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MATTERS RELATING TO COMMITMENTS

METHODOLOGICAL ISSUES

Note by the interim secretariat

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I. INTRODUCTION

A. Committee mandate

1. At its ninth session, the Committee adopted decision 9/1 on methodological issues (A/AC.237/55, annex I, decision 9/1) whereby it decided:

(a) That Annex I Parties should, on a provisional basis, use the Intergovernmental Panel on Climate Change (IPCC) Draft Guidelines for National Greenhouse Gas Inventories in preparing their first communications; and further decided to invite the IPCC to disseminate widely these Guidelines;

(b) That global warming potentials (GWPs) may be used in national communications pending the decision of the Conference of the Parties at its first session (COP 1) and in accordance with the "Guidelines for the preparation of first communications by Annex I Parties" (see A/AC.237/55, annex I, annex to decision 9/2, para. 5); and further decided to invite the IPCC to provide GWP values for all gases over time-horizons of 20, 50, 100, 200 and 500 years and to consider very long-lived gases;

(c) That Parties should include data on emissions from international aviation and marine bunker fuels in a separate category in their national inventories on the basis of fuel sold and should, as far as possible, not include them in total national emissions (see A/AC.237/55, annex I, annex to decision 9/2, para. 14); and

(d) That the question of methodological issues should be reviewed at its eleventh session in the context of its final recommendations to the COP; and further decided to invite the IPCC to continue its work on methodologies, particularly those relating to inventories of greenhouse gas emissions and removals by sinks, GWPs of those greenhouse gases, vulnerability assessment and adaptation, projections of emissions and removals, and to study methodologies for the evaluation of the effects of measures.

2. In that decision, the Committee recommended that the COP take up the issue of the allocation of emissions from bunker fuels, and that Governments and relevant international organizations be encouraged to continue and intensify their work on emissions from bunker fuels and keep the interim secretariat informed of progress.

3. The Committee also requested the interim secretariat to prepare documentation for consideration by the Committee at its eleventh session on the work currently under way in relevant bodies, including the IPCC, relating to methodologies on the issues referred to in paragraph 1 (d) above and on methodological issues, including draft recommendations to COP 1 on the decisions of the Committee and relevant new information.

B. Scope of the note

4. The purpose of the present note is to convey to the Committee relevant new information relating to methodologies on the issues referred to in paragraph 1 (d) above. In addition to this note, the Committee will have before it parts of the Special Report prepared by the IPCC for COP 1, namely, the summaries for policy makers approved at the IPCC plenary meeting, November 1994. This note has been prepared in close consultation with the secretary of the IPCC; the Chairman of the IPCC will provide a detailed report on the outcome of the IPCC plenary meeting to the Committee at its eleventh session, and the IPCC will make background documentation available to member States before that session.

5. When considering this note, the Committee is invited to bear in mind the information contained in documentation prepared for earlier sessions on methodological issues (see A/AC.237/34; A/AC.237/44 and Add.1 and 2; and A/AC.237/Misc. 32). Document A/AC.237/68, prepared for the tenth session, also contains a status report on current studies and activities being carried out by the IPCC and the United Nations Environment Programme (UNEP) on the impacts of climate change and on methodologies for adaptation. The implications of both decision 9/2 on guidelines and procedures for first communications and decision 9/3 on the roles of the subsidiary bodies established by the Convention (adopted by the Committee at its ninth session), as well as related documentation prepared for the tenth and eleventh sessions, are also of relevance to the consideration of methodological issues (see A/AC.237/46; A/AC.237/55, annex I; A/AC.237/63 and Add.1; A/AC.237/64; A/AC.237/81; and A/AC.237/85).

6. Section II provides relevant new information on the IPCC Guidelines for National Greenhouse Gas Inventories, GWPs and vulnerability assessment and adaptation. Section III addresses the issue of further work on methodological issues, in particular, in relation to the work of the Subsidiary Body for Scientific and Technological Advice (SBSTA).

7. Section IV contains a draft recommendation to COP 1 on methodological issues.

C. Possible action by the Committee

8. The Committee may wish to take note of the information provided below and give guidance on near-term needs regarding methodological work until the SBSTA starts its activities. The interim secretariat proposes that the Committee adopt a recommendation to COP 1 on methodological issues.

II. RELEVANT NEW INFORMATION ON METHODOLOGICAL ISSUES

A. Guidelines for National Greenhouse Gas Inventories

9. Since the ninth session of the Committee, the draft Guidelines for National Greenhouse Gas Inventories (February 1994; hereinafter referred to as "the Guidelines") have been extensively reviewed. The subsequent substantive changes represent a consensus opinion regarding the best methods currently available for the calculation and reporting of national inventories, as well as reflecting Committee decision 9/1. On the recommendation of its Working Group I, the IPCC, at its tenth session, approved the revised Guidelines and their use for the calculation and reporting of national inventories of greenhouse gas emissions by sources and removals by sinks. In so doing, the IPCC recognized that the Guidelines should be revised on a regular basis in the light of new scientific and technical information.

10. The following changes are relevant to the discussion of the Committee:

(a) Where relevant, the format of the data tables excludes the emissions from international bunker fuel use from national emission totals but provides for the separate reporting of these emissions;

(b) A revised structure of the source/sink categories list was adopted and is attached in an annex to this note. It should be noted that the default methods for the estimation of emissions and removals from land use change and forestry have been significantly restructured;

(c) It is made clear that if a country has used its own methodology to calculate emissions from fuel combustion activities, it should also use the IPCC reference methodology as a verification procedure. In such cases, data tables provided facilitate the reporting of results from both methodologies. Countries are also requested to explain any significant differences in the results;

(d) New data tables have been added to allow reporting of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur oxides;

(e) Where relevant, data tables have separate columns for reporting carbon dioxide (CO₂) emissions by sources and removals by sinks.

11. The Committee may recommend to COP 1 that the revised Guidelines be used by Annex I Parties, and, to the extent possible, by non-Annex I Parties, in preparing their national communications (see draft recommendation on methodological issues in section IV below). The final version of the Guidelines will be made available in French, Spanish and Russian by the IPCC at COP 1.

B. Global warming potentials

12. The IPCC summary for policy makers on radiative forcing of climate change, 1994 provides the latest estimates of GWPs, which are typically larger by 10-30 per cent than those reported in the IPCC 1992 Supplementary Report to the IPCC Scientific Assessment. It should be emphasized, however, that these increases primarily depend on the shorter lifetime of carbon dioxide and generally longer lifetimes of the other gases in the atmosphere than was previously estimated. Their effective absorption of radiation, on the other hand, has not changed much. The typical uncertainty associated with GWP values is ± 35 per cent relative to the CO₂ reference. The GWP value for methane includes both direct and indirect effects. The indirect effect of chlorofluorocarbons (CFCs) and halons, which tends to reduce the GWPs for these gases, is not included. The Committee may wish to take note of these updated GWP values and encourage those Parties using GWPs in the presentation of their inventory and projections data to use IPCC-1994 GWP values for a 100-year time-horizon.

C. Vulnerability assessment and adaptation

13. The synthesis report on adaptation prepared by the secretariat for the tenth session of the Committee (A/AC.237/68) contains an annex providing a status of studies and activities of the IPCC and UNEP on the impacts of climate change and measures for adaptation. The annex refers to the IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations. These guidelines were reviewed and adopted by the IPCC to form part of its Special Report. These guidelines are intended to assist Parties in formulating national and regional adaptation policies; they will be updated as methodologies are further developed and more information becomes available on the potential impacts of climate change and possible adaptation options.

14. As the definition of adaptation used in the executive summary of the above-mentioned guidelines refers to both the adverse and positive effects of climate change, the IPCC noted that "adaptation in the context of the Convention can be understood to include all purposeful and deliberate activity taken in response to or in anticipation of the adverse impacts of rapid climate change. Activities taken in response to or in anticipation of any beneficial impacts of rapid climate change are not explicitly included or excluded in this formulation of adaptation".

III. FURTHER WORK ON METHODOLOGICAL ISSUES

A. Inventory methodologies

15. It is worth recalling that the development and improvement of the inventory Guidelines must be seen as a long-term exercise. One of the tasks of the SBSTA is to look at methodological issues, including, in particular, methodologies for national inventories. In

this regard, the IPCC, at its tenth session, considered proposals to continue the Programme on National Greenhouse Gas Inventories of the IPCC, the Organisation for Economic Co-operation and Development (OECD) and the International Energy Agency (IEA). Recognizing the financial constraints it faces, and the likelihood that the COP and its subsidiary body will progressively take over parts of the work relating to inventory methodologies, the IPCC agreed upon elements to develop a reduced and transitional programme to run over the next 15 months. By the end of that period, that is, the beginning of 1996, the respective roles of the IPCC and the SBSTA should be clearer and plans for further work on inventory methodology could be designed. Should funding become available, such a transitional Programme could be extended. The Chairman of the IPCC also proposed that at the end of such a period the activities of the Panel regarding methodology development be restricted to periodically assessing ongoing work in order to ascertain global consistency based on the best available scientific knowledge. He stated further that work on new methodologies should be undertaken as the need for them arises or when advances in knowledge come about.

16. The main programme elements agreed upon by the IPCC include the identification and correction of any major deficiencies or errors in the present set of Guidelines, as well as an initial assessment of the Guidelines based on national experience. Priority will also be placed on the completion of the Guidelines to include methods to estimate additional greenhouse gases and source categories for gases already addressed by the present set of Guidelines. However, under the present funding situation, the work programme only aims to develop recommendations for modification to the estimation methods and does not include the preparation, publication and distribution of documents that revise or update the Guidelines.

17. Technical outreach and cooperation activities will continue. Contacts with the Convention secretariat will be intensified to ensure that the operational aspects of the Guidelines could be handed over to the Convention institutions by the end of the transitional period. The IPCC also decided to consider the continuation of the Programme at its next plenary meeting scheduled in December 1995.

18. The Committee in its recommendation to COP 1 on methodological issues, may wish to mention the importance of close collaboration between the SBSTA and the IPCC, inter alia, concerning the development and improvement of inventory methodologies (see draft recommendation in section IV below), and encourage the SBSTA to consider its work programme on inventory methodologies and its relationships with the IPCC concerning such work. In this regard, COP 1 may mandate the SBSTA to establish a technical advisory panel to assist that body in its work related to methodological issues (see A/AC.237/85). In the meantime, and taking into account the limited scope of the IPCC/OECD/IEA Programme,

the Committee may consider whether revised Guidelines would be needed, and if so, when, in order for the IPCC and the Convention secretariat to explore the modalities to satisfy such a need.

B. Other methodological issues

19. The SBSTA may want to consider what type of methodological work it could undertake in the area of climate change impacts and adaptation, bearing in mind the work of other relevant bodies.

20. Concerning projections and the evaluation of the effects of measures undertaken pursuant to the Convention, as in the case of the development of inventory methodologies, the process of review of national communications should provide useful information and data to develop scientific and methodological knowledge related to these topics. In this regard, the Committee may recommend to COP 1 that the SBSTA address the issue relating to projections and the evaluation of measures in the light of the experience gained during the review of Annex I communications.

21. The programme adopted by the IPCC to develop and disseminate guidelines on analytical methods for assessing mitigation options and technologies is of relevance to the implementation of the Convention and to the work of the SBSTA. The objective of the programme is to achieve widespread application of effective analytical methods for assessing mitigation options, which should result in improved national strategies to mitigate climate change and greater comparability of results provided in national communications. The aim of the three-year work programme is to complete the development and sharing of information on mitigation technologies and analytical methods among countries, with a key component being the provision of technical assistance and training to those developing countries and countries with economies in transition that need to strengthen their analytical capabilities.

22. The IPCC at its tenth plenary meeting concluded that it should maintain its current breadth of subject areas of assessments. The Panel also mentioned the need to clarify its future relationship with the SBSTA to avoid duplication of work and ensure that information is provided in a timely fashion. The possibility of establishing joint working groups to provide communication channels between both bodies was advanced. The IPCC authorized its Chairman to explore the possible future role of the IPCC through consultations with its parent bodies (namely, the World Meteorological Organization and UNEP), the Bureau of the Committee and the Convention secretariat. The Chairman of the IPCC will brief the Committee on his conclusions.

IV. DRAFT RECOMMENDATION TO THE CONFERENCE
OF THE PARTIES AT ITS FIRST SESSION

23. After taking note of the above new relevant information, the Committee may wish to consider for approval the following draft recommendation to COP 1 on methodological issues, which includes a draft decision of COP 1.

Methodological issues

The Intergovernmental Negotiating Committee for a Framework Convention on Climate Change,

Recalling its mandate to prepare for the first session of the Conference of the Parties pursuant to General Assembly resolution 47/195,

Recalling also Articles 4.2(c), 7.2(d), 9.2(e) and 12.1(a) of the United Nations Framework Convention on Climate Change,

Recalling further its preparatory work on methodological issues as reflected in documents A/AC.237/24, A/AC.237/41 and A/AC.237/55,

Recommends that the Conference of the Parties adopt the following decision:

Draft Decision of the Conference of the Parties 1/..

Methodological issues

The Conference of the Parties at its first session,

Recalling Articles 4.2(c), 7.2(d), 9.2(e) and 12.1(a) of the United Nations Framework Convention on Climate Change,

Having considered the recommendation of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change contained in document ..,

1. Decides:

(a) That the Guidelines for National Greenhouse Gas Inventories and Technical Guidelines for Assessing Climate Change Impacts and Adaptations adopted by the Intergovernmental Panel on Climate Change should be used by Annex I Parties and, to the

extent possible, by non-Annex I Parties, in preparing their national communications 1/ pursuant to the Convention;

(b) That the global warming potentials over a 100-year time-horizon provided by the Intergovernmental Panel on Climate Change in its 1994 Special Report may be used by Parties to reflect their inventories and projections in carbon dioxide-equivalent terms; Parties may also make use of at least one of the other time-horizons provided by the Panel in its 1994 Special Report;

(c) That the Subsidiary Body for Scientific and Technological Advice, drawing upon existing competent international bodies, including the Intergovernmental Panel on Climate Change, and taking account of decisions 1/.. (on the process for reviewing first national communications) and 1/.. (on the subsidiary bodies), should:

- (i) Consider the methodological issues arising from the review of national communications, including those identified in the compilation and synthesis of national communications and in available in-depth review reports, and make recommendations thereon to the Conference of the Parties at its second session;
- (ii) Provide advice, taking account of the outcome of (i) above, on further development, refinement, improvement and use of comparable methodologies for:
 - National inventories of emissions and removals of greenhouse gases
 - Projecting national emissions and removals of greenhouse gases and comparing respective contributions to climate change of different gases
 - Evaluating the individual and aggregate effects of measures undertaken pursuant to the provisions of the Convention
 - Conducting impact/sensitivity analyses and assessing adaptation responses

1/ The term "national communications" includes communications from the regional economic integration organization included in Annex I to the Convention.

- (iii) Propose a work plan and timetable for longer-term activities relating to methodological questions (in particular, inventory methodologies), including the establishment of working relationships with other bodies (in particular, the Intergovernmental Panel on Climate Change and its working groups and programmes);
- (iv) Propose a work plan and timetable to address the technical aspects of the issue of the allocation and control of emissions from international bunker fuels, drawing upon ongoing work in Governments and international organizations, including the International Maritime Organization and the International Civil Aviation Organization;
- (v) Report on the above work to the second session of the Conference of the Parties;

(d) To consider at a future session, in the light of the scientific, technical and practical information provided by the Subsidiary Body for Scientific and Technological Advice, the issues covered in decisions contained in subparagraphs (a) and (b) above;

2. Invites the relevant international organizations and bodies, including the Intergovernmental Panel on Climate Change, to contribute to the work of the Subsidiary Body for Scientific and Technological Advice, especially on methodologies, particularly those relating to inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol on Substances that Deplete the Ozone Layer, global warming potentials of those greenhouse gases, vulnerability assessment and adaptation, projections of emissions by sources and removals by sinks, the evaluation of the effects of measures undertaken pursuant to the provisions of the Convention and the allocation and control of emissions from international bunker fuels.

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Annex

REVISED LIST OF SOURCE/SINK CATEGORIES

1. Energy
 - A. Fuel combustion activities
 1. Energy and transformation industries
 2. Industry (ISIC)*
 3. Transport
 4. Small combustion (including commercial/institutional, residential and agriculture/forestry/fishing)
 5. Other
 6. Traditional biomass burned for energy
 - B. Fugitive emissions from fuels
 1. Solid fuels
 2. Oil and natural gas
2. Industrial processes (ISIC)*
 - A. Iron and steel
 - B. Non ferrous metals
 - C. Inorganic chemicals
 - D. Organic chemicals
 - E. Non metallic mineral products
 - F. Other
3. Solvent and other product use
 - A. Paint application
 - B. Degreasing and dry cleaning
 - C. Chemical products, manufacture and processing
 - D. Other

* International Standard Industrial Classification

4. Agriculture
 - A. Enteric fermentation
 - B. Manure management
 - C. Rice cultivation
 - D. Agricultural soils
 - E. Prescribed burning of savannas
 - F. Field burning of agricultural residues
 - G. Other

5. Land use change and forestry
 - A. Changes in forest and other woody biomass stocks
 - B. Forest and grassland conversion
 - C. Abandonment of managed lands
 - D. Other

6. Waste
 - A. Solid waste disposal on land
 - B. Wastewater treatment
 - C. Waste incineration
 - D. Other waste

7. Other
