
The subsidiary bodies of the UN Framework Convention on Climate Change (FCCC) met from 2-12 June 1998 in Bonn, Germany. These were the first formal FCCC meetings since the adoption of the Kyoto Protocol at the Third Conference of the Parties (COP-3) in December 1997. The eighth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA-8) agreed to draft conclusions on, inter alia, cooperation with relevant international organizations, methodological issues, and education and training. The eighth session of the Subsidiary Body for Implementation (SBI) reached conclusions on, inter alia, national communications, the financial mechanism and the second review of adequacy of Annex I Party commitments. In its sixth session, the Ad Hoc Group on Article 13 (AG13) concluded its work on the functions of the Multilateral Consultative Process (MCP).

After joint SBI/SBSTA consideration and extensive contact group debates on the flexibility mechanisms, delegates could only agree to a compilation document containing proposals from the G-77/China, the EU and the US.

A BRIEF HISTORY OF THE FCCC AND THE KYOTO PROTOCOL

The first meeting of the Conference of the Parties to the FCCC (COP-1) took place in Berlin from 28 March - 7 April 1995. In addition to addressing a number of important issues related to the future of the Convention, delegates reached agreement on what many believed to be the central issue before COP-1 — adequacy of commitments, the “Berlin Mandate.” The result was to establish an open-ended Ad Hoc Group on the Berlin Mandate (AGBM) to begin a process toward appropriate action for the period beyond 2000, including the strengthening of the commitments of Annex I Parties through the adoption of a protocol or another legal instrument.

COP-1 also requested the Secretariat to make arrangements for sessions of SBSTA and SBI. SBSTA would serve as the link between scientific, technical and technological assessments, the information provided by competent international bodies, and the policy-oriented needs of the COP. During the AGBM process, SBSTA addressed several issues, including the treatment of the IPCC’s Second Assessment Report (SAR). SBI was created to develop recommendations to assist the COP in the review and assessment of the implementation of the Convention and in the preparation and implementation of its decisions. SBI also addressed several key issues during the AGBM process, such as national communications and activities implemented jointly.

The Ad Hoc Group on Article 13 (AG13) was set up to consider the establishment of a multilateral consultative process available to Parties to resolve questions on implementation. AG13-1, held from 30-31 October 1995 in Geneva, decided to request Parties, non-
used every opportunity to distance itself from any attempts to draw developing countries into agreeing to anything that could be interpreted as new commitments.

**COP-3:** The Third Conference of the Parties (COP-3) to the FCCC was held from 1 - 11 December 1997 in Kyoto, Japan. Over 10,000 participants, including representatives from governments, intergovernmental organizations, NGOs and the press, attended the Conference, which included a high-level segment featuring statements from over 125 ministers. Following a week and a half of intense formal and informal negotiations, including a session that began on the final evening and lasted into the following day, Parties to the FCCC adopted the Kyoto Protocol on 11 December.

In the Kyoto Protocol, Annex I Parties to the FCCC agreed to commitments with a view to reducing their overall emissions of six greenhouse gases (GHGs) by at least 5% below 1990 levels between 2008 and 2012. The Protocol also establishes emissions trading, “joint implementation” between developed countries, and a “clean development mechanism” (CDM) to encourage joint emissions reduction projects between developed and developing countries.

As of 9 May 1998, the following 39 Parties had signed the Kyoto Protocol (in order of signature): Maldives, Samoa, Antigua and Barbuda, Switzerland, Saint Lucia, Argentina, Marshall Islands, Micronesia, St. Vincent and the Grenadines, Seychelles, the Philippines, Malta, Costa Rica, Japan, Austria, Germany, Finland, Portugal, France, Sweden, Belgium, Spain, Denmark, Greece, Italy, the Netherlands, Luxembourg, the UK, Brazil, Norway, Monaco, Australia, Canada, Ireland, New Zealand, China, Panama, El Salvador and Mexico. These Parties represent 39% of Annex I CO2 emissions.

Under Protocol Article 25, the Protocol will enter into force after it has been ratified by 55 Parties to the FCCC, incorporating Parties included in Annex I that account for at least 55% of the total carbon dioxide emissions for 1990.

**AD HOC GROUP ON ARTICLE 13**

In his opening remarks on Friday, 5 June, AG13 Chair Patrick Széll (UK) recalled that during AG13-5, delegates agreed that the Multilateral Consultative Process (MCP) should be advisory rather than supervisory in nature. They also agreed that AG13 should complete its work by COP-4. He stressed that the meeting would discuss only the MCP under the Convention and not the Protocol. From 5-11 June, delegates deliberated on the heavily bracketed draft text (FCCC/AG13/1997/4) from AG13-5. A drafting group, chaired by Clara Musendo (Zimbabwe), was convened to incorporate new proposals.

On paragraph 1 (establishment of the MCP), delegates agreed on a “standing” Multilateral Consultative Committee reporting to the COP.

On paragraph 2 (objective of the MCP), a drafting group agreed to remove brackets from the paragraph stating that “the objective of the MCP is to resolve questions regarding implementation of the FCCC by providing advice on assistance to Parties to overcome difficulties in their implementation, promote understanding of the FCCC, and prevent disputes.”

On paragraph 3 (nature of the MCP), delegates debated the description of the MCP as “transparent.” Following the discussion, the Chair invited a small group to draft an interpretative statement for inclusion in the AG13 report, indicating that transparency should be understood as a reference to the overall process and outcome and not to the question of access to meetings. The delegates agreed to these conclusions.

On paragraph 4 (nature of the MCP), AUSTRALIA raised the possibility of duplication by the MCP of other FCCC dispute settlement work. The EU, UNITED ARAB EMIRATES and IRAN noted the MCP’s purpose is advisory only and that duplication was dealt with in paragraph 6.

On paragraph 5 (mandate), Parties debated the implications of a reference to provision of “the” appropriate assistance. Delegates agreed to language indicating that assistance would be purely advisory.

Paragraph 6, on avoiding duplication with other FCCC bodies, was accepted without debate.

On paragraph 8 (expertise), delegates agreed, based on proposals from GHANA and the EU, that the Multilateral Consultative Committee should comprise persons nominated by governments who are experts in relevant fields, such as science, socioeconomics and the environment.

In paragraph 10 (deliberations), the EU, supported by SLOVENIA and GHANA, proposed that the Committee meet “at least once a year.” The delegates also accepted an EU proposal to merge paragraphs 10 (deliberations) and 11 (governance).

On paragraph 12, delegates debated who could trigger the MCP. CANADA, Chair of the drafting group, reported that Parties agreed the MCP can be triggered by: a Party with respect to its own implementation; a group of Parties with respect to their own implementation; a Party or group of Parties with respect to implementation by another Party or group of Parties; and/or the Conference of the Parties.

On paragraph 13 (outcome) the delegates deliberated on the reporting of the Committee, access to the reports of the work of the Committee, frequency and form of the reports and whether reports should be subject to consent of Parties concerned. Consensus was reached in the drafting group to forward concerned Parties’ comments on the conclusions and recommendations together with the Committee’s report to the COP.

On paragraph 14 (evolution), delegates accepted text noting that these terms of reference may be amended by the COP.

A substantial part of the AG13 deliberations dealt with paragraphs 7 (size of the committee) and 9 (Constitution), which were considered jointly. Delegates generally agreed to: limit the number of participants in the Multilateral Consultative Committee, rotate terms of two or three years; and permit the other subsidiary bodies’ Chairs to participate as observers. They were divided over exact membership numbers, with the EU, SLOVENIA, the US and others favoring 15 or fewer members for administrative efficiency while the G-77/CHINA called for 25 members to allow the inclusion of a broader competence base and avoid difficulties with constituting a separate roster of experts. Language allowing for a roster of experts in paragraph 9 was not supported. This issue was not resolved and will be discussed at COP-4.

The EU and G-77/CHINA accepted unbracketed text on equitable geographical distribution among regions, but the US proposed dividing membership equally between Annex I and non-Annex I Parties and suggested that “equitable geographical distribution” be replaced with “with one half to be designated by Annex I Parties and one half to be designated by non-Annex I Parties.” He argued that the Committee was the first under the Convention and thus was not compelled to apply the UN system of apportionment. The G-77/ CHINA disagreed, saying that they were unable to undermine well-established UN practices on equitable geographical distribution and rotation principles. The US further objected to the language used in the Chair’s report on the work of AG13. He noted that even though the US raised the objection in Plenary, several other countries had expressed their support for the US position during the contact group. The G-77/ CHINA objected to stating that the report only covered the formal proceedings.

On Tuesday, 9 June, a small group was convened to try to resolve the two outstanding issues. On 11 June, AG13 Chair Széll reported on the results from the contact group. The group agreed that in paragraph 9 of the terms of reference for the MCP, “geographical distribution” would not be placed in brackets, with a footnote denoting that this represents the view of G-77/China and others. The proposal by the US to designate half the members for Annex I Parties and half for non-Annex I Parties would be placed in brackets with a similar footnote denoting that it represents the view expressed by some Parties. Paragraph 11 of the report of AG13-6 was modified accordingly.

In the new draft, a paragraph on the budgetary provisions for 1999 was included. With no objections raised by the Parties, the report of the meeting and annexes, including a draft terms of reference of the MCP (FCCC/AG13/1998/L.1), were adopted and will be presented at COP-4.
On Friday, 12 June, delegates considered draft conclusions (FCCC/ SBSTA/1998/CRP.4) on this agenda item. The draft conclusions noted: that other international organizations such as ICAO and IMO will be invited to make progress on their work of relevance to the Convention and provide reports to SBSTA; the statement by UNEP's Executive Director on the role of UNEP; as set out in the UN General Assembly's Programme for the Further Implementation of Agenda 21; the IPCC's programme of work and forthcoming Third Assessment Report (TAR); and welcomed UNEP's readiness to raise awareness of climate change. The conclusions were adopted with some modifications.

ANNEX I NATIONAL COMMUNICATIONS

On Wednesday, 3 June, delegates discussed Annex I national communications (FCCC/SBSTA/1998/3 and MISC.3). The EU called for a Secretariat report on revisions proposed by Parties for consideration at SBSTA-9 and COP-5. The MARSHALL ISLANDS said stricter adherence to existing reporting guidelines, rather than full-scale revision, may be needed. The US highlighted the importance of inventories and sought revisions guidelines on policies and measures (P&amp;Ms), national circumstances and technology transfer. CANADA cited examples of inconsistencies in national communications stemming from a lack of clarity in the guidelines. SWITZERLAND said the Secretariat should record the difficulties cited by countries and called for revision of in-depth review projects. He also raised the issue of expert post reviews and evaluation of GHG inventories, and proposed a draft of decisions for COP-4, calling for consideration of aerosols from combustion of fossil fuels, biomass burning and other greenhouse gas precursors as highlighted by the IPCC's Second Assessment Report (SAR).

On Thursday, 11 June, the Chair's draft conclusions were presented calling upon Parties to provide submissions to the Secretariat on clarifications, additions and/or amendments to the revised guidelines for the preparation of Annex I national communications and proposed one workshop on national communications and another with the aim of addressing the problems identified by SBSTA. The draft conclusions (FCCC/SBSTA/1998/L.2) on this item were adopted without amendment.

METHODOLOGICAL ISSUES

Several issues were considered under this agenda item, including emission inventories, land use change and forestry, the impacts of a single project on emissions in the commitment period, and the scientific and methodological aspects of the proposal by Brazil based on historic emissions.

EMISSION INVENTORIES: Delegates discussed emission inventories on Thursday, 4 June (FCCC/SBSTA/1998/4, and Misc.2). The US and the EU stressed the need to incorporate the additional methodological issues raised by the Kyoto Protocol into the existing guidelines to enhance understanding of the three new gases under the Kyoto Protocol. POLAND stressed further work on emission factors since these differ for different sectors, between and within countries. He called for guidelines for the preparation of default projections.

On Thursday, 11 June, the draft conclusions (FCCC/SBSTA/1998/ L.3) were adopted. They call for active participation by Parties in the ongoing activities of the current programme of work on GHG inventories methodology and call upon Parties to organize a workshop with the participation of methodological experts from the roster of experts as well as other relevant organizations. They also note that the Kyoto Protocol includes provisions related to GHG inventory methods and recognizes the methodological challenges arising from the need for aerosol emissions.

LAND USE CHANGE AND FORESTRY: On 4 June, delegates addressed land use change and forestry (LUCF) during general statements on methodological issues. Some countries, including JAPAN and the US, noted the urgent need for a decision including anthropogenic activities because this influences the ability of some countries to ratify and implement the Protocol. The EU reaffirmed that inclusion of sink activities should not undermine incentives for action on gross emission mitigation. MAURITANIA and ICELAND cautioned against concentrations solely on forests and conservation. The Alliance
of Small Island States (AOSIS) expressed concern over "blanket" inclusion of all land use and forestry activities in sinks since this would introduce uncertainties and distract the Protocol from focusing on fossil fuel dependence.

Several delegations said SBSTA should call on the IPCC to address outstanding technical questions in a special report. The EU called for work on methodologies for quantifying changes in soil carbon as a result of forest activities since 1990. With AOSIS, JAPAN, the US and AUSTRALIA, he sought clarification of IPCC terms and definitions of afforestation, reforestation and deforestation. CANADA said soil sink projects should be included under the CDM. The US cautioned against delays in the CDM process and said sink-related activity must move forward in the project-based process. COLOMBIA stressed that technical aspects of Kyoto Protocol Article 3.3 (sinks related to forests), such as establishing what is meant by net change in stock, must be resolved. Addressing Kyoto Protocol Article 3.4 (other sinks) depends on the will of some Parties. NORWAY and CANADA sought to establish a process to enable COP-5 to consider sinks.

A contact group on land use change and forestry (LUCF), chaired by Paul Maclons (South Africa) and Maciej Sadowski (Poland), met four times in closed and open sessions. While agreeing on the need for an IPCC report, delegates disagreed on the content, timing and consideration of its results. Debate centered on: *inter alia*: holding a workshop to consider Article 3.4 after COP-4; specific articles for consideration by IPCC in its special report; the impact of addressing only forests as sinks; and whether the special report will be considered at COP-6, or at the first meeting of the Parties to the Kyoto Protocol (COP/MOP-1). On Thursday, 11 June, the contact group agreed to the Chair's revised draft conclusions.

On Friday, 12 June, SBSTA adopted draft conclusions on LUCF (FCCC/SBSTA/1998/CRP.3). The draft conclusions state that SBSTA understands Article 3.3 to mean: the adjustment to a Party's assigned amount shall be equal to the verifiable changes in carbon stocks during the period 2008 to 2012 resulting from direct human-induced activities of afforestation, reforestation and deforestation since January 1990. Where the result of this calculation is a net sink, this value shall be added to the Party's assigned amount. Where the result of this calculation is a net emission, this value shall be subtracted from the Party's assigned amount.

SBSTA also requested the Secretariat to organize a workshop of experts prior to COP-4 to consider data availability based on definitions by Parties in relation to Article 3.3. This workshop would report to SBSTA-9. SBSTA also agreed to plan a workshop after COP-4 to focus on issues arising from Article 3.4. SBSTA requested the IPCC to prepare a special report to enable the COP to take decisions on land use, land change and forestry at COP/MOP-1. The special report would address the methodological, scientific and technical implications of the Protocol, particularly Article 3. The conclusions also state that issues not covered by the special report would be included in the TAR. BRAZIL amended language in the conclusions on "including those nominated by the IPCC," to anyone "engaged in the IPCC process." The conclusions were adopted as amended. JAPAN noted its intention to make a financial contribution to the workshop to be held prior to COP-4.

**IMPACTS OF SINGLE PROJECTS IN COMMITMENT PERIOD:** In a proposal submitted to SBSTA (FCCC/SB/1998/MISC.1/Add.2) on Wednesday, 3 June, ICELAND expressed concern over the difficulties faced by small countries arising from the setting of quantified limits on single project emissions and called for the adoption of a threshold value for significant proportional impact and separate reporting of process emissions. AOSIS and the US expressed concern. The EU recalled that differences in quantified emission reductions were already addressed and was reluctant to give exceptions for single projects. SWITZERLAND said the proposal would threaten credibility.

On Thursday, 11 June, ICELAND presented a revised proposal (FCCC/SBSTA/1998/MISC1/Add.4.) that included an extra requirement on the definition of small economies and also specified that separate reporting of process emissions can only be initiated in the event that the assigned emissions amounts are exceeded as a result of single projects. He said that the suggested criteria limits application to only three Annex I Parties. The delegates adopted draft conclusions (FCCC/SBSTA/1998/L.5) that invited consideration of the issue at SBSTA-9 and acknowledged the additional information provided.

**SCIENTIFIC AND METHODOLOGICAL ASPECTS OF A PROPOSAL MADE BY BRAZIL:** On Friday, 5 June, delegates considered the scientific and methodological aspects of a proposal made by Brazil (FCCC/AGBM/1997/MISC.3/Add.1) during the AGBM process and forwarded by COP-3 to SBSTA. BRAZIL recalled that the proposal contains a clean development fund that has been replaced by the Kyoto Protocol's Clean Development Mechanism (CDM). The proposal contains a technical and scientific aspect that establishes a methodology for linking the historical responsibility for increasing global temperature with the responsibility for lowering emissions. He proposed a contact group to consider the issue at this meeting and announced his Government will convene an expert meeting soon. CHINA said the proposal highlights the "real" relative responsibility of Annex I and non-Annex I countries. GREENPEACE said some of the methodology needs enhancement, noting that the proposal contains no methodology for several technical and policy assumptions. He said further development would be useful for the second review of adequacy of commitments. The EU, the US, SWITZERLAND and AUSTRALIA said the proposal requires broader discussion and expressed concern about, *inter alia*: the method for reconstructing historical emissions; indicators that ignore the rate of change; and the availability of data. A group was convened to work on concrete suggestions on advancing the proposal.

On Thursday, 11 June the contact group presented draft conclusions (FCCC/SBSTA/1998/L.6) recognizing that there were outstanding issues and welcoming the offer by Brazil to host a workshop and report back to SBSTA-9.

**TECHNOLOGY TRANSFER AND TECHNOLOGY INFORMATION CENTRES**

On Thursday, 4 June, SBSTA considered development and transfer of technologies (FCCC/SBSTA/1998/S. INF.2, INF.5 and MISC.4). Regarding the poor responses to the technology needs survey, the G77/CHINA explained that this can be attributed to the absence of specific frameworks for the implementation of the Convention. AUSTRALIA called for the identification of synergies in technology transfer activities under other Conventions. With the US, he noted that national communications of non-Annex I countries would be helpful in identifying technology needs and underscored the role of the private sector. The EU expressed hope that the flexibility mechanisms proposed under the Protocol would facilitate the transfer of technology. URUGUAY noted the need to transfer concrete emission reduction projects, not just reports. He recommended a financial mechanism for technology transfers. CHINA said the issue of technology transfer had been marginalized and noted that it is different from information centers. COP-4 should address this as a separate agenda item. CHILE noted the potential for technology transfers through the CDM.

On the issue of technology information centres, delegates called for: the identification and assessment of means to improve the flow of information and technology; the establishment of regional centres; greater engagement of the private sector; consideration of needs and participation of beneficiaries; and the need to develop, strengthen and use existing institutions. On technology work programmes, delegates recommended: improved government coordination; identification of barriers to transfer; incentives for transfers by the private sector; and a September deadline for submissions on the work programme.

The contact group on technology, co-chaired by Renate Christ (EC) and Wanna Tanunchawatana (Thailand) met throughout the week and considered the Co-Chairs' proposed conclusions. Delegates debated various formulations on identification of technology information needs in non-Annex I communications and proposals on next steps for technology information centres. Under a proposal from the US and the EU, the first step would be to assess the extent to which managers and technicians in relevant sectors are aware of such tech-
nologies and processes, followed by the identification of sources and supplies. SBSTA would request the Secretariat to, *inter alia*, identify the desired functions and services to be provided by such centres and networks. Under a G-77/China proposal, SBSTA would state that initial priority should be given to supporting the establishment and enhancement of national and regional technology information centres. The contact group did not reach agreement on these issues.

On Friday, 12 June, SBSTA considered draft conclusions (FCCC/SBSTA/1998/CRP.5). The conclusions contain bracketed text noting that non-Annex I communications are an important means of identifying technology information needs to facilitate adequate adaptation to climate change or the implementation of their obligations under the Convention and urging non-Annex I Parties to identify their needs in accordance with decision 10/CP.2, paragraph 20.

Regarding the bracketed text, the G-77/China and the Marshall Islands preferred the first bracketed proposal. The US favored the second formulation, noting the first option limits the scope of the paragraph. He said the latter would include references to adaptation and mitigation. Concerned delegations engaged in informal consultations throughout the day. Delegates agreed to: “adequate adaptation to climate change in accordance with decision 10/CP.2, paragraph 21, and to facilitate implementation of their obligations under the Convention in accordance with 10/CP.2, paragraph 20, and may include other relevant information in accordance with 10/CP.2.”

Under the conclusions, SBSTA noted the results of the expanded technology and technology needs survey and that the identification of technology information needs at the country level is an important step in connection to the improvement and development of modalities for the diffusion and transfer of technologies. The conclusions also state that SBSTA took up the question of technology information centres but was not able to reach consensus. Views of the EU, the US and the G-77/China were compiled in document FCCC/SBSTA/1998/MISC.5. Discussion of this issue will continue at SBSTA-9 with the intention of forwarding its conclusions for consideration by COP-4.

**ARTICLE 6 OF THE CONVENTION: EDUCATION, TRAINING AND PUBLIC AWARENESS**

On Wednesday, 10 June, delegates considered for the first time Article 6 of the FCCC -- Education, Training and Public Awareness. The Chair reported that the Secretariat and UNEP held a workshop the previous day. The workshop highlighted the scope for cooperation on public awareness and noted: that public awareness should not be limited to particular events but should be part of larger efforts; the need for more effective climate awareness strategies; the need for Parties to provide more information on particular awareness building strategies; and that Article 6 can be operationalized by SBSTA.

UNEP reiterated the importance of public support in the implementation of the Convention. Sri Lanka and Iran called for equal distribution of information packages prepared by CC:INFO to countries beyond those included in country study programmes. Switzerland said that the existing information units of the Secretariat and UNEP should be used to further work under Article 6 and, with the Central African Republic and Iran, called upon the IPCC to provide reports in languages other than English.

The African Group, with Sri Lanka and The Gambia, called on Parties to make resources available for institutional capacity enhancement and to expand the sphere of African countries participating in country studies. She said that there was a need to operationalize Article 6 and expand activities to all facets of society, and stressed that such activities are neither cheap nor short term. To this end, she stated that the proposal to expand the mandate of UNEP is worth considering. Supported by Indonesia and Canada, she called on SBSTA to request the Secretariat to prepare a paper on work under Article 6 for consideration at SBSTA-9. She recommended that SBI include a budget-line for the implementation of Article 6 in funding proposals as well as for translation of documents; and noted the importance of timely delivery of resources for the implementation of education programmes.

The US highlighted work of programmes such as the IGBP-START (Systems for Analysis Research and Training) and the coordinating role the Secretariat can play in North-South exchange of experience. The CENTRAL AFRICAN REPUBLIC and Canada noted the need for information and expertise sharing and a resource centre for copyright-free material. The EU called for a review of the scope of current education programmes and development of more specific reporting guidelines for this issue.

The draft conclusions (FCCC/SBSTA/1998/CRP.2): note the views expressed by the meeting; call for Parties to fully present their activities related to this article when submitting their national communications; and invite Parties to submit by 14 December 1998 their views on possible means of promoting the implementation of this article as well as proposals on how to integrate this into SBSTA’s work programme. The conclusions were adopted with some modifications.

**ROSTER OF EXPERTS**

On Friday, 5 June, delegates considered the agenda item on the roster of experts (FCCC/SBSTA/1998/INF.4). Canada, the US and New Zealand called for regular reviews of the roster as well as inclusion of gender considerations in the identification of persons to recommend. In response to a query from Ethiopia on the fate of previous submissions to the roster, the Chair noted that the compilation was an ongoing process. Botswana stressed the need for adequate time for notifying and inviting the experts and, supported by China, stressed the need for regional distribution of experts. Draft conclusions of the deliberations (FCCC/SBSTA/1998/L.4) were adopted.

**SUBSIDIARY BODY FOR IMPLEMENTATION**

On Tuesday, 2 June, Chair Bakary Kante (Senegal) opened the first meeting of the SBI. Michael Zammit Cutajar, FCCC Executive Secretary, noted that 37 countries have signed the Kyoto Protocol, including Parties representing 39% of Annex I CO2 emissions. The G-77/China called on delegates not to be distracted from implementing the Convention, noting the second review of Annex I Party commitments due by December 1998. He also stressed decisions on new and additional financial resources and inadequate implementation of previous COP decisions on technology transfer.

The SBI-8 held nine sessions over the course of the two-week meeting. The SBI considered the following agenda items: election of officers other than the Chair; national communications; financial mechanism; second review of the adequacy of Annex I Party commitments; amendments to the FCCC annexes; arrangements for intergovernmental meetings; administrative and financial matters; and involvement of non-governmental organizations. Several contact groups met to further discuss issues and draft conclusions. Several of the contact groups met in closed sessions, while others were open to NGO attendance. The second week the Bureau decided that all contact group meetings would be open unless the group objected.

**ELECTION OF OFFICERS OTHER THAN THE CHAIR**

Chair Kante announced Iran’s nomination as SBI Vice Chair for Asia on 2 June. At SBI’s closing session on 12 June, he informed the group that regional coordinators had reached no agreement on election of officers. He proposed keeping the item under consideration for SBI-9. Delegates stated their positions on the issue. On behalf of the Western European and Others Group (WEOG), Austria recalled that the Rules of Procedure allow a second term and called for making use of the experience of WEOG’s candidate for Vice-Chair. She expressed WEOG’s willingness to undertake further consultations.

The Philippines, on behalf of the Asian Group, and supported by India, Pakistan, China, Saudi Arabia, Indonesia, Kuwait and Iran, stated that, on the election of the Vice-Chair, they had asked for a guarantee to honor the UN principle of geographical rotation after the next term, but this had been rejected.
ANNEX I PARTY COMMUNICATIONS

Delegates began discussion on Annex I Party communications on Tuesday, 2 June. Three scheduling options for future communications and review were considered. Many Annex I Parties favored: lengthening the period between submissions of national communications; interim electronic reports; and synchronized reporting. Many favored 2001 for the next communication, but SWITZERLAND said information on achievement of stabilization by 2000 could not be provided until 2002. The US called for less emphasis on details of domestic actions or national circumstances and more time for data collection on emissions trading and CDM projects. The EU and NEW ZEALAND favored a fourth national communication deadline of 2005 and a strengthened reporting process leading to the commitment period 2008-2012. CHINA, with the US, noted COP decisions urging Annex II Parties to include measures taken for technology transfer. The Chair invited Parties to submit nominations for a roster of experts for the in-depth review of Annex I Parties’ second national communications.

Draft conclusions on national communications from Annex I Parties (FCCC/SBI/1998/CRP.2) were submitted for SBI consideration on Monday, 8 June. An EU proposal for a draft COP-4 decision on revised guidelines was not supported. A SWISS proposal not to limit submission of Parties’ views to “the scheduling of” subsequent communications was accepted. As amended, the document calls for Parties who have not done so to finalize dates of in-depth review visits, submit their annual national GHG inventory for 1998, and/or submit their second communications. The document also urges all Parties to take actions to enlarge the participation of experts from non-Annex I Parties in the Roster of Experts that will review the communications, and to submit views on subsequent communications for consideration by SBI-9.

NON-ANNEX I COMMUNICATIONS

On Thursday, 4 June, the SBI took up non-Annex I communications. The Secretariat stated that eight initial communications have been received, 23 are expected in 1998 and 30 in 1999. The deadline was March 1998. The EU and others called for a COP-4 decision on in-country expert reviews. The G-77/CHINA highlighted financial and technical constraints and capacity building for adaptation. SRI LANKA called for training for adaptation in all regions. THAILAND noted difficulties with the adaptation assessment model. GEORGIA and AZERBAIJAN stressed continuing GEF support. Assistance was requested for: finance and know-how (MOROCCO); technical needs (BURKINA FASO); longer-term implementation (CENTRAL AFRICAN REPUBLIC, ARGENTINA); vulnerability (ARGENTINA); emission mitigation in other sectors and formulation of implementation programmes (URUGUAY, ARGENTINA); and second national communications (SENEGAL, MEXICO).

The G-77/CHINA reminded UNEP and UNDP that they are implementing agencies of the operating entity of the financial mechanism. NIGERIA suggested GEF subregional offices for project monitoring. BURKINA FASO, THAILAND and AZERBAIJAN called for translations of guidelines. SENEGAL and ARGENTINA noted constraints on translation and dissemination of communications. The EU and AUSTRALIA stressed accelerating submission of initial communications, assisted by the GEF. UZBEKISTAN stressed workshops for information exchange for Central Asia. BENIN requested facilitation of conference attendance for delegates from Africa.

A contact group, chaired by John Ashe (Antigua and Barbuda) and Dan Reifsnyder (US), was formed to consider non-Annex I Party communications as well as review and guidance to the financial mechanism. On Wednesday, 10 June, the Co-Chair Reifsnyder reported that the contact group had appointed a smaller group to recommend a decision.

On Friday, 12 June, the Chair introduced documents that note the views of Parties together with the observations of the Secretariat (FCCC/SBI/1998/INF.3 and Add.1), including information on a workshop in Malaysia to assist deliberations. Contact group Co-Chair Reifsnyder reported that the Co-Chairs had failed the SBI Chair, having run out of time to reach a substantive solution. It was decided to continue discussion at SBI-9.

REVIEW OF THE FINANCIAL MECHANISM

On Thursday, 4 June, the Chair introduced discussion of the review of the financial mechanism, noting it must be completed with a COP-4 decision. On guidance to the GEF, the Chair noted that new needs have arisen since guidance was provided in 1996. The G-77/CHINA called for: GEF adherence to COP guidance; no funding of activities inconsistent with FCCC principles; and, with EGYPT, attention to adaptation measures. EGYPT called for long-term sustainability. CHINA called for: a more streamlined project approval process; transparency in incremental cost calculation; and, with IRAN, no conditionalities attached to the activities of multilateral funding institutions, which was opposed by CANADA.

The EU distinguished GEF review from future guidance; and, with SWITZERLAND, CANADA and VENEZUELA, proposed making it the permanent FCCC financing mechanism, subject to future reviews. SWITZERLAND stressed adequacy and predictability in the flow of funds. SAUDI ARABIA cautioned against a premature conclusion. CANADA favored CDM support for adaptation activities. JAPAN noted its contribution of 20% of GEF funding and called for extensive evaluation. IRAN criticized a GEF overemphasis on energies. The Chair asked Dan Reifsnyder (US) and John Ashe (Antigua and Barbuda) to co-chair a contact group to prepare a draft decision.

On Friday, 12 June, the Co-Chair Reifsnyder stated that the contact group had not been able to complete its work. The Chair noted documents on Parties’ views on the review of the financial mechanism and additional guidance to the GEF (FCCC/SBI/1998/MISC.4 and Add.1) and it was concluded that further deliberations are needed at SBI-9. Parties are invited to submit comments to the Secretariat by 15 August 1998, for compilation and distribution at SBI-9.

SECOND REVIEW OF THE ADEQUACY OF ANNEX I PARTY COMMITMENTS

On Wednesday, 3 June, SBI began consideration of the second review of the adequacy of Annex I Party commitments. The G-77/CHINA, supported by many G-77 members and CHINA, said the Kyoto Protocol was the first step in the review process and noted that the group was working on a draft decision. The EU welcomed Kyoto Protocol provisions for a review at COP/MOP-2 and for initiating consideration of second period commitments. Noting the desire for increasingly global participation, he said the EU was ready for discussions with all Parties at COP-4 and beyond, under FCCC Article 7.2 on regular review of Convention implementation. He noted an FCCC provision for non-Annex I Parties to opt for targets.

AUSTRALIA and the EU said all the scientific evidence indicates that actions by Annex I countries alone would be insufficient. The US noted findings that this is due to the small number of Parties involved. SAUDI ARABIA, THE GAMBIA, COLOMBIA, IRAN and INDIA opposed any consideration of voluntary commitments at COP-4. The CENTRAL AFRICAN REPUBLIC called for a decision on the adequacy of Annex I commitments before consideration of other country commitments. IRAN said it is natural to assess new Annex I commitments.

BURKINA FASO emphasized obligations related to developing countries, specifically on technology transfer. CHINA, supported by HUNGARY, called for a review of FCCC implementation, not just commitments. CANADA said future reviews should cover the effect of actions by all Parties over time and that SBSTA should provide scientific and technical information for such a review. HUNGARY noted many Annex I countries will meet their FCCC obligations. He opposed deferring SBI consideration of the review to other bodies.

SAUDI ARABIA recommended discussing non-Annex I Parties’ commitments only after the Kyoto Protocol enters into force.

SWITZERLAND said the second review should, inter alia, address stabilization of GHG emissions by Annex I Parties, and, citing Article 7.2 (a), said the issue of adequacy should not be restricted to Annex I Parties. The EU noted that Article 7 discusses review of “implementation” of the Convention, not just targets. The US noted that the objective of the Convention cannot be achieved simply
through Article 4.2(a) or (b). CHINA insisted that Article 7’s reference to “the” Parties does not include “all” Parties and warned “the North” that pushing too hard risks complete failure.

Discussion continued on Friday, 5 June. The G-77/CHINA, supported by TOGO, said that COP-4’s second review must respect the FCCC mandate and not be distracted by extraneous consideration of new commitments for non-Annex I Parties; COP-4 should convene the next review at the same time as the review at COP/MOP-2, in accordance with Article 9.2 of the Protocol; and subsequent reviews should take place in the year preceding the termination of successive Protocol commitment periods.

The US asked the G-77/CHINA if the intention was to confine discussion of the second review to that agenda item at COP-4; and about the timing of future reviews. The G-77/CHINA: said the second review should be limited to that foreseen in Article 4; noted it would be logical to hold the next review at the same time as COP/MOP-2; and indicated flexibility on timing of subsequent reviews. Referring newly industrialized countries, the US expressed interest in exploring ways to move beyond the static world created by the Annex I list. A way to modify the Annexes was needed. HUNGARY said the timing of reviews should not be linked to the unratified Kyoto Protocol.

SAUDI ARABIA recalled the existing FCCC provision for any Party to undertake Annex I commitments. PERU said the Kyoto Protocol was a very delicate balance. Raising developing country commitments at COP-4 would be a danger for the international community and for the environment. CHINA said the G-77/China position clearly stated that developing countries would not accept new commitments under any guise. MEXICO said questions on OECD membership are inappropriate. VENEZUELA stated that Article 4.2(d) only calls for review of commitments under 4.2(a) and (b). AOSIS said that Parties should not distract from Protocol implementation, noting the CDM will assist sustainable growth with climate protection.

The Chair asked Jennifer Irish (Canada) and Margaret Mukahana (Zimbabwe) to co-chair a contact group to prepare a draft decision. On Wednesday, 10 June, the group presented a draft conclusion in the name of the Co-Chairs, reflecting different views. FCCC/SBI/1998/CRP.1. The draft conclusions, inter alia: reiterate the conclusions of COP-1 that FCCC Article 4.2(a) and (b) are not adequate; recognize the Kyoto Protocol as an important step; and note differing views of the G-77/China and others on the following: whether new commitments by non-Annex I Parties should be introduced; whether the review should consider action by all Parties as necessary to meet the objective of the Convention or just to Article 4.2(a) and (b); and whether the third review should be carried out at COP/MOP-2 or be determined by the COP at future sessions. The draft conclusions invite Parties to submit views by 15 August 1998 to the Secretariat for compilation by SBI-9.

AMENDMENTS TO THE FCCC ANNEXES

On Wednesday, 3 June, delegates considered review of information and possible decisions under Article 4.2(f) (amendments to the FCCC Annexes). AUSTRALIA, CANADA and the EU requested information on Turkey’s approach to responsibilities. The EU said all OECD countries should have stated commitments. The US said any decision on review should include a provision that it be a regular item on the COP agenda. The Chair requested a draft decision. Informal consultations undertaken by Amb. Luis Herrera (Venezuela) did not result in consensus. On 12 June the Chair proposed and delegates agreed that the SBI mandate continuing discussions at SBI-9 on Turkey’s request to be deleted from the Annex I and Annex II lists.

ADVERSE EFFECTS AND IMPACTS OF RESPONSES

On Thursday, 4 June, the SBI took up implementation of Article 4.8 and 4.9 (adverse effects of climate change and impacts of responses). The Chair noted that consideration of Decision 3/CP.3 and the related Protocol Articles 2.3 and 3.14 had been added to the agenda item, as requested by COP-3. The Secretariat introduced the documentation (FCCC/SBI/1998/CRP.1), offering an analytical framework to facilitate response.

BURKINA FASO called for an ad hoc committee, supported by the Secretariat, to assess Annex I Party efforts and report to the COP. The G-77/CHINA, supported by the MARSHALL ISLANDS, called for SBSTA work on this item and a possible expert meeting before COP-4. The MARSHALL ISLANDS called for regional workshops on adaptation. SAUDI ARABIA proposed, inter alia, that: the Secretariat’s analytical framework combine consideration of adverse effects and impacts; SBI form a permanent committee on implementation of Articles 4.8 and 4.9; COP-4 request information from Annex I Parties on policies and measures, fossil fuel imports during the first commitment period and estimated effects on other imports from developing countries; and processes not discriminate against any country clusters identified in Articles 4.8 and 4.9.

AOSIS stressed the urgency of the question of insurance and, with the MARSHALL ISLANDS, viewed the additions to the agenda item title as technical rather than substantive. The EU supported CDM assistance for adaptation, but stressed a focus on mitigation. He noted that action on Article 4.8 must await more certainty on the effects of fossil fuel use, calling for further discussion. VENEZUELA opposed limiting action to studies and called for a COP-4 decision. The US asked for more time for comment. SAUDI ARABIA opposed delaying formation of a contact group on this.

On Monday, 8 June, the G-77/CHINA, supported by SAUDI ARABIA, CHINA, INDIA, VENEZUELA and ETHIOPIA, called on the SBI to identify the needs of developing countries, utilizing the SBSTA and the IPCC. She called for a contact group to prepare a draft decision to take the item up at all future COPs and establish a joint SBI/SBSTA working group. The EU welcomed the Secretariat’s document (FCCC/SBI/1998/CRP.1), and noted, on the paper’s analytical framework, that there was an overstatement of the certainty of information on adaptation. Possible actions were not restricted to funding, insurance and technology transfer. The SBI would not reach definitive conclusions by COP-4 but could initiate work by SBSTA. The US anticipated dramatic improvements in the state of knowledge concerning adaptation in the years ahead. He noted that the FCCC contains no provision obliging Annex I or Annex II Parties to compensate countries that could be affected by response measures. Any such obligation could create a perverse disincentive to reduce GHGs. Instead, FCCC Article 4.8, on response measures, implies that Parties should implement commitments while avoiding or minimizing impacts on developing country Parties.

GEORGIA noted the readiness of many non-Annex I countries to take on voluntary commitments on GHGs, with adequate support under Article 4 within the framework of the CDM. A contact group chaired by Tibor Faragó (Hungary) and Mohammad Reza Salamat (Iran) was formed.

On Tuesday, 9 June, the contact group received a Co-Chairs’ compilation of written inputs from three Parties/regional groups, along with a draft decision, On 10 June, the contact group discussed the Co-Chairs’ text. The G-77/CHINA proposed modifications based on its draft decision paper. On the “analytical framework,” the UK, AUSTRALIA and the US raised a number of questions. JAPAN cautioned that a reference to Protocol Articles 2.3 and 3.14 suggested implementation of the Protocol. On separating the effects of climate change and impacts of response measures, AUSTRALIA said different modeling approaches are used. SAUDI ARABIA, supported by the UNITED ARAB EMIRATES, said the distinction could be made later. The G-77/CHINA proposed alternative language from Decision 3/CP.3 on undertaking a process. The US bracketed references to Protocol Articles 2.3 and 3.14. On actions necessary to meet needs and concerns of developing countries, the US and the EU proposed following the language of FCCC Article 4.8.

On 11 June, the contact group reconvened to review a Co-Chairs’ compilation together with a G-77/China draft decision paper. Parties disagreed over the “considerable uncertainties” associated with the assessment of adverse effects of climate change and “very considerable uncertainties” regarding the impact of response measures. The US, the EU and AUSTRALIA said the uncertainties regarding the impact of response measures are greater.
The G-77/CHINA and the US supported deletion of a paragraph noting the difficulty in distinguishing between natural and human-induced climate change. The EU placed it in brackets.

VENEZUELA proposed adding a reference to assisting the COP/MOP-1 in its consideration of the Protocol articles. Alternative proposals referencing the Protocol were placed in brackets. The EU, supported by AUSTRALIA, JAPAN and the US, preferred to replace a list of information requests with a reference to a paragraph on identification of effects and impacts.

On 12 June, the SBI considered the Chair’s draft conclusions, which state that the SBI, in response to a COP-3 decision, will undertake a process to identify and determine actions to identify the special needs of developing country Parties arising from the adverse effects of climate change and/or the impacts of the implementation of response measures. They note that Articles 2.3 and 3.14 of the Kyoto Protocol are also relevant to considerations of FCCC Articles 4.8 and 4.9, and that in accordance with decision 1/CP.3 a joint approach was adopted. The conclusions also note discussion by the contact group together with text the contact group did not have time to consider. The SBI is to continue its consideration of the item at SBI-9 with a view to recommending a draft decision for adoption at COP-4.

The Chair noted that discussion on the issue began in 1992. The US, supported by JAPAN and HUNGARY, proposed, on the linkage between the FCCC articles and the Protocol provisions, replacing a reference to “a joint approach to consideration of the issues” with a reference to an amendment to the provisional agenda item under which the Protocol Articles 2.3 and 3.14 were placed in parentheses. He said the modification would flag the relationship between the two and leave options open. ZIMBABWE, on behalf of the G-77/CHINA, said FCCC Articles 4.8 and 4.9 were long overdue for implementation. She expressed disappointment at the lack of progress on reaching agreement and noted a lack of cooperation. With CHINA, SAUDI ARABIA, INDIA and IRAN, she regretted the absence of developed country Parties from a scheduled contact group meeting the previous night. SAUDI ARABIA reminded Parties that they should consider the progress on all subjects as a package. They could not expect that developing countries would proceed on some issues while their interests and concerns were blocked on others. He proposed that the SBI submit a request to SBSTA for methodological work in order to help the work progress at COP-4 and that such a request be attached to the draft conclusion.

The US objected to G-77/China comments about other Parties’ lack of willingness to discuss the issues. He said the problem on the previous evening was that so many groups were meeting on different issues at the same time. His delegation was unable to cover everything, but he fully expected to engage in the issue at the next session. He also proposed an amendment to the Chair’s conclusions to reflect agreement in the contact group on referencing the effects of climate change and/or the impact of implementation of response measures. On SAUDI ARABIA’s proposal, HUNGARY said the relevant text in the draft conclusion was unfinished. This could be considered in relation to SAUDI Arabia’s request. IRAN suggested that the SBI send a letter to the SBSTA Chair requesting that he include consideration of methodological and technical aspects of Articles 4.8 and 4.9 in his agenda at SBSTA-9. The EU emphasized his understanding of the concerns of developing countries, particularly those vulnerable to climate change. On Saudi Arabia’s proposal, he said the draft conclusions contain an invitation to SBSTA regarding methodological work and this appears wrong to pre-empt a COP-4 decision. The conclusions were adopted as amended.

ARRANGEMENTS FOR INTERGOVERNMENTAL MEETINGS

The Chair introduced discussion on involvement of NGOs on Thursday, 4 June, calling for consensus at SBI-8. The US, opposed by the EU, called for including labor, agriculture, and quasi-governmental entities. SWITZERLAND extended this to all Agenda 21 major groups except US and CANADA. Opposed US request for NGOs from the contact group on flexibility mechanisms. General support was expressed for Chair discretion on NGO access to informal meetings. The CLIMATE ACTION NETWORK asked for a proposal for additional participation and transparency in registration. An industry representative called for greater access to informal meetings with the Chair.

On Monday, 8 June, the Chair introduced his draft conclusions (FCCC/SBI/1998/CRP.3). The US, with others, deleted a request for additional information on the objectives of NGOs. The EU supported existing arrangements accrediting three NGO constituencies. SAUDI ARABIA, supported by CHINA and VENEZUELA, proposed that “Parties” rather than “Chairmen” agree on NGO participation in informal contact groups. Delegates accepted a US compromise allowing participation unless the group objects. The final paper also requests the Secretariat to continue consultations with representatives of different NGOs to arrive at an improved set of NGO constituencies and for improving availability of documentation to NGOs.

On Friday, 12 June, the Chair proposed amending a paragraph on the conclusion on NGO participation in the report of the SBI session to read that representatives of NGOs may be allowed to participate “as observers in open-ended” informal contact groups, unless the Parties object. CHINA, supported by SAUDI ARABIA and INDIA, and opposed by the US, called for deletion of “the” before Parties as “the” implies that all Parties would have to object to NGO participation before they could be barred. The US, with CANADA and the EU, said the understanding when the conclusion was adopted was that contact group Chairs would seek to determine the sense of the group itself. SAUDI ARABIA objected, stating that one Party’s objection is enough to block NGO attendance. The US observed that the report was to
reflect what happened when the original conclusions were adopted, not current discussion. Upon a suggestion by the Executive Secretary, it was agreed that the subparagraph would be left unchanged but placed after the other subparagraphs on NGO participation. It will be immediately followed by a paragraph saying that the Secretariat is mandated to draft a decision on this issue for SBI-9 to consider for recommendation to COP-4. The report was adopted with these amendments.

**SBSTA/SBI JOINT SESSIONS**

SBST and SBSTA met jointly three times to consider: activities implemented jointly (AIJ) under the pilot phase; joint implementation (JI) (decision 1/CP.3, paragraph 5(c)); the Clean Development Mechanism (CDM) (decision 1/CP.3, paragraph 5(e)); and emissions trading (decision 1/CP.3, paragraph 5(b)). A SBSTA/SBI contact group met four times to prepare a draft decision(s) on: the division of labor for forthcoming SBST and SBSTA sessions; substantive issues regarding AIJ, JI, the CDM, and emissions trading; and elaboration of a work programme.

**OPENING STATEMENTS**

On 2 and 3 June, the joint SBI/SBSTA sessions heard welcoming remarks and opening statements. Maria Julia Alsogaray, Secretary of Natural Resources and Sustainable Development of Argentina, said that there is a great interest, almost a consensus, on the early functioning of the CDM and emissions trading. She urged delegates to develop the elements common to all flexibility mechanisms together.

UNEP Executive Director Klaus Toepfer pointed to the connection between flexibility and minimizing repercussions for economic growth potential. He underlined UNGASS’s call for improved scientific knowledge on the linkage between environmental conventions, policy coherence and public awareness. He expressed the hope that his task force could support conventions.

FCCC Executive Director Michael Zammit Cutajar said he had suggested that the Bureau consider inviting UNEP to offer help on specific issues with linkages to other processes. He spoke of an explosion of activities seeking to contribute to the design of the three new mechanisms envisaged in the Protocol. The sooner Parties set the basic rules, the sooner economic and institutional actors could adjust their plans.

SBI Chair Kante recalled that the CDM, emissions trading and joint implementation are new to the agenda of the subsidiary bodies. This joint meeting was designed to identify preparatory work needed for COP-4 and reach agreement on a work schedule. Key issues to address included identifying questions that can be resolved by COP-4, and essential areas of work on each mechanism, such as methodological issues.

The Secretariat introduced the following documents: Mechanisms for cooperative implementation (FCCC/SB/1998/1); Submissions by intergovernmental and non-governmental organizations (FCCC/SB/1998/MISC.2); Submissions from Parties on preparatory work needed for COP-4 (FCCC/SB/1998/MISC.1); and Update on activities implemented jointly (FCCC/SBSTA/1998/INF.3).

Delegates made statements on flexibility mechanisms in general, as well as on specific mechanisms. The G-77/CHINA said the joint cooperation mechanisms bring about technical, political and other new uncertainties that must be settled. Many speakers, including URUGUAY, NICARAGUA and SAUDI ARABIA, cautioned against spending an inordinate amount of time discussing cooperative mechanisms, which only serve selected countries.

The AFRICAN GROUP said cooperative implementation should not overshadow the review of commitments, technology transfer and capacity building. CHINA warned that the Kyoto Protocol should not copy the Montreal Protocol. The Kyoto Protocol’s implementation depends on technology and resource transfers to developing countries. He cautioned against imposing reduction commitments on developing countries. ZIMBABWE did not anticipate a final resolution of issues surrounding flexibility mechanisms at COP-4. INDIA opposed any hierarchy or prioritization of work with regard to the three collaborative mechanisms.

The EU stressed that Parties must start with domestic action and said flexibility mechanisms, which must be cost effective and verifiable, should not create loopholes that weaken the commitments to be made at COP-4. On the uncertainties surrounding the new mechanisms, AOSIS called for a non-compliance regime and noted their supplementary role. He noted the importance AOSIS attaches to adaptation. NORWAY opposed quantitative caps on the use of flexibility mechanisms. With COLOMBIA, COSTA RICA and IRAN, he noted they are supplemental to domestic action. SOUTH AFRICA and IRAN noted that COP-4 cannot finalize work on setting modalities and guidelines for the mechanisms. SLOVENIA reiterated the urgency of action, calling for proposed working groups to provide sufficient input to COP-4.

AUSTRALIA, supported by RUSSIA, called for cost-effective mechanisms and said that credits should be transferable across the three mechanisms for the achievement of the Protocol’s aims.

ARGENTINA stressed the importance of setting COP-4’s priorities and suggested moving on those issues, such as the CDM, where consensus has been achieved.

**EMISSIONS TRADING:** On emissions trading, the EU said the adoption and ratification of a compliance regime is a prerequisite for emissions trading, as is careful consideration of risk-sharing between buyers and sellers. The US favored a simple set of rules for emissions trading and specified, inter alia, that no formal trading should occur until the Protocol enters into force. A Party should not be able to sell once it has emitted its allowed amounts during any period, i.e., “deficit trading.” He opposed limiting the percentages that can be sold. NEW ZEALAND called for early decisions on transparent emissions trading to harness economic efficiency to the achievement of environmental goals, backed by a firm compliance regime. He objected to a proposal for ceilings on amounts traded. The REPUBLIC OF KOREA and NIGERIA stressed that emissions trading should supplement national reductions and cautioned that rules to govern it must be defined in advance to avoid compliance and verification problems. CHINA noted that emissions trading is illegal until the COP defines relevant rules, principles, and guidelines. Supporting emissions trading, RUSSIA said the Russian people had paid a very high price for “hot air” by reducing their living standards.

CANADA tabled a discussion paper on principles, modalities, rules and guidelines for an international emissions trading regime on behalf of Australia, Canada, Iceland, Japan, New Zealand, Norway, Russia and the US. The tradable unit would be Assigned Amount Units (AAUs). AAUs would be denominated in “CO₂ equivalent” and would express one metric tonne of CO₂ equivalent emissions. Each Annex B Party could issue serialized AAUs from its “assigned amounts.” AAUs would be valid until used to offset emissions for the purposes of contributing to compliance. Parties could trade directly and/or authorize legal entities to acquire and transfer AAUs. Each Annex B Party would need to comply with Protocol Article 5 (national emission estimation systems) and Protocol Article 7 (emissions inventories). They must also establish and maintain a national system for recording their “assigned amounts” and tracking AAUs held, transferred or acquired. Each Party would also be required to report annually on activities and be assessed on compliance at the end of the commitment period.

**CLEAN DEVELOPMENT MECHANISM:** On the CDM, the EU noted the need to agree on: what contribution the CDM can make to Annex I QELROs; the operational entities of the CDM; and the form and identity of the various institutions established under Article 12 of the Protocol. He emphasized that this article does not refer to removals by sinks and suggested that the CDM should not apply to sinks unless the COP/MOP decides otherwise. The US stressed it was premature to limit the extent to which CDM activities may account for emissions limitation and cautioned against the chilling effect of administrative restrictions. The G-77/CHINA expressed alarm at interpretations of the CDM as a clean production mechanism or a global carbon fund. He opposed having any entity outside the FCCC operate the CDM.

GEORGIA cautioned that the CDM, in its current form, makes developing countries dependent on the will of developed countries and said there is a need for financial resources to assist developing coun-
tries. MAURITIUS emphasized the CDM for poverty alleviation and ETHIOPIA called for elaboration on this at COP-4. With COLOMBIA, COSTA RICA, SLOVENIA, SENEGAL, NIGERIA and IRAN, NORWAY called the CDM a tool for sustainable development in non-Annex I countries that should also contribute to climate change objectives. He said additional time is needed for inclusion of sinks in the CDM. Supported by SAUDI ARABIA, INDIA noted that the CDM's origins are in sustainable development through development cooperation and resource transfer.

COLOMBIA and VENEZUELA recommended that CDM projects, *inter alia*, produce real emissions reductions and, with COSTA RICA, accord with host country wishes. Supported by COSTA RICA, NICARAGUA, ARGENTINA and IRAN, COLOMBIA opposed ignoring sinks, noting that they are also biodiversity deposits. COSTA RICA also opposed re-negotiation on what kinds of sinks are included. The REPUBLIC OF KOREA expressed reservations about the inclusion of forestry under the CDM and cautioned against the temptation to micromanage the CDM through extended bureaucracies. IRAN distinguished the CDM from other mechanisms, pointing out that it is a multilateral rather than bilateral mechanism, with international supervision. He cautioned against turning the CDM into a clean energy mechanism. URUGUAY called for further definition and contact group discussions.

**ACTIVITIES IMPLEMENTED JOINTLY:** On AIJ and JI, the AFRICAN GROUP, supported by SOUTH AFRICA, noted that African countries have neither participated in AIJ nor received funding because donors seem to prefer other regions. Several countries, such as BURKINA FASO, NIGERIA and the CENTRAL AFRICAN REPUBLIC, stressed the need to wait until the end of the AIJ pilot phase before drawing conclusions on its viability. IRAN favored continuation of the AIJ pilot phase and development of guidelines. The US said that projects begun under AIJ that lead to legitimate emissions reductions should receive credits. The EU said the AIJ experience gained since COP-1 can provide valuable guidance on questions of flexibility mechanisms in the Protocol.

**CONTACT GROUP ON MECHANISMS**

Delegates agreed to discuss the mechanisms in a contact group chaired by Yvo de Boer (Netherlands) and Gylvan Meira Filho (Brazil). On Monday, 8 June, Co-Chair de Boer reported in a joint SBI/SBSTA Plenary that the group had met three times to: identify issues related to the mechanisms; consider a work programme; and suggest decisions. The group mandated a Co-Chairs' paper submitted as a proposed schedule of work. The G-77/CHINA, supported by the PHILIPPINES, SAUDI ARABIA and CHINA, called upon SBSTA to clarify methodological issues before substantive issues are discussed. He also noted, with CHINA, the G-77/CHINA’s current consideration of this item; called for consideration of rules, guidelines and modalities and other relevant issues; and, with the PHILIPPINES, opposed establishing another contact group on similar issues. The Chair urged that the two groups’ work be harmonized. The EU introduced a proposal on international emissions trading, noting differences from the Canadian proposal in addressing: complementarity; environmental effectiveness, compliance mechanisms, market transparency, risk and liability rules, reporting requirements, and eligibility.

On 10 June, the contact group met to discuss a Co-Chairs’ draft proposed schedule on mechanisms. The G-77/CHINA presented an initial list of issues to address, and stressed consideration of fundamental issues before timing and schedules of work. NORWAY, on behalf of a group of countries and supported by the US, recalled the non-paper on emissions trading distributed by the group the previous week, and the package of four mechanisms agreed in Kyoto. He stressed that quantitative caps, which could lead to fewer developing country projects, had not been adopted in Kyoto. Referring to its non-paper, the EU stressed domestic actions and called for: ceilings on use of mechanisms; guidelines, rules and procedures; a compliance regime as a prerequisite; and parallel work on the three mechanisms. The US suggested basing group discussions on both the G-77/China questions and the Co-Chairs’ draft proposed schedule.

In the evening, delegates received the G-77/CHINA’s proposed work programme on mechanisms. Discussion of its elements took place that evening and the following day. The G-77/CHINA suggested deferring AIJ until after the pilot phase designated at COP-1.

Countries were limited to volunteering proposals for additional elements and questions for clarification. For CDM and Article 6 projects, delegates considered elements under methodological/technical work, institutional issues, process and linkages, as well as participation in projects under the CDM. For emissions trading between Annex I Parties, delegates considered general issues.

On emissions trading, the US questioned the inclusion of language on rights and entitlements of Annex I Parties. The G-77/CHINA commented that “rights” are included in the literature on common property resource trading schemes and in the FCCC regarding the right to develop. The EU and the US stated that entitlements for trading have already been established under the Kyoto Protocol. The US said it is not “rights” but “assigned amounts” that are discussed in the Protocol, and that the emissions and allocations of non-Annex I Parties will only be addressed in the longer term when they participate. He invited discussion on this. Several delegates questioned the inclusion of language on funding of adaptation in the G-77/China’s paper.

Additional elements were proposed by Annex I Parties, including SWITZERLAND, the EU, the US, CANADA, AUSTRALIA and NEW ZEALAND. Under emissions trading, new text covered, *inter alia*, involvement of legal entities and verification, reporting and accountability with regard to principles, modalities, rules and guidelines. Under the other topics additions were proposed on such topics as: review of implementation of Article 6 by expert review teams; methodological issues surrounding additionality; guidelines for projects and project baselines on sinks; an overall institutional framework; Executive Board supervision; and accessibility of participation. A proposal for guidelines on the eligibility of projects initiated under the AIJ pilot phase for generation of emissions reduction units was opposed by the G-77/CHINA. The Chair proposed to prepare a set of “Chairs’ personal notes” based on the discussion.

In the evening, Chair Meira Filho recalled that work remained on linkages under the CDM and Article 6. Delegates received a revised proposal on the work programme on mechanisms incorporating additions from the morning session, accompanied by “Chairs’ personal notes.” The EU sought clarification on whether issues mentioned the day before would be reflected in the proposed work programme. The US queried the status of the new paper and objected to the Chair’s suggestion that no new items or categories should be added. Noting efforts to provide flexibility, the US said he could not accept the paper as a consensus document. The Chair clarified that due to time constraints the contact group could not wait for consideration of the issues raised by the US, and proposed addressing them in the next session. The US objected to the Chair’s proposal, saying all ideas must be presented in a complete way.

SAUDI ARABIA noted the efforts made by the G-77/China and stressed that other issues must be considered. He said that all the issues are a package and progress on one issue cannot be expected while others are blocked. The US expressed disappointment that the G-77/CHINA’s position paper (FCCC/SBSTA/1998/Misc.1/Add.5) had just emerged as a document. He called for a break to study it.

Following several breaks, the Chair proposed to take into account all comments discussed and prepare a Co-Chairs’ report with a section on personal notes and on the proposed work programme, including new submissions. The paper would have no legal status and would not be subject to editing. He requested the group to allow the Co-Chairs to conclude this and only show the outcome to representatives of the G-77/China, the EU, the US, Saudi Arabia and any interested Parties before presenting it to the Chairs of the subsidiary bodies.

On 12 June, Co-Chair de Boer reported on the work of the contact group, which resulted in two documents (contained in FCCC/SB/1998/CRP.2), a set of “suggested elements for a work programme on mechanisms” and the Chairs’ draft conclusions. He noted that the conclusions invite Parties to submit views on the mechanisms, noting that submisi-
sions received by the Secretariat by 10 September can be distributed at the next meeting as "miscellaneous" documents. The suggested elements for a Work Programme are a compilation of the G-77/China's proposal and proposals by other Parties made during the contact group meetings and further proposals submitted by the EU, Canada and others on emissions trading.

The EU expressed satisfaction with the outcome of the contact group and noted two papers the EU had tabled since the last meeting (contained in FCCC/SB/1998/MISC.1/Add.6). One contains preliminary views of the EU and Switzerland on the G-77's questions discussed earlier in the contact group. The second, a non-paper on joint implementation submitted on behalf of the EU, Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Poland, Slovakia, Slovenia and Switzerland, gives views on the principles to apply to joint implementation, including: additionality, supplementarity, transparency, eligibility and compliance, and includes a draft decision proposed by the group for consideration at COP-4.

INDIA, on behalf of the G-77/CHINA, expressed satisfaction regarding the deliberations related to the mechanisms. He noted that delegates were able to synthesize perspectives, identify issues and propose a work programme. Developing countries are much wiser because they know more about the uncertainties that must be understood before the mechanisms can proceed to the next stage.

CONTACT GROUP ON ALLOCATION OF WORK

On allocation of work for future sessions under Decision 1/CP.3, paragraph 6, SWITZERLAND, on behalf of Co-Chair José Romero (Switzerland), reported that the contact group met three times. Although Parties expressed views that were compiled into a Chair's draft paper, the contact group was unable to finish its work on the agenda item at a third meeting due to non-attendance by official representation from the G-77/China. INDONESIA reported that the G-77/China felt it was premature to try to decide the organization of work until after work on mechanisms and review of adequacy of commitments under FCCC 4.2(a) and (b) is finished, because task allocation requires a complete list of tasks and at this stage it may not be exhaustive. The Chair's draft conclusions (FCCC/SB/1998/CRP.1) were adopted. The document states that the subsidiary bodies decided to defer consideration of these items until their ninth sessions and invited the Chairs of SBI and the SBSTA to formulate points that might provide a basis for deliberations at that time.

CLOSING SBI/SBSTA JOINT PLENARY

On 12 June, SBSTA Chair Kok Kee Chow (Malaysia) noted there had been many doubts voiced regarding the ability to make progress, but noted that this session resulted in the basic building blocks to move forward on important issues. He urged delegates to "see the glass as half full rather than half empty." SBI Chair Bakary Kante (Senegal) said that delegates had started a process that, while interesting, cannot be completed at once. Following the adoption of all conclusions, delegates adopted the draft report of the session (FCCC/SB/1998/CRP.1).

CANADA spoke on behalf of the countries that jointly submitted an emissions trading proposal. He expressed appreciation for the G-77/China's questions and favored an early opportunity to provide preliminary responses. NEW ZEALAND expressed its intent to make a submission on mechanisms.

INDONESIA, on behalf of the G-77/CHINA, said that all mechanisms must be examined on the basis of equity, sustainable development and the objective of the Convention. The issue related to the CDM must be addressed first. On arrangements for COP-4, he said the High-Level Segment must not be bound by any declaration originating in any body or meeting extraneous to COP-4. On technology transfer, he expressed concern at the lack of progress, despite relevant provisions of the Convention and decisions adopted at the three previous COPs. On the second review of FCCC Article 4.2(d), he reiterated that there must be no new commitments, voluntary or introduced for all developing countries, under any guise. On the financial mechanism, he said the group was not getting the necessary cooperation on improvement and functioning of the operating entity on an interim basis. On adverse impacts of response measures, he expressed disappointment.

The CENTRAL AFRICAN REPUBLIC stressed the need to help countries presently lacking technical capacity and said delegates must contemplate ways to advance developing countries' understanding.

ARGENTINA thanked all participants for their diligent work and expressed confidence that COP-4 would be a resounding success.

A BRIEF ANALYSIS OF THE MEETINGS

"THE BUMPY ROAD TO BUENOS AIRES - TIME FOR A MANDATE?"

After the colorful displays of prowess, endurance and dexterity at "the big game" in Kyoto, some delegations in Bonn found themselves drawn to the Piano Bar at the Maritim Hotel to recapture a sense of purpose and excitement by viewing the opening games of the World Cup displayed on a life-size screen. Participants at the first post-Kyoto subsidiary body meetings in Bonn encountered a distinct and worrying loss of momentum caused, in part, by unresolved negotiation of the priorities for the COP-4 agenda in Buenos Aires. Moreover, some key issues for discussion have generated at least two "world views" around their meaning and significance. This brief analysis will limit itself to an examination of the factors which have slowed the negotiating process and an attempt to identify some of the ingredients required for a decisive COP-4 in Buenos Aires.

A LOSS OF MOMENTUM

The immediate agenda for the subsidiary bodies was set, for the most part, by Decision 1/CP.3 of COP-3 which directed the Chairs of the SBI and SBSTA to provide guidance to the Secretariat on the preparatory work needed for consideration by COP-4 and to allocate work to the respective subsidiary bodies. The "flattening of momentum" observed in Bonn was attributed to the decision's failure to provide guidance on what "must" be done at COP-4. In Kyoto and Bonn, Parties not only failed to reach a consensus around priorities but continued to attach very different expectations to issues that may or may not appear on the agenda in Buenos Aires. Consider, for example, the second review of the adequacy of commitments under FCCC Article 4.2(a) and (b). The date of COP-4 was, in part, determined by the provision in Article 4.2(d) for a second review to be held not later than 31 December 1998. In a move that puzzled some observers, it was a number of developing countries who pushed for the second review, viewing it as an opportunity for a rehearsal of their argument that Annex I Parties have failed to adequately "implement" their commitments.

The G-77/China told the SBI that COP-4's second review must respect the FCCC mandate and not be distracted by extraneous matters such as consideration of new commitments for non-Annex I Parties. The articles, however, can also be viewed as a hook upon which to build a case for developing country participation. The US and others adopt this view, based on an interpretation of the second review process which holds that the inadequacy of the articles per se (not implementation) is due to the limited number of Parties subject to the kind of commitments outlined in Articles 4.2(a) and (b). Incidentally, the European Union shares this reading of Articles 4.2(a) and (b) but is also examining the possibility of using FCCC Article 7.2, which encompasses review of FCCC-related legal instruments, to press for increasingly global participation. The logic of the US reading of inadequacy shores up their interest in exploring ways to move beyond what it calls the "static world" created by the establishment of Annex I and make a case for bringing the newly industrialized countries on board.

Another example of opposing interpretations involves Articles 4.8 and 4.9 on the effects of climate change and the adverse impacts of response measures. Oil exporting countries, supported by AOSIS, are pressing for increased and, perhaps, equal weight to be given to any adverse social, economic and physical impacts arising from implementation of FCCC commitments. Annex I countries are more cautious, pointing out that much more scientific work will have to be done before these issues are dealt with side by side, if ever.
WHAT DOES A UNITED STATES SENATOR WANT? The US can be expected to continue pushing the envelope on the “meaningful participation” of key developing countries on a number of fronts. One of these fronts might be an attempt to review the FCCC Annex I list, with the argument that the world has moved on, notably for newly industrializing countries, since the list was first formulated. To borrow a phrase from Sigmund Freud, the question comes down to this: What does a United States Senator want? It has been reported that US Senators believe that India, China and Mexico will determine whether the US will ratify the Kyoto Protocol.

The US is also behind one of the most intriguing questions on the road to Buenos Aires. The host country for COP-4, Argentina, is considering “voluntarily” taking on emissions commitments. When the proposed Article 10, on voluntary commitments, was dropped from the draft Protocol at the final meeting of the Committee of the Whole (COW) in Kyoto, Argentina asked for the item to be included on the COP-4 agenda. The proposal was lost after opposition from Saudi Arabia and China on the grounds that it was not an issue the COW could take up. Argentina mistakenly thought that its motion had succeeded and it was not until things were clarified by the FCCC Secretariat earlier this year that the country repeated its request to place voluntary commitments on COP-4’s provisional agenda, in writing. Argentina consulted widely at the subsidiary body meetings to find an agreed formulation but faced overwhelming opposition within the G-77. There is speculation that the item will appear at the top of COP-4’s agenda with a view to it being dropped in return for concessions on an alternative approach to the same issue. Towards the close of the Bonn meeting the host country’s representatives were reportedly occupied by the failure of the COP-4 agenda to take shape, and the prospect of a “non-event” graced by the less than dignified presence of a coterie of the world’s ministers twiddling their thumbs.

One alternative approach to voluntary commitments (based on identifying incentives), suggested by a leading player, could focus on research such as that conducted by the World Resources Institute identifying incentives), suggested by a leading player, could focus on the prospect of a “non-event” graced by the less than dignified presence of a coterie of the world’s ministers twiddling their thumbs.

WHO WANTS WHAT? For Annex I Parties anxious to make progress for the entry into force, the preferred package of outcomes from COP-4 is shaped by their requirements for ratification, such as the flexibility mechanisms. The EU and the economies in transition are also interested in developing the framework for joint implementation. The US and New Zealand are pursuing early decisions on emissions trading. For the developing countries there is interest in the new mechanisms such as the CDM and the second review of adequacy of FCCC commitments. In addition there was a strong push for technology transfer and an emphasis on Articles 4.8 and 4.9 by oil-exporting countries and AOSIS, something which took the FCCC Secretariat by surprise. Contrary to appearances, the issue of the GEF has been described by one insider as a “dead horse.” These packages are likely to converge around the “trade offs” on progress on flexibility mechanisms in favor of Annex I countries and concessions on the push for a schedule for developing country commitments in favor of most Annex II Parties, at least for the time being. In Bonn the development of positions and lack of movement on some fronts clearly signaled a desire by Parties to create a stock of bargaining chips to begin trading in Buenos Aires.

WHITHER THE G-77 & THE EU’S BURDEN: Intra-group dynamics and their impact on negotiations are also being discussed. Reflecting on the diverse positions within the G-77, one of the group’s delegates noted that in the long run, the regional sub-groups would have to find ways of articulating their specific interests separately. A split in G-77 is not imminent since the group represents other interests beyond the climate forum. However, more articulated and clearer regional positions may become apparent at the next COP and probably would be the most feasible way to achieve progress.

European negotiators and observers were preoccupied with imminent internal negotiations on burden sharing within the “bubble” arrangement. A small number of countries are expected to take on the lion’s share of the burden, creating a very wide gap between the high achievers and the rest. NGOs have speculated that the lack of balance in the burden sharing deal could impact on the Union’s positions on flexibility and policies and measures. For example, one NGO suggested that an uneven spread of commitments could undermine the incentive within the less ambitious European countries to accept the kind of common policies and measures required by more ambitious countries.

PREPARING TO GIVE AND TAKE? Movement, or the lack of it, on a number of key issues will determine the success of the COP-4 agenda. Land use change and forestry are not specifically mentioned in either Article 6 (JI) or Article 12 (CDM). Therefore, it remains unclear whether they will be included as potential projects for meeting reduction commitments. This has proved to be a highly complex and divisive issue, even among the NGOs. A question remains about whether a special report requested from the IPCC will be ready for COP-6 in 2000. This is significant because according to Article 12, Annex I countries may begin to accrue certified emissions reductions starting in that year. Therefore, it is likely that the US and CANADA will be pushing for early resolution. Emissions trading is another hot topic. UNEP Executive Director Klaus Töpfer has described this component of the Protocol as the “creation of a new property rights regime for a global resource - the atmosphere” leading to a concern among both NGOs and some delegations that key actors have become increasingly preoccupied with managing targets and manipulating the numbers at the expense of efforts to seriously address efforts to achieve significant parts of their reduction targets at home. The EU, a supporter of capping, is concerned that the “21st century carbon rush” may fail to convince developing countries that Annex I Parties are serious about their commitment to take a lead on climate change mitigation.
CREATING A GOAL-ORIENTED COP-4

There will be opportunities at a number of intersessional activities, including high-level meetings in Canada, Japan and Argentina, for key Parties to refine their respective agendas in advance of COP-4. Perhaps out of a sense of “AGBM nostalgia,” some are mooting the possibility of a Buenos Aires Mandate to restore momentum and create deadlines for this new phase in the negotiations. Deadlines can, in a sense, become “star players” in a negotiating process and may help to assuage the fears of those who believe that urgent decisions may be left to COP-5, allowing the all important date for the Protocol’s entry into force to drift to the sidelines. There may be truth in this. It will also be worth remembering, however, that the content of the issues at stake has also shifted towards greater complexity and deeper uncertainty in the post-Kyoto phase. After Kyoto the future is not what it used to be.

THINGS TO LOOK FOR

THIRD CONFERENCE OF THE PARTIES TO THE FCCC: The Third Conference of the Parties will be held in Buenos Aires, Argentina, from 2-13 November 1998. The ninth sessions of SBI and SBSTA are expected to meet during the first week. A High-Level Segment will be held from 12-13 November. Canada and Japan announced plans to hold intersessional meetings in September. For more information contact the FCCC Secretariat in Bonn, Germany; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secreariat@unfccc.de. Also try the FCCC home page at http://www.unfccc.de and UNEP’s Information Unit for Conventions at http://www.unep.ch/iuc/.

FOURTH INTERNATIONAL CONFERENCE ON GREENHOUSE GAS CONTROL TECHNOLOGIES (GHGT-4): This conference will be held from 30 August - 2 September 1998 in Interlaken, Switzerland. For information contact: Dr. Baldur Eliasson, Head, Energy and Global Change, ABB Corporate Research Ltd., Baden-Dättwil, Switzerland; tel: +41-56-486 80 31; fax: +41-56-493 45 69; e-mail: baldur.eliasson@chcrc.abb.ch.

SECOND INTERNATIONAL CONFERENCE ON CLIMATE AND HISTORY: The Second International Conference on Climate and History: “Past and present variability - a context for the future,” will be held from 7-11 September 1998 in Norwich, UK. For more information contact: Susan Boland, Climatic Research Unit, Univ. of East Anglia, Norwich, NR4 7TJ, UK; tel: +44-1603-456-161; fax: +44-1603-507-784; e-mail: s.boland@uea.ac.uk; Internet: http://www.cru.uea.ac.uk/cru/conf.

ELEVENTH WORLD CLEAN AIR & ENVIRONMENT CONGRESS (& EXPO): The Congress is scheduled from 13-18 September 1998 in Durban, South Africa. For information contact: Conference Secretariat, PO Box 36782, Menlo Park 0102, South Africa; fax: +27 12 460 170; e-mail: wissing@iafrica.com.

SIXTH INTERNATIONAL CONFERENCE ON MODELING, MONITORING AND MANAGEMENT OF AIR POLLUTION (Air Pollution ’98): This meeting will be held from 28-30 September 1998 in Genova, Italy. The meeting will be organized by the Wessex Institute of Technology (UK) and the Universita di Genova, Italy. The objective of this meeting is to bring together scientists working in industry, research organizations, government and academia who are working on monitoring, simulation and management of air pollution problems. For information contact: Sally Radford, Conference Secretariat, Air Pollution 98, WIT; tel: +44 (0) 1703 293223; fax: +44 (0) 1703 292853; e-mail: sradord@wessex.ac.uk

INTERNATIONAL CONFERENCE ON TROPICAL FORESTS AND CLIMATE CHANGE: This meeting will be held from 19-22 October 1998, Manila, the Philippines. For more information contact the Conference Secretariat, Environmental Forestry Program, UPLB College of Forestry, 4031 College, Laguna, the Philippines; tel: +63-49-536-2342; fax: +63-49-536-2341; e-mail: Rd1@mudspring.uplb.edu.ph.

1998 EARTH TECHNOLOGIES FORUM (formerly Climate Change Conferences and Ozone Protection Technologies Conference): This meeting will be held from 26-28 October 1998 in Washington, DC. The Forum will address climate change and ozone protection technologies and policies. It is co-sponsored by the International Climate Change Partnership (ICCP), the US Environmental Protection Agency and the Alliance for Responsible Atmospheric Policy. The conference will provide a forum for discussion of current technologies and efforts to bring them into the marketplace. It also offers an opportunity to learn more about the important linkage between technology issues and policy discussions prior to COP-4. For conference registration, programme and exhibit information contact: Heather Tardel; tel: +1 (703) 807-4052; fax: +1 (703) 243-2874; Internet: http://www.earthforum.com.