Meeting on the revision of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories was held in Geneva on 16 – 18 September 2003, and the Task Force Bureau at its 11th session (19 September 2003, in Geneva) considered draft Terms of Reference (TOR), Table of Contents (TOC) and Work Plan (WP) which had been elaborated by the Expert meeting.

Draft Report of IPCC XX

7.4 Proposal to revise the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*

7.4.1 Ms Thelma Krug introduced this Item. She noted that in response to a request from the UN FCCC/SBSTA 17 the TFB is proposing to develop a plan to revise the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* that would see the request fulfilled by early 2006.

Decision 8

7.4.2 The Panel was supportive of the TFB proposal to revise the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and decided that the TFB should adopt the following four step
approach to their revision:

(1) Definition of the task (beginning after IPCC-XX approval through late 2003).
(2) Preparation for the Scoping meeting.
(3) Scoping meeting (September 2003, timing to be confirmed).
(4) Preparation of the Revised Guidelines (2004 – early 2006).

The TFB to submit to the 21st Session of the Panel the proposed timetable, terms of reference, table of contents and work plan to complete the task.

2. TFB is pleased to submit the draft TOR, TOC and WP for consideration by the Panel, as below.

3. On the treatment of aerosol issues no agreement reached (see Attachment).

Draft Terms of Reference for 2006 IPCC Guidelines for National Greenhouse Gas Inventories

In response to the decision of IPCC XX and the invitation from the SBSTA at its 17th session the IPCC will revise and update the 1996 revised IPCC Guidelines as outlined in the Table of Contents. This work will be completed in 2006, as noted in the work plan.

IPCC will base this work on, inter alia: The Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, the IPCC Report on Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (2000), the IPCC Emission Factor Database, and the Good Practice Guidance on Land Use, Land-Use Change and Forestry (when completed). Experience and feedback using the existing reports and recent advances in science will also be taken into account.

Key elements of the work will be

- Structure: The existing reports will be integrated to improve user-friendliness. Information on each sector will be synthesised into single documents. There will also be a document on cross-cutting issues, including reporting tables.

- Content of cross-cutting guidance: The volume for cross-cutting issues will include general methods on data collection issues; uncertainty assessment; methodological choice and identification of key categories; time series consistency and recalculation; quality assurance/quality control (QA/QC) and verification; and reporting tables.

- Content of sectoral guidance: The volumes for each sector will include tiered methodological approaches; decision trees; new and/or updated methods and emission factors, where appropriate; cross-references and/or revisions as necessary to avoid double counting or omissions of emissions and removals; sector-specific guidance on uncertainty assessment and QA/QC; methods for new sources[1]; and reporting and documentation guidance.

- Coverage: The 2006 IPCC Guidelines will cover the same greenhouse gases and precursors included in the current guidelines and good practice guidance reports. New greenhouse gases identified in the TAR will be included if they meet the following criteria: availability of a global warming potential; identified anthropogenic sources; a basis for methodological development; and a relative importance to the total emissions. A need for development for new methods for ozone precursors is not anticipated as these are addressed under other agreements and conventions. Appropriate linkages to these methodologies will be provided.

[1] Criteria for new sources: a basis for methodological development including the ability to develop default emission factors, feasibility of obtaining the necessary data to implement the methods, and significance of the source within the sector.

2006 IPCC GUIDELINES FOR NATIONAL GREENHOUSE GAS INVENTORIES

Draft Table of Contents

Overview

Volume 1: Cross-Cutting Issues and Reporting Tables

This volume will integrate existing material[2] relevant to cross-cutting issues listed below. A more complete discussion on approaches to data[3] collection (e.g. sampling, use of expert judgement in data collection) will be provided. Specific information on the topics listed below will also be elaborated at the sectoral level.

- Overview
- Approaches to Data Collection
- Uncertainties
- Methodological Choice and Identification of Key Categories
- Time Series Consistency and Recalculation
- Quality Assurance/Quality Control and Verification
- Reporting Guidance, including Tables

Volume 2: Energy

This volume will integrate and update existing material[1] relevant to the Energy Sector. As appropriate, it will provide methodologies and default data to cover emissions of new sources (see criteria in TOR).[4]

- Overview and cross-cutting issues
- Reference Approach
- Stationary Combustion
- Mobile Combustion5
- Fugitive emissions

[2] Existing material refers to the Revised 1996 IPCC Guidelines, Good practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (2000), Good Practice Guidance for LULUCF, the IPCC Emission Factor Database, and any relevant material in literature and the sectors themselves. Methodologies developed under international agreements and conventions (e.g. LRTAP) will be referenced and used where necessary.

[3] Data refers to activity data, emission factors and other data used in inventory compilation.

[4] It is recognised that CO_2 capture and storage is an important emerging issue in inventory development. The coverage of CO_2 storage in this report will be closely coordinated with progress on IPCC SR on CO_2 capture and storage. CO_2 capture activities will be integrated as appropriate into the methods presented for source categories where it may occur.

[5] Emissions from international aviation and maritime transportation will be addressed here, taking into consideration the relevant work of the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

Volume 3: Industrial Processes and Product Use

This volume will integrate existing material[1] relevant to Industrial Processes and Solvent and Other Product Use Sectors. It will update as necessary the existing material on current source categories. As appropriate, it will provide methodologies and default data to cover emissions of new halogenated gases. It will also develop methodologies for selected new sources (see criteria in TOR):

- Overview and cross-cutting issues
- Chemical industry emissions
- Metal industry emissions
- Mineral industry emissions
- Non-energy product and feedstock use of fuels
- Ozone precursors from industrial processes
- Other industrial process emissions
- Solvent and other product use
- Emissions of Fluorinated Substitutes for Ozone Depleting Substances

Volume 4: Agriculture, Forestry and Other Land Use

This volume will merge the material from the LUCF and Agriculture Chapters of the Revised 1996 IPCC Guidelines, GPG2000 and GPG-LULUCF. The GPG-LULUCF will report on a land-use basis. The emissions from agriculture have been integrated into this new framework in order to resolve inconsistencies and avoid double counting. This integration should be done in a way that consistency of existing inventory data is ensured when reporting emissions and removals from the sector using the new approach. This volume will also update data, methods and emission factors where feasible

- Overview and cross-cutting issues
- Consistent Representation of Lands
- Agriculture

  The following issues will be elaborated: changes in C stocks (5 pools), burning of biomass/grassland/residues, rice cultivation, non-CO2 gases, fertilization/liming, organic soils/peat lands, new gases, sources and sinks.
  - Cropland and Grassland Remaining Cropland and Grassland
  - Land Converted to Cropland
  - Land Converted to Grassland
  - Livestock
- Forest lands

  The following issues will be elaborated: changes in C stocks (5 pools), burning of biomass, non-CO2 gases, fertilization/liming, organic soils/peat lands, new gases, sources and sinks.
  - Forest land remaining forest land
  - Land converted to forest land
- Wetlands
  - Peatlands
  - Flooded lands
- Settlements
  - Settlements remaining settlements
  - Land converted to settlements
- Other land
- Other
  - HWP (taking into consideration any decision of the COP on this matter)

Volume 5: Waste

This volume will integrate and update existing material[1] on the Waste Sector. As appropriate, it will provide methodologies and default data to cover emissions from open burning of waste in solid waste disposal sites, open dumps, consolidation of wastewater treatment and human sewage disposal methods, alternative waste treatment technologies (like anaerobic digestion) and additional gases according to the criteria in TOR.

- Overview and cross-cutting issues
- Solid Waste Disposal Sites
- Wastewater Handling and Human Sewage
- Waste Incineration

Draft Workplan for preparing the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Period	Sequence and stages	Activity
September 2003	Scoping Meeting	Elaborate draft TOR, TOC and Workplan for the Revision including combination of sectors per meeting, size of meetings, level of participation, handling of common elements in agriculture and LUCF, merging of the GPG2000 and GPG-LULUCF, etc.
September 2003	TFB 11	Consider and finalise draft TOR, TOC and Workplan for submission to IPCC XXI.
November 2003	IPCC XXI	Approval of TOR, TOC and Workplan
November 2003	IPCC call for nomination of authors	Issue formal letter to Governments and intergovernmental bodies, inviting the author nominations.
Early February 2004	TFB (by communication)	Finalise a slate of authors, and issue invitation to 1st Authors meeting.
Mid March 2004	Integration of existing material in IPCC GLs and GPG reports	A draft integrating material in the IPCC 1996 Guidelines and good practices reports will be made available for the authors.
April 2004	CLA meeting and Cross-cutting Authors Meeting	Prepare First Order Draft for cross-cutting issues; provide guidance on cross-cutting issues and consistency in drafting the sectoral volumes;
Late May/Early June 2004	Sector Authors Meeting	Prepare First Order Draft for the Agriculture, Forestry and Other Land Use Sector
July 2004	Sector Authors Meeting	Prepare First Order Draft for the Industrial Process and Product Use Sector
September 2004	Sector Authors Meeting	Prepare First Order Draft for the Energy Sector
Early November 2004	Sector Authors Meeting	Prepare First Order Draft for the Waste Sector
January 2005	Consolidation Meeting	Meeting to consolidate the sectoral reports to First Order Draft Report of 2006 Guidelines (CLAs and key authors);
March – April 2005	Experts Review	First review of the FOD report by experts for six weeks
June 2005	7th Meeting	Meeting to consider experts comments and to prepare Second Order Draft.
September – October 2005	Governments/Experts review	Second review of the report by Governments and Experts for eight weeks
December 2005	8th Meeting	Meeting to consider Government comments.
February 2006	TFB 17	Endorse Final Draft Report
March 2006	Government consideration	Government consideration (four weeks)
April 2006	IPCC XXIV	Present report to IPCC Panel for Adoption/Acceptance.
May 2006	SBSTA24	Presentation to SBSTA

ATTACHMENT

The Expert Scoping Meeting did not reach agreement on the treatment of aerosol issues within the context of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The proposed language below was tabled:

In the TOR (proposed as last line in bullet on "Coverage"):

"Aerosols will not be addressed in the main body of the guidelines but an appendix reviewing the existing methodological literature will be developed as a basis for further consideration."

In the TOC (proposed at the end of document):

"**Appendix: Aerosols – Basis for Further Consideration**

This appendix will review available literature on quantifying anthropogenic emissions of relevant aerosols. A synthesis and preliminary consideration of methodological issues will be provided.[7]

[7] It is anticipated that the appendix will cover black carbon and organic carbon aerosols and potentially mineral dust. Methodologies for sulfate aerosols are covered in other agreements and it is not anticipated that additional consideration is needed for them."