ENGLISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE Eighth session Bonn, 2-12 June 1998 Item 3 of the provisional agenda

COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS

Structure and contents of the Third Assessment Report by the IPCC

Additional comments by Parties

Note by the secretariat

- 1. At its sixth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA), invited Parties to submit comments on the planned structure and content of the Third Assessment Report (TAR) of the Intergovernmental Panel on Climate Change (IPCC) to the secretariat, by 20 January 1998, for compilation into a miscellaneous document (FCCC/SBSTA/1997/6, para. 44). The secretariat has previously made submissions from Parties available which were received by 30 May 1997. These were compiled into document FCCC/SBSTA/1997/MISC.4.
- 2. The secretariat has received three such submissions.* In accordance with the procedures for miscellaneous documents, these submissions are attached and reproduced in the language in which they were received and without formal editing.

FCCC/SBSTA/1998/MISC.1 GE.98-

^{*} In order to make these submissions available on electronic systems, including the World Wide Web, these contributions have been electronically scanned and/or retyped. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

CONTENTS

| Paper | No. | Page |
|-------|---------------------------------------------------------------------------------|------|
| 1. | Alliance of Small Island States (AOSIS) (Submission received 10 August 1997) | 3 |
| | AOSIS VIEWS ON THE WORK OF THE IPCC | |
| 2. | Australia (Submission received 9 January 1998) | 5 |
| | COMMENTS ON THE IPCC THIRD ASSESSMENT REPORT | |
| 3. | Sri Lanka (Submission received 9 December 1997) | 7 |
| | COMMENTS FROM SRI LANKA ON THE IPCC THIRD ASSESSMENT REPORT | |

PAPER NO. 1: ALLIANCE OF SMALL ISLANDS STATES (AOSIS)

AOSIS VIEWS ON THE WORK OF THE IPCC

AOSIS members wishes to express their sincere appreciation to the excellent work done to date by the IPCC and its Bureau. It noted with appreciation the information provided by the Chairman and the Chairman-elect at the present sessions of the Subsidiary Bodies to the UNFCCC, particularly regarding the Third Assessment Report (TAR). AOSIS gives its full support to the on-going and valuable work of the IPCC and re-iterates the need for the IPCC to continue to maintain its independent and non-political role in fulfilling its mandate.

On the financial contributions to the work of the IPCC, AOSIS wishes to thank parties that contributes to the IPCC Trust Fund which allowed experts from developing countries, including AOSIS experts, to participate in the work of the IPCC. AOSIS urges these Parties to continue to provide adequate funding to the Trust Fund to ensure the further involvement of experts from non-Annex Parties in the future work of the IPCC.

AOSIS requests that the IPCC, in carrying out its work, to cooperate closely with other international organizations such as the World Meteorological Program (WMO) involved in international research programs to advance our understanding of the climate system and its response to climate change. AOSIS gives its full support to the Climate Agenda program.

Regarding the TAR, AOSIS noted with satisfaction the regional emphasis on the report and the efforts by the IPCC to fully involved experts from non-Annex I country parties. AOSIS requests the IPCC to address the following issues in the TAR.

- The IPCC to further narrow down the remaining uncertainties in the IPCC projections and scenarios.
- The ranges used by the IPCC in past reports and papers are based on collective judgment of IPCC authors and reviewers of each chapters and papers. AOSIS sees the need for the IPCC to develop and draw formal methodologies to achieve more consistency in setting criteria for high and low range limits.
- On computer modeling, AOSIS requests the IPCC to put more efforts to narrow down grid box scales to smaller scales in order for these models to be meaningful and applicable to AOSIS members.
- Provision of accurate information and analysis on the effectiveness and implications of proposed PAMs to mitigate and adapt to climate change and sea level rise, in particular the socio-economic implications including losses incurred by implementing PAMs in Annex I parties.

- Put more efforts on assessment of regional impacts and responses to climate change and sea level rise particularly adaptation options. Of particular importance to AOSIS is the need to further improve our understanding of the role of the oceans in determining the response time of the climate system. In this regard, efforts gear towards further understanding regional weather patterns which have major influence on AOSIS members (e.g. El Nino Southern Oscillation, Tropical cyclones etc.) should be of high priority for the work of the IPCC.
- Structure of TAR could be improved. AOSIS expresses concerns on the structure of past papers and reports. It took a great deal of efforts to synthesize these into manageable sections.

PAPER NO. 2: AUSTRALIA

COMMENTS ON THE IPCC THIRD ASSESSMENT REPORT

A. General Comments

- 1. Presentationally, it would be extremely helpful if the TAR included a section/chapter which summarised the key advances, changes and developments since the second assessment report (SAR) of 1995. This would be particularly helpful to readers familiar with the SAR who want readily identifiable description of the extent to which the TAR included new information and makes different assessments.
- 2. The report could usefully include a section that covers the frequently asked questions/misinterpretations associated with previous IPCC findings.
- 3. Models both scientific and econometric will continue to play important roles as tools in making climate change assessments. The TAR should provide an updated assessment of the utility (and uncertainties) of such models, including integrated assessment models, ie what are the various models telling us now and how can they be improved.
- 4. The SAR assessments of the extent of "no regrets" mitigation opportunities should be refined with a focus less on technical potential and more on a realistic assessment of practical possibilities (and how to overcome barriers to implementing "no regrets" measures), including in developing countries. An assessment of newly emerging "no regrets" measures, as technologies develop and become more cost effective in terms of their greenhouse gas mitigation benefits, would also be valuable.
- 5. The assessment of the mitigation potential of technologies, practices and policies should consider the implications of the patterns of global production and trade in energy intensive goods.

B. Policy-relevant questions for the Synthesis Report

- 1. To what extent is it important to be able to distinguish between human induced greenhouse gas emissions and those from non-anthropogenic sources, given the different definitions of climate change employed by the IPCC and under the UNFCCC. Would a natural/anthropogenic emissions counting system be effective?
- 2. How does our understanding of the interactions of non-atmospheric features of the climate system (e.g. oceans, cryosphere) compare with that of the atmospheric aspects?
- 3. What progress has been made in determining the possible interactions of climate change with major causes of climatic variability such as the El Nino Southern Oscillation?

- 4. What progress has been made in refining global warming potentials, to enable better accounting of emission reductions of greenhouse gases other than carbon dioxide?
- 5. What progress has been made in reducing uncertainties in the measurement of carbon sequestration/emissions through land use and forestry changes and other sectors of high measurements uncertainty?
- 6. How important is it to avoid rapid rates of warming?
- 7. What are the consequences of delaying emissions reduction action under various concentration profiles (concentration level and target year)? Can the economic costs and benefits of delay be quantified?
- 8. How can optimal emissions pathways be defined?
- 9. How does more comprehensive assessment of non-energy abatement options affect the assessment of costs and benefits?
- 10. How well does the assessment of abatement options deal with existing market imperfections (including subsidies direct and indirect -, information failure, institutional inertia and imperfection, bounded rationality, social vs private discounting, non-greenhouse externalities, etc)? What analytic tools are available to assess policy options in the "real world"? How many of the available analytic tools deal with non-energy issues?
- 11. What is the likely magnitude of the so-called "rebound effect", where investments in energy efficiency are offset to some degree by resulting increase in output? How does analysis of the issue differ at the firm, industry, national and international level?
- 12. To what extent will the provisions of the FCCC and Kyoto Protocol affect, positively or negatively, the range of options identified for technologies, practices, policies and policy instruments to adapt to, or reduce, greenhouse gas emissions from sources and to enhance removals of greenhouse gases by sinks?
- 13. What are the implications for atmospheric concentration, climate and sea level of the proposed targets and timetables to reduce emissions contained in the Kyoto Protocol?

PAPER NO. 3: SRI LANKA

COMMENTS FROM SRI LANKA ON THE IPCC THIRD ASSESSMENT REPORT

1. Emissions Scenarios

The Assessment reports depends heavily on the five emissions scenarios IS92 a-e. All the estimates of mean temperature rise (MTR) and sea-level rise (SLR) are given corresponding to each of these scenarios. However, none of these scenarios is defined in the report. One has to go back to the 1992 Assessment Report (AR1) for their definitions. Since it occupies only one page (p of 1992 AR), I suggest that this page be reproduced in the AR3, if you are planning to use the same scenarios in the new report.

2. Mean Temperature Rise and Sea Level Rise Estimates

The MTR and SLR estimates for 2100 are given subject to two variables, one the emission scenarios and the other climate sensitivity. For each of these, there are 3 values, high, medium and low. Hence, the results could be presented in the form of a matrix as given below. The data given in the AR2, some of which had to be interpolated from the diagrams, cover only a few elements in the matrix. It might be at least of academic interest to give the balance elements in the matrix.

TEMPERATURE RISE IN °C

| EMISSION | CLIMATE SENSITIVITY | | | |
|----------|---------------------|--------|------|--|
| SCENARIO | Low | Medium | High | |
| High | | 2.5 | 3.5 | |
| Medium | | 2 | | |
| Low | 1 | 1.3 | | |

SEA LEVEL RISE IN cm

| EMISSION | CLIMATE SENSITIVITY | | | |
|----------|---------------------|--------|------|--|
| SCENARIO | Low | Medium | High | |
| High | | 55 | 95 | |
| Medium | | 50 | | |
| Low | 15 | 38 | | |

3. Climate Sensitivity

One of the variables used, namely climate sensitivity has been defined as the temperature rise in the atmosphere corresponding to doubling of the carbon dioxide concentration. This is

denoted in the AR2 as ΔT and its unit is given as °C. Generally the term sensitivity is defined as the amount of response per unit measure of a stimulant. Here the stimulant is $2xCO_2$ and the response is the temperature rise. Hence the unit of sensitivity should be expressed as °C/2xCO₂. This will also remove the confusion that may arise by having the same unit °C for sensitivity as well as for the temperature rise as appearing in AR2. This is specially so because the sensitivity range (1.5 - 4.5 °C) is of the same order of magnitude as the temperature rise range.

4. Availability of Fossil Fuel

In fixing the emissions scenarios up to 2100, it has been assumed that there will not be any constrains on the supply of fossil fuels during the next century. However, other sources of data indicates that at the present rate of consumption, the economically recoverable deposits may not last that long. Hence, a brief clarification on this point may be desirable.

- - - - -