

REPORT OF THE 27TH SESSION OF THE IPCC BUREAU
Geneva, 7-8 August 2002

1. OPENING OF THE SESSION

1.1 OPENING

1.1.1 The Chair of the IPCC, Dr Rajendra Pachauri, called the session to order at 1000 hours on Wednesday, 7 August 2002. In his opening remarks he noted, *inter alia*, that the IPCC:

- a) Must remain relevant to the intergovernmental processes;
- b) Must remain credible through the engagement of the world's best scientists;
- c) Cannot afford to be dominated by any one group;
- d) Must maintain a proper geographical balance;
- e) Must engage a new group of younger scientists in the Fourth Assessment;
- f) Must work to explain the IPCC processes so that scientists are not discouraged from participating;
- g) Needs to satisfy SBSTA, but also look beyond SBSTA/UNFCCC to other conventions;
- h) Needs to interact more with research programs; and
- i) Needs to increase its interaction with non-government organisations and industry.

1.1.2 The session was attended by 42 persons (Attachment A).

1.2 WORKING ARRANGEMENTS

1.2.1 It was agreed that the working hours would be from 1000 to 1300 in the mornings and from 1500 to 1800 hours in the afternoon.

1.2.2 The issue of how the Bureau members should be designated at the session was discussed. After discussion in the session, and further discussion out-of-session, it was resolved that:

- a) Bureau members would sit behind personal name cards (consistent with WMO procedures) that also carried an indication of their country of origin; and,
- b) Government representatives would have cards indicating the country they represent.
- c) It was also agreed that at the next Bureau meeting a report would be submitted by the Secretary on an appropriate procedure for replacement of Bureau members who withdraw from the Bureau for any reason.

1.3 APPROVAL OF THE AGENDA

1.3.1 In reviewing the Provisional Agenda (Attachment B) it was noted that it could be amended at any time during the session.

1.3.2 It was agreed that a further four items would be included in the Agenda:

- (1) a brief report on the IPCCs possible involvement in the Johannesburg WSSD Conference;
- (2) A discussion on the planning for climate conferences in Moscow and Beijing, at the request of Professor Izrael;
- (3) terms of reference for, including procedures for election to, the Bureau; and,
- (4) a discussion of the philosophy of the IPCC as it relates to the Fourth Assessment Report.

1.3.3 It was agreed that these would be considered where most appropriate in the Agenda.

2. APPROVAL OF THE DRAFT REPORT OF THE TWENTY-SIXTH SESSION

2.1 The draft report of the Twenty-sixth session of the Bureau was considered, and with the amendments agreed by the session, approved (Attachment C).

REPORT FROM CO-CHAIRS OF WORKING GROUP I

3.1 The Co-chairs of Working Group I (WG I) presented a brief report on the activities of their working group. Items mentioned in the report and considered further in the ensuing discussion included:

- a) the recent WG I/WG II joint workshop on extreme events (Beijing, China, 11-13 June 2002);
- b) good progress is being made in setting up the WG I TSU, with Dr Martin Manning having been appointed as its head;
- c) discussions between WG I and WG III on the SBSTA request relating to HFCs and PFCs;
- d) plans in place to provide scientists in developing countries with access to online scientific journals;
- e) proposals to have, on line, (automatic) translations of the abstracts of English language, scientific papers into other languages;
- f) the need to undertake further work on climate sensitivity (including making use of both satellite and paleo-climate data in this work);
- g) the need to consider the role of aerosols in climate change;
- h) the need to consider the impacts of climate change on the polar regions as well as on non-polar glaciers.
- i) the need to consider the impacts of volcanic activity.

4. REPORT FROM CO-CHAIRS OF WORKING GROUP II

4.1 The Co-chairs of Working Group II (WG II) presented a brief report on the activities of their working group. Items mentioned in the report, and considered further in the ensuing discussion, included:

- a) the Hadley Centre of the UK Meteorological Office has been selected as the host for the WG II Technical Support Unit. The Unit is already established and arrangements have been made to receive the files from the former WG II TSU. Good progress is made for the selection of the head of the TSU;
- b) The organization of expert meetings on scenario development to characterize the SRES scenarios with detail sufficient to enable vulnerability, impact and adaptation assessment, along different development pathways and on a regional scale;
- c) The TG CIA has a new Director, Dr Richard Moss (USA), former Head of the WG II TSU. An outlook of the work programme of the TG CIA was provided.
- d) The Bureau, at its December meeting will review the Terms of Reference and mandate of the TG CIA.
- e) The importance of vulnerability studies and the need to effectively develop integrated impact assessments;
- f) Outreach and communication activities related to TAR and its Synthesis Report should be furthered on a regional basis with the collaboration of NGOs and the private enterprise.
- g) A scoping meeting similar to the one held in Bad Münstereiffel for the TAR, should be held as early as possible;
- h) The WG II contribution to the Fourth Assessment Report should include an assessment of regional vulnerabilities and impacts, which for the developing regions, as far as possible, should be supported by research work developed by scientists from those regions. The Bureau emphasized the need to assess relevant information available in languages other than English;
- i) The status of the SRES scenarios given recent criticism of their statistical/economic basis conveyed to the Chair by Australian economists and the Australian member of the Bureau.

5. REPORT FROM CO-CHAIRS OF WORKING GROUP III

5.1 The Co-chairs of Working Group III (WG III) presented a brief report on the activities of their working group. Items mentioned in the report, and considered further in the ensuing discussion, included:

- a) the need for an explicit assessment of the role of biomass in climate change mitigation;
- b) discussions with WG I on the HFCs/PFCs issue;
- c) the need to address sustainable development, equity and poverty in the Fourth Assessment;
- d) the need to develop a clearer explanation, for policy makers, of the GWP;
- e) the need to consider integrated strategies for responding to climate change and other environmental issues;
- f) the need for further discussion on the role, and management of non-CO₂ greenhouse gasses;
- g) the need for greater involvement of younger scientists in the next assessment in order to have too many overburdened authors;
- h) the role of WG III in assessing the economic damage of climate change, as well as the costs of adaptation and mitigation; and,
- i) the best ways of assessing technologies available for adaptation and mitigation;
- j) to have more effective participation of authors from developing countries;
- k) to plan actively for outreach activities.

6. REPORT FROM CO-CHAIRS OF THE TASK FORCE ON GREENHOUSE GAS INVENTORIES

6.1 The Co-chairs of the Task Force on Greenhouse Gas Inventories (TFI) presented a brief report on the activities of their task force. Items mentioned in the report, and considered further in the ensuing discussion, included:

- a) noting the National Greenhouse Gas Inventories Programme's (NGGIP's) two ongoing projects (LULUCF and the Emission Factors Database (EFDB));
- b) reporting on progress with LULUCF Tasks 1, 2 and 3;
- c) advising that there will be a call to governments for nominations to the editorial board of the EFDB;
- d) advising that in 2003 work will commence on the revision of the 1996 Good Practice Guidelines;
- e) noting that a vacancy for a visiting scientist to the TSU will be advertised on the NGGIP TSU homepage in August/September 2002;
- f) noting the generous US contribution that will enable the translation of the Good Practice Guidance from English to the five other IPCC languages (Arabic, Chinese, French, Russian and Spanish).

7. LESSONS LEARNT FROM THE PREPARATION OF THE TAR

7.1 The Co-chair of WG III summarised an assessment of the areas where of the work of WG III, during the TAR process, could have been improved. He emphasised the importance of the selection of lead authors and the involvement of an even larger expert community in the review process, advised that the chapter writing teams held insufficient meetings and underlined the need for continuous outreach efforts (and regular budgeting for these activities) and feedback from the user community.

7.2 The Bureau agreed that evaluating lessons learnt from the preparation of the TAR is a very useful exercise and therefore should be revisited at future Bureau sessions. It however recognised that each working group faces different challenges and adopts different approaches. The Bureau encouraged the outgoing TSUs to provide information about their experience during the TAR process to the next session.

8. DECISION FRAMEWORK

8.1 The "Decision Paper", drafted by Dr Solomon in response to a request by the Chair in May, 2002 with contributions from the Co-chairs and others, was exceedingly well received. It was seen as presenting a very informative discussion on the issues and options faced by the IPCC in preparing its

Fourth Assessment Report, as well as setting out an appropriate decision framework for Special Reports and Technical Papers. After Dr Solomon had presented the paper a broad ranging discussion ensued that included the following issues:

- a) in scoping the Fourth Assessment there will need to be broad consultation involving decision makers, NGOs, industry and the scientific community (including sceptics);
- b) a Bad Munstereiffel style scoping meeting needs to be planned for late-2002 or early-2003;
- c) in the Fourth Assessment cross-cutting issues will need to be treated better than in the Third. To achieve this there will need to be early identification of these issues, good interaction between the WGs and provisions in the design and structure of the WG reports to facilitate proper treatment of these issues. It is highly likely that the Fourth Assessment will undertake detailed assessment of specific themes that are of particular policy significance. It is most likely that these themes will be cross-cutting in nature;
- d) consideration should be given to including a risk assessment framework within the overall integrated assessment framework;
- e) one possible theme would be technology. Further consideration needs to be given to the appropriate IPCC framework and processes for assessing technologies;
- f) efforts would also need to be made for greater focus on region specific assessments.
- g) utility of the synthesis report and how it might be organised. A synthesis report could be organised around a set of policy relevant, scientific and technical questions as in the TAR. Alternatively a synthesis report could consist of a series of theme papers on selected cross-cutting issues. Other possible methods for preparing such a report were discussed. The timing of the preparation of a synthesis report was also considered.
- h) consideration needs to be given to the range of products the IPCC will distribute at the completion of its Fourth Assessment. The target audiences need to be identified and a range of internally consistent products, appropriate for each of the target audiences should be developed. There should be an emphasis on good graphics that, make effective use of colour, but are suitable for black and white photocopying. Thought should be given to preparing 1, 10 and 100 page summaries that are internally consistent and which convey the same key messages arising out of the Fourth Assessment.

8.2 The issue of deciding the “shorthand” name for the Fourth Assessment Report (e.g. FoAR, 4AR, AR4, etc.) was not resolved. It was agreed that the secretariat would conduct another electronic poll and that the Chair would consider the results of this and advise Bureau members of the outcome.

8.3 PROPOSALS FOR SPECIAL REPORTS, TECHNICAL PAPERS AND THEMES IN THE FOURTH ASSESSMENT REPORT

8.3.1 PFCS AND HFCS

8.3.1.1 At its sixteenth session SBSTA (June 2002) invited the IPCC and the Technology and Economic Assessment Panel (TEAP) of the Montreal Protocol, in consultation with other organisations such as UNEP, to consider the modalities, feasibility, resource implications and timing of providing an information package on hydrofluorocarbons and perfluorocarbons. Doc. 10 Rev 1, prepared in consultation with the Co-chairs from WGs III and I, and others, brought the issue to the Bureau for a decision as to how to respond to the SBSTA request.

8.3.1.2 The Bureau agreed that Doc. 10 Rev 1 with further revision (as given at Attachment D) would form the basis of the IPCC’s response to SBSTA.

8.3.1.3 Concern was expressed that Para. 18 (Attachment D) refers to an assessment of “Technical information relevant to ..., health, environmental and safety considerations, ...”. The particular concern was that including considerations of health and safety issues not related to climate change

would go beyond IPCC's traditional area of expertise, while such topics have been traditionally considered by TEAP. This was acknowledged, but it was felt that these matters could not be excised from the integrated assessment. SBSTA would, however, be informed about IPCC's view that these matters would need to be dealt with by TEAP experts.

8.3.1.4 It was agreed that the secretary would advise SBSTA and governments of the results of the Bureau's deliberations on this matter. That is, a copy of Attachment D with appropriate covering letters would be sent to SBSTA and governments.

8.3.1.5 Recognizing SBSTA's proposal of this issue, the WG I co-chairs proposed a small side event of invited experts to inform SBSTA about the findings of the 2002 WMO/UNEP Scientific Assessment of Ozone Depletion at a future SBSTA meeting (likely in June, 2003), if desired. This will be pursued through informal discussions with SBSTA to determine their interest in such an event.

8.3.2 CARBON STORAGE

8.3.2.1 The Bureau noted that the Nineteenth session of the Panel (April 2002) had agreed to start the process of working towards a Special Report on Carbon Storage to meet needs identified by SBSTA at Marrakech.

8.3.2.2 The Bureau further noted that plans are well underway for a workshop on "Carbon Capture and Storage", to be held in later in Regina, Canada, 19-21 November 2002. This workshop will develop a proposal on how best to deal with this matter for consideration by the Panel at its February 2003 session.

8.3.3 LULUCF TASK 3

8.3.3.1 The Land use, land-use change and forestry decision (11/CP.7) in the Marrakesh Accords invites the IPCC to develop practicable methodologies to factor out direct human-induced changes in carbon stocks and greenhouse gas emissions by sources and removals by sinks from changes in carbon stocks and greenhouse gas emissions by sources and removals by sinks due to indirect human-induced and natural effects (such as those from carbon dioxide fertilization and nitrogen deposition), and effects due to past practices in forests (pre-reference year), to be submitted to COP 10.

8.3.3.2 Decision 4 of the Nineteenth session of the Panel was that the programme proposed by the Co-chair of the Task Force on Inventories (Appendix J, Part 2 of the Report of the Nineteenth Session) should be adopted.

8.3.3.3 The Bureau noted the progress being made by TFI on this issue.

8.3.4 CLIMATE CHANGE AND WATER

8.3.4.1 The Nineteenth Session (Decision 8) of the Panel entrusted the Bureaus of WG I and WG II, in consultation with Working Group III, with the task of preparing a scoping paper for a possible Special Report on Climate Change and Water within the next four months (from April 2002). The Secretary noted that Decision 8 did not explicitly provide for a meeting and the IPCC's 2002 Budget, as approved at the Nineteenth Session, did not provide for one for this purpose.

8.3.4.2 The Bureau was informed that there are at least 17 international organisations involved in water issues, and that while constructive talks have been held with the Dialogue on Water, and the WMO's hydrology group, it would be necessary to speak with a broader cross-section of the water community before the IPCC could decide how to deal with the water issue.

8.3.4.3. The WG II Co-chairs, in coordination with the WMO designated focal point on the this issue, will prepare a background document for an expert meeting on the topic of Climate Change and Water.

They will also organise the meeting, to be held prior to the next Bureau meeting. The aim of this meeting would be to advise whether the IPCC should:

- a) prepare a Special Report on Climate Change and Water;
- b) treat it as a cross-cutting issue in the Fourth Assessment; and / or
- c) assign to the issue special priority, when dealing with the regional impacts of climate change, in the Fourth Assessment Report.

8.3.5 CLIMATE CHANGE AND SUSTAINABILITY

8.3.5.1 At its Nineteenth Session (Decision 9) the Panel decided that there would be an Expert Meeting on climate change and development, and that the meeting would prepare a first draft of a scoping paper for consideration by the Panel. The Expert Meeting is to draw upon a broad range of experts and to be co-organised by WGs II and III.

8.3.5.2 The Bureau was advised by the Co-chair of WG III that current thinking is that a Special Report on this topic would not be appropriate, rather that it should be treated as a theme within the Fourth Assessment. He also noted that the planned Expert Meeting should draw on expertise from the “development” as well as the “climate change” communities. He stressed that two expert meetings would be needed to consider this issue sufficiently given the different views that currently exist.

8.3.6 DANGEROUS LEVELS OF GREENHOUSE GASES

8.3.6.1 The issue of whether a Special Report or Technical Paper should be prepared by the IPCC on this topic was discussed at the Twenty-fifth session of the Bureau (section 5.2 of the report of the session). The background document (scoping paper) on this issue, prepared by the vice-Chair, Prof Izrael was scheduled for discussion at the Nineteenth Session of the IPCC but it was not considered due to lack of time.

8.3.6.2 The Chair, noting that this is a cross-cutting issue, and further noting Prof. Izrael’s expertise relevant to, and interest in, the matter, asked that he coordinate follow-up action. After some discussion it was agreed that Prof. Izrael, in consultation with the secretariat, should prepare the documentation for a small meeting to be conducted in early 2003. The aim of the meeting would be to develop a proposal for consideration by the Panel in February 2003.

9. PREPARATIONS FOR COP 8 AND WSSD

9.1 The Bureau agreed that it may be premature to address matters related to UNFCCC Art. 2 and future work of the IPCC at a COP-8 side event. There was broad consensus to rather aim for a strong presence of IPCC authors at the planned adaptation day and to explore the feasibility of holding an event on climate change implications on the Indian sub-continent with participation of IPCC authors from the region as well as international presence. The IPCC chair agreed to further explore the desirability and feasibility of such an IPCC event.

9.2 The TFI chairs informed the Bureau about their plan to launch the Emissions Factor Database at a side event at COP-8. Furthermore a side event to provide a progress report on the LULUCF programme is planned.

9.3 SBSTA at its 16th session requested the UNFCCC Secretariat to invite representatives of the IPCC and of international research programmes and bodies to attend the 17th session of SBSTA, being prepared to provide their views on the research recommendations identified in the TAR. It requested the secretariat to organize a question-and-answer special side event to enable Parties to have a substantial dialogue with the invited representatives. The representative of the UNFCCC Secretariat informed the Bureau about the preparations for this event. It was agreed that he would liaise with the IPCC Secretariat regarding invitation of IPCC experts.

9.4 The Secretary informed the Panel about the invitation to the IPCC by WMO to contribute to an event during WSSD on climate change and water, which is scheduled for 1 September 2002 in the so-called water dome. It is planned that the IPCC Chair will deliver a keynote speech at the beginning of the event. Bureau members appreciated this initiative and suggested also holding an IPCC press conference during WSSD to present the current thinking of the IPCC on climate change and sustainable development and provide a brief outlook on future plans.

10. REPORT ON THE IPCC BUDGET

10.1 The Secretary introduced this item. He pointed out that the IPCC's present cash situation is a good one, however he also noted that expenditures will be increasing as work on the Fourth Assessment gets underway while contributions have been decreasing. He further noted that expenditures for publications have been underestimated, while expenditures for meetings have been overestimated.

10.2 Questions on various technical and accounting matters were clarified by the WMO's financial controller (D/REM), other WMO financial experts and the Secretary. Expenditures for TSUs, incurred by the respective host governments, will be explicitly mentioned in future budget documents.

10.3 The Bureau agreed that a three-year budget plan needs to be developed for consideration by the Panel in February 2003. This plan has to be underpinned by financial plans provided by the TSUs, using, to the extent feasible, standard cost indicators.

10.4 A long term funding strategy is required. The Chair and the Secretary should contact governments in an endeavour to secure a broader, and larger, funding base for the IPCC.

10.5 The Bureau agreed that it is desirable if some flexibility is given to the Bureau and the Secretary to reallocate, within the approved budget, funds between budget lines. It asked the Secretary to draft a proposal on improved financial management and a 3-year budget plan for consideration by the next Bureau session and Panel in February 2003. A half-day meeting of the Financial Task Team will be held before the 28th Session of the Bureau to consider these proposals.

10.6 Several Bureau members raised the question of administrative and technical support for the Chair and suggested that funds be provided for that purpose. The Bureau will address the matter at its next session. The Chairman, however, expressed his strong insistence in not seeking any support for his staff and infrastructure from IPCC trust funds. He also reminded the Bureau of the earlier decision to carry an acknowledgement in the budget indicating TERI's support for maintenance of the IPCC website.

11. OUTREACH

11.1 The Bureau, at its 26th session, recommended the formal constitution of a task group on communications and that careful consideration should be given to the early development of an IPCC outreach programme.

11.2 In response to that the Bureau established an open-ended Outreach Task Group (OTG) with J. Stone and M. Martelo as co-chairs. The group will be composed of representatives of the four Technical Support Units, the IPCC Secretariat and the following Bureau members and government representatives: E. de Alba Alcaraz, A. Allali, E. Calvo, F. Giorgi, T. Hiraishi, B. Jallow, J. Jouzel, L. Kajfez-Bogataj, T. Krug, S. Solomon, R.T.M. Sutarnhardja, D. Wratt, J-P. van Ypersele, J. Zillman, D. Warrillow (UK) and A. Reisinger (NZ).

11.3 The initial mandate of the group is to develop and implement an outreach strategy, including matters related to publication and translation. In the course of the next six to eight weeks the group will develop a detailed proposal for a mandate and a draft outreach strategy which identifies audiences

and priorities, and suggests partnerships and initial activities for further consideration by the next session of the Bureau and presentation to the Panel in February 2003.

12. OTHER BUSINESS

12.1 Short reports were presented providing information on the planned climate conferences to be held in Moscow and Beijing in 2003.

13. TIME AND PLACE OF THE 28TH SESSION

13.1 It was agreed that the next session of the Bureau would be conducted in Geneva on 6-7 December 2002.

13.2 The International Conference Centre, CIGG (Geneva) has been booked for the week 10-14 February 2003 for the next Panel session. Tentatively the next session of the Bureau would be 1.5 days, commencing 1500 hours on 10 February 2003. There are however many conflicts arising because this week overlaps the American Meteorological Society meetings in the USA. Options for holding the next plenary in the third or fourth weeks of February 2003 are being explored. It is expected that there would be a Bureau meeting on the two days prior to the IPCC session.

LIST OF PARTICIPANTS

TWENTY -SEVENTH SESSION OF THE IPCC BUREAU

(Geneva, 7-8 August 2002)

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DRAFT AGENDA

1. OPENING OF THE SESSION

- 1.1 Opening
- 1.2 Working arrangements
- 1.3 Approval of the agenda

2. APPROVAL OF THE DRAFT REPORT OF THE TWENTY-SIXTH SESSION

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4. REPORT FROM CO-CHAIRS OF WORKING GROUP II

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5. REPORT FROM CO-CHAIRS OF WORKING GROUP III

6. REPORT FROM CO-CHAIRS OF THE TASK FORCE ON GREENHOUSE GAS INVENTORIES

7. LESSONS LEARNT FROM PREPARATION OF THE TAR

8. DECISION FRAMEWORK (BACKGROUND PAPER BY WORKING GROUP CO-CHAIRS)

- 8.1 Issues relating to the Fourth Assessment Report
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12. OTHER BUSINESS

13. TIME AND PLACE OF THE 28TH SESSION

14. CLOSURE OF THE SESSION

**REPORT OF THE TWENTY-SIXTH SESSION
OF THE IPCC BUREAU**

Geneva, 20 April 2002 (p.m)

The approved report is available on website: http://www.ipcc.ch/meet/meet_rep.htm

ATTACHMENT D

IPCC BUREAU
TWENTY-SEVENTH SESSION
Geneva, 7-8 August 2002

B-27/Doc. 10 Rev.3
(26.VIII.2002)
Item 8.2.1
ENGLISH ONLY

**A PROPOSED RESPONSE TO A REQUEST FROM SBSTA
REGARDING THE RELATIONSHIP BETWEEN EFFORTS TO PROTECT THE STRATOSPHERIC OZONE
LAYER AND EFFORTS TO SAFEGUARD THE GLOBAL CLIMATE SYSTEM:
ISSUES RELATING TO HYDROFLUOROCARBONS AND PERFLUOROCARBONS**

A PROPOSED RESPONSE TO A REQUEST FROM SBSTA REGARDING THE RELATIONSHIP BETWEEN EFFORTS TO PROTECT THE STRATOSPHERIC OZONE LAYER AND EFFORTS TO SAFEGUARD THE GLOBAL CLIMATE SYSTEM: ISSUES RELATING TO HYDROFLUOROCARBONS AND PERFLUOROCARBONS

At its sixteenth session the Subsidiary Body for Scientific and Technological Advice (SBSTA) in June 2002 invited the Intergovernmental Panel on Climate Change (IPCC) and the Technology and Economic Assessment Panel of the Montreal Protocol (TEAP), in consultation with other organisations such as UNEP, to consider the modalities, feasibility, resource implications and timing of providing an information package on hydrofluorocarbons and perfluorocarbons, covering the following three broad areas:

- (a) A summary of up-to-date scientific information on the relation of ozone layer depletion and global warming, including concentrations of relevant ozone-depleting and greenhouse gases;
 - (b) Technical information on practices and technologies for phasing out ozone-depleting substances and at the same time contributing to the objectives of the Convention and the Montreal Protocol. It should cover the relevant sectors, including heating, refrigeration and air-conditioning, foams, aerosols, solvents and fire-fighting applications. It should include the technical options, *inter alia*, of improved containment, use of fluids, gases or aerosols with negligible or lower global warming potential, use of not-in-kind technology, process improvement and end-of-life-cycle recovery, recycling and disposal. It should present technical information relevant to evaluation, including cost, availability, health, medical, environmental and safety issues, technical performance, energy and resource efficiency and all associated greenhouse gas emissions using life cycle climate performance. Where appropriate, reference should be made to relevant policies and measures;
 - (c) The future demand and supply of HFCs and the implication for developing countries, drawing upon relevant reports. The SBSTA noted that many developing countries use HFCs in applications and depend on imports of these substances.
2. The background to this request is given in the Annex to this Document.
 3. In asking for this information the SBSTA requested that:
 - (a) This information package should not duplicate current efforts by those organizations.
 - (b) It is within the mandate of those organizations.
 - (c) It builds also upon the information already provided, is cost-efficient, and does not lead to the creation of any new reporting requirements for Parties.
 4. The SBSTA invited the IPCC and the TEAP, in cooperation with other organizations such as UNEP, to assess the feasibility of the preparation of such an information package.
 5. The SBSTA will consider these replies with a view to deciding, at the time of COP 8, whether to make a further request on this issue to these bodies.

Proposed actions

6. On the basis of incomplete consultations between IPCC WG I and III co-chairs and the co-chair of TEAP the following suggestions are made for how the IPCC could respond to the SBSTA requests in Parts (a), (b) and (c).

Part (a) Summary of scientific information on the relation of ozone depletion and global warming

7. It is noted that comprehensive work has recently been carried out on this matter within the Third Assessment Report (TAR) of the IPCC. Also the Scientific Assessment of Ozone Depletion of UNEP and the World Meteorological Organisation (WMO) was published last in 1998 and the next Assessment in this series is expected to be concluded and published around the end of 2002.

8. The community that prepares ozone assessment reports is a small one, and it is considered that it would be unrealistic to ask that they immediately repeat for the IPCC an assessment undertaken for UNEP/WMO. Noting that in asking for this information the SBSTA requested that: "It builds upon the information already provided, is cost-efficient, and does not lead to the creation of any new reporting requirements for Parties.", it would seem inappropriate, at this time, to repeat this UNEP/WMO Ozone Assessment in an IPCC Special Report although an IPCC Special report could include a brief summary as an introduction to the issue. An alternative approach would be to give this issue special emphasis within the context of the Fourth Assessment.

Part (b) Technical information on practices and technologies

9. Reference is made to the work on this matter recently carried out within the framework of a large number of R&D projects as well as literature research projects by academic institutions, government, industry and environmental non-government organisations (NGOs).

10. The efforts of the UNFCCC secretariat in providing a web site and template to report information on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluoro chemicals (perfluorocarbons, SF₆ and NF₃), including the use of some of these as replacements for ozone-depleting substances, is recognised as useful input for an assessment. It is also recognised that the wealth of information currently available to the Parties to the UNFCCC and to stakeholders often does not meet the criteria of being policy-neutral and user-friendly in order to satisfy the information needs of Parties as specified by the SBSTA.

11. Recent joint and separate efforts by the IPCC and the TEAP also need to be taken into account. These include, *inter alia*, the:

- (a) IPCC's TAR
- (b) Recent report of TEAP's HFC and PFC Task Force
- (c) Report of the Joint IPCC/TEAP expert meeting on options for the limitation of emissions of HFCs and PFCs (held in Petten, 1999)
- (d) 2002 Assessment Reports of TEAP and its Technical Options Committees, to be published by the end of 2002.

Part (c) Future demand and supply of HFCs and the implication for developing countries

12. A report on the future demand and supply of HFCs and the implication for developing countries will be hard to produce given the huge uncertainties in the market developments and the proprietary character of the information required. It is recognised that currently the required information is not available in the open literature.

13. IPCC is therefore not in a position to contribute to the request made by SBSTA on this issue.

Recommendation

14. It is recommended that the IPCC work with experts from TEAP to prepare a submission to SBSTA, and that in that submission the IPCC commits, subject to Panel approval, to the following actions:

Part (a)

15. A brief summary of the relevant findings from TAR and the UNEP/WMO 1998 and 2002 Ozone Assessment Reports could be included in a Special Report to serve as useful background. Furthermore, within the context of the Fourth Assessment Report special emphasis could be given to this issue.

Part (b)

16. Following the IPCC procedures, and involving experts that have been active in TEAP and its Technical Options Committees, IPCC would prepare a special report (“Compendium”) on practices and technologies that would assist Parties in making informed decisions when evaluating alternatives to ozone depleting substances while at the same time contributing to the objectives of the UNFCCC and the Montreal Protocol.

17. The aim of the Compendium is to inform industry and policy decision making regarding relevant considerations in choosing among options to replace ozone depleting substances. This will involve a number of considerations not only regarding greenhouse gas potency. In doing this work the IPCC would give valuable assistance to the Parties to the UNFCCC as well as to other stakeholders in implementing this convention.

18. For each type of application the Compendium would cover the matters described above, including:

- Technical information relevant to the evaluation, including cost, availability, health, environment and safety considerations, technical performance, energy and resource efficiency and all greenhouse gas emissions, using a systematic approach, such as the total equivalent warming impact (TEWI) and all greenhouse gases and lifecycle climate performance (LCCP).
- Technical options to reduce greenhouse gas emissions, e.g. through containment, recovery, recycling, destruction, the use of alternative fluids and not-in-kind technologies. Where appropriate reference should be made to examples of relevant policies and measures.

19. An integrated analysis would be done to assess toxicity, atmospheric chemistry effects (e.g., air quality) and potential build up of gases and their degradation products in the atmosphere.

20. Reference could be made to the full range of technical literature as specified in the IPCC procedures on the use of non-peer reviewed literature (as done in the Annex to Chapter 3 of WG 3 of the IPCC-TAR).

21. It is recognised that due to the technical nature of the Compendium participation of the appropriate industry experts (in their personal capacity as experts and not as representatives) would need to be ensured.

22. Consistent with IPCC procedures, all possible measures would be taken to ensure that the report would be policy neutral and user-friendly.

23. Noting the highly technical and detailed character of the information to be assessed the Summary for Policy Makers could be limited to procedural elements rather than also summarise the

technical content of the report. This would be analogous to the way the Summary for Policy Makers is handled for IPCC Inventory methodology reports.

24. The special report would be prepared in a way that will facilitate easy access by users. The report will be posted on the web-site of IPCC and be distributed through CD ROM.

25. The following timetable for preparation of the Compendium is foreseen: (change bold to regular font)

- A first expert meeting on the broad contents and timelines prior to the SBSTA/JWG meeting in fall 2002.
- An expert meeting in January 2003 to develop a work programme, Compendium structure and list of authors;
- Consideration of the work programme, Compendium structure and list of authors by IPCC plenary in February/March 2003;
- Subject to approval by IPCC plenary the Compendium would be drafted through 2003 and 2004 for approval by IPCC plenary in early 2005 (24 months turn-around time).

26. The cost to the IPCC of preparing this Compendium would be of the order of CHF 640,000 comprising the following elements:

In 2002: Small expert meeting prior to SBSTA/JWG, fall 2002 CHF 25,000

If the Special Report is requested by SBSTA:

In 2003/2004 Large expert meeting in January 2003 CHF 75,000

Then, if the IPCC plenary decides to go forward:

4 Lead Author meetings CHF 300,000

In 2005: WG I/III plenary if in association with another major plenary CHF 60,000.

Printing and publishing: CHF 180,000

Part (c)

27. It is recommended that IPCC respond to SBSTA that it cannot contribute to this part of the request. It is likely that TEAP would consider a possible response to the SBSTA request in the form of a report by experts based on manufacturers' information.

Background

With its decision 13/CP.4, “Relationship between efforts to protect the stratospheric ozone layer and efforts to safeguard the global climate system: issues related to hydrofluorocarbons and perfluorocarbons” in November 1998, the COP initiated a discussion on this matter.

2. The decision invited Parties, the relevant bodies of the Montreal Protocol, the IPCC, intergovernmental organizations and non-governmental organizations to provide information to the secretariat, by 15 July 1999, on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, including their use as replacements for ozone-depleting substances. It also encouraged the convening of a workshop by the IPCC and TEAP in 1999. The aim of the workshop to assist the SBSTA in establishing information on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, and invites the IPCC to report on the results of such a joint workshop to the SBSTA at its eleventh session, if possible. It further requested the secretariat to compile the information provided, including, if available, the conclusions of the workshop, for consideration by the SBSTA at its eleventh session and requested the SBSTA to report on this information to the COP, at its fifth session, and to seek further guidance from the COP on this matter at that session.

3. As a reaction to this decision several activities were launched.

4. In November 1998, the Parties to the Montreal Protocol adopted decision X/16 in which the TEAP was requested to provide such information to the UNFCCC and to assess the implications to the Montreal Protocol of the inclusion of HFCs and PFCs in the Kyoto Protocol and to report these findings to its Eleventh Meeting (November 1999). In addition, the Parties to the Montreal Protocol also encouraged the IPCC and TEAP to jointly convene a workshop on ‘available and potential ways and means’ of limiting emissions of HFCs and PFCs.

5. Following the request by the Parties to the UNFCCC and the Montreal Protocol, the technical support unit of the IPCC working group III and the TEAP co-organised the “Joint IPCC/TEAP expert meeting on options for the limitation of emissions of HFCs and PFCs” held in Petten, the Netherlands, 26 – 28 May 1999. The proceedings of the meeting are available on the internet.¹

6. The UNFCCC secretariat provided a web site and template to report information on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, including their use as replacements for ozone-depleting substances. Submissions were compiled in documents FCCC/SBSTA/1999/MISC.6 and Add.1 and 2 and were made available on the UNFCCC web site.²

7. The TEAP created a Task Force on HFCs and PFCs to undertake the assessment requested by the Parties to the Montreal Protocol. It produced the report “The implications to the Montreal Protocol of the inclusion of HFCs and PFCs in the Kyoto Protocol” in October 1999.³

8. The IPCC decided in 1999 to add an annex to its chapter 3 of its Working Group III report of the Third Assessment report on “Options to reduce global warming contributions from substitutes for ozone depleting substances” which was published in early 2001.

9. The SBSTA considered the issue again at its eleventh session in November 1999. In the discussions, several Parties proposed further work to evaluate the available information. Due to the disagreement on whether there is a need for further work and on the scope of such work, a general conclusion was reached that the SBSTA should consider information aspects of this issue at the first

¹ see <http://www.ecn.nl/library/reports/1999/rx99029.html>

² See <http://unfccc.int/program/wam/>

³ See http://www.teap.org/html/teap_reports.html

session following the sixth session of the Conference of the Parties (see FCCC/SBSTA/1999/14 and decision 17/CP.5).

10. The fifteenth session of the SBSTA in November 2001 was the first session after the sixth session of the COP, since the COP had resumed its sixth session in Bonn, June 2001. At that session, the SBSTA invited Parties and organizations to provide further information on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, invited Parties to provide their views, by 1 March 2002, on information aspects noted in decision 17/CP.5, requested the secretariat to prepare a document and decided to consider the issue further at its sixteenth session.