#### **ENGLISH ONLY**

#### UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE Eighteenth session Bonn, 4–13 June 2003 Item 4 (a) of the provisional agenda

#### METHODOLOGICAL ISSUES

## REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND THE KYOTO PROTOCOL

## <u>Initial views on needs for specific methodological activities and on a</u> strategic approach to further methodological work

#### **Submissions from Parties**

- 1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its seventeenth session, noted that numerous activities relating to the development of guidelines for reporting information, including national communications, and to the dissemination of information on methods, guidelines, modalities and rules, have been initiated and implemented under the Convention and the Kyoto Protocol. The SBSTA concluded that future implementation of the Convention and the Kyoto Protocol would benefit from further consideration of ongoing methodological work and from the development of a strategic approach to future methodological work (FCCC/SBSTA/2002/13, para. 14).
- 2. The SBSTA invited Parties to submit, by 1 March 2003, their initial views on needs for specific methodological activities and on a strategic approach to future methodological work, for example, on what methodological work should be done, on how it should be done, on who should undertake the work and on what the priorities are.
- 3. The secretariat has received nine submissions from Parties. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced\* in the language in which they were received and without formal editing.

FCCC/SBSTA/2003/MISC.3

<sup>\*</sup> These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

## CONTENTS

		<u>Page</u>
1.	AUSTRALIA	_
	(Submission received 25 March 2003)	3
2.	CANADA	
	(Submission received 19 March 2003)	6
3.	GREECE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES AND OF THE CZECH REPUBLIC, LATVIA AND SLOVENIA	
	(Submission received 1 March 2003)	15
4.	JAPAN	
	(Submission received 18 March 2003)	21
5.	NEW ZEALAND	26
	(Submission received 6 March 2003)	26
6.	NORWAY (Submission received 17 March 2003)	28
7		20
7.	SAUDI ARABIA (Submission received 11 February 2003)	31
8.	SWITZERLAND	
0.	(Submission received 12 March 2003)	33
9.	UNITED STATES OF AMERICA	
	(Submission received 29 March 2003)	35

#### PAPER NO. 1: AUSTRALIA

## REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND THE PROTOCOL

## VIEWS ON NEEDS FOR SPECIFIC METHODOLOGICAL WORK AND ON A MORE STRATEGIC APPROACH TO METHODOLOGICAL WORK

#### Introduction

At its seventeenth session the subsidiary body for scientific and technical advice invited Parties to submit views on needs for specific methodological work and on a more strategic approach to methodological work. Australia welcomes the opportunity to submit its views on these matters.

## The need for a strategic approach

It is important that all Parties can participate in discussions in the subsidiary bodies and the COP on an equal basis, with analysis and decision-making informed, as far as possible, by comprehensive and reliable information. Methodological work will be needed to lay a firm foundation for the decisions we will need to be making over the next 5-10 years. In the relatively near term, the discussions that will take place under Article 9 and Article 3, paragraph 9 of the Kyoto Protocol and Article 4, paragraph 2(d) and Article 7, paragraph 2(a) of the Convention will place considerable demands on the institutional capacity of all Parties to amass and analyse information. Capacity building will be important in ensuring that all Parties have a voice in discussions, as will access to information.

In the context of a strategic approach to methodological work, preparing for these discussions must be considered a priority for near-term work. Considerable preparatory work is needed to ensure that comprehensive, complete and reliable information is available to assist all Parties to conduct analyses, and to ensure that there is every opportunity for these discussions to be based on a shared understanding of the issues. Such information would also be a crucial tool in the optimal targeting of capacity building, including adaptive, mitigative and institutional capacity building.

Strengthening the information base available to the COP and the subsidiary bodies would contribute to this aim. Australia proposes that the SBSTA undertake methodological work to strengthen the information base of the Convention, including both environmental and socio-economic information. The information base could serve as a central point for the dissemination of information collated from widely dispersed sources and/or provide information not available elsewhere. Suggestions for specific tasks are given below.

It is possible that the outcomes of discussions under Article 9 and Article 3, paragraph 9 of the Kyoto Protocol and Article 4, paragraph 2(d) and Article 7, paragraph 2(a) of the Convention, will create demand for further methodological work that cannot be pre-empted. In the meantime, the opportunity should be taken to prioritise other important methodological work, including under the topics listed in document FCCC/SBSTA/2002/INF.12. Australia's priorities for this work are listed below.

### Priorities for specific methodological work

## Strengthening the information base of the Convention

This issue cuts across several of the topics outlined in document FCCC/SBSTA/2002/INF.12. To emphasise the strategic aspect of the work, the specific tasks have been collated under this theme.

- 1. Analysis of information needs and availability, including:
  - (i) An assessment of the information needs of Parties in considering the issues to be discussed under Article 9 and Article 3, paragraph 9 of the Kyoto Protocol and Article 4, paragraph 2(d) and Article 7, paragraph 2(a) of the Convention. Information could include:
    - Emissions information, such as current emissions, major sources and trends;
    - Socio-economic information, such as population and population trends, GDP and GDP growth, other key economic indicators and indicators of institutional capacity
  - (ii) A stocktake of existing sources of such information, including an assessment of accessibility, completeness and reliability. Sources would need to be credible and comprehensive in their coverage, and could include intergovernmental organisations such as OECD, IEA, and the IPCC, and research institutions and other organisations such as WRI, EIA and CDIAC.

This work could be undertaken by the secretariat, with a paper outlining information needs and possible sources published in time for discussion at SBSTA 19.

2. Development of options for the collation and presentation of information, including what sources will be used, who will carry out the work, how the information will be disseminated, how gaps in the information will be addressed and what, if any, value-adding will be done prior to publication.

This work could be undertaken by the secretariat, taking into account discussions at SBSTA 19 and, possibly, submissions by Parties in March 2004. An options paper could be published for discussion at SBSTA 20 and 21, with a decision on strengthening the information base forwarded to COP 10.

3. Implementation and use of the information base. In addition to its use by Parties in conducting their own analyses, the information base could be use by the COP and the subsidiary bodies as a common reference source, and by the secretariat in preparing agenda papers and analysis.

## Greenhouse gas inventories

Australia supports work to consider the level of accuracy that will be needed by greenhouse gas inventory methods under the Convention in 5-10 years. In particular, Australia is mindful of the need to consider the overall picture when preparing guidelines for producing inventories for JI and CDM

projects, so that the degree of accuracy required of project inventories is not out of step with national inventory standards. The financial implications of estimating emissions to different degrees of accuracy and the degree of institutional capacity required should also be considered in this work.

#### Projections of greenhouse gas emissions and removals by sinks

High-quality and transparent greenhouse gas projections are required for a proper assessment of the greenhouse gas abatement task. They will be fundamental to ensuring that the discussions that will take place under Article 9 and Article 3, paragraph 9 of the Kyoto Protocol and Article 4, paragraph 2(d) and Article 7, paragraph 2(a) of the Convention and beyond are based on transparent information.

The information base discussed above would provide a central source of data on which Parties could draw when developing the assumptions that underlie their projections. While the role of national circumstances in projections mean that any centrally produced projections could never replace nationally produced projections in national reporting, it would be useful to have some idea of the degree of consistency in the assumptions countries make about global indicators.

The SBSTA could request the secretariat to look at the assumptions about global indicators used by Parties in projections in their 3<sup>rd</sup> national communications and analyse the degree of consistency between Parties' assumptions and the impact this had on their projections. The results of this work could be presented in a paper for discussion at SBSTA 19.

## Assessing policies and measures

This is a low priority for Australia. Work on assessing mitigation technologies could cover the more practical elements of work on policies and measures.

#### Assessing mitigation and adaptation technologies

Australia would be interested in work to assess mitigation and adaptation technologies. This work should include an assessment of their costs and benefits.

Currently mitigation technologies are not addressed, either in terms of methodological approaches or default emission factors, in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. Australia would be interested in work to assess mitigation technologies and how they could be integrated into a revision of the IPCC inventory guidelines.

## Assessing the impacts, vulnerability and adaptation of climate change

Australia is interested in work in this area, in particular in developing methodologies for assessing the future costs of climate change under various scenarios. Such work should be broad in scope and global in its coverage, and take into account the work by other organisations.

#### PAPER NO. 2: CANADA

## REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND KYOTO PROTOCOL (FCC/SBSTA/2002/L.17, PARA 4)

Canada would like to first express its appreciation for the work of the SBSTA to date to provide scientific and technical information instrumental to assisting Parties' efforts to move from concept to implementation of the Convention and the Kyoto Protocol. Canada welcomes this opportunity to review the methodological work of the SBSTA with a view to reconfirming the mandate of the SBSTA, setting its strategic direction for the next 5-8 years, including appropriate means to review and prioritize ongoing and new methodological work.

Canada notes that as, a first step on specific activities under this agenda item, the SBSTA at its 17<sup>th</sup> session invited the IPCC to revise the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*.

Canada's submission is therefore presented in the following sections:

- 1) The mandate and role of the SBSTA;
- 2) The strategic direction of the methodological work of the SBSTA, including principles for prioritizing work;
- 3) Review of specific methodological activities and requests for new areas of methodological work:
  - Methodological questions arising from consideration of the IPCC TAR
  - Methodological questions specific to the Convention
  - Methodological questions specific to the Kyoto Protocol;
- 4) Revision of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

## 1. The mandate and role of SBSTA

Canada believes that the SBSTA mandate as contained in Article 9 of the Convention and further elaborated by the Conference of the Parties, in particular in decisions 4/CP.1 and 6/CP.1, remains comprehensive and relevant.

Canada believes, therefore, that Parties should lend greater focus not to what the SBSTA mandate is but rather to how the SBSTA further fulfills its mandate. For example, in Canada's view, the SBSTA should continue to further the use of compatible methods by Parties through continued collection, compilation and dissemination of information on methods, but also take a more active role, working with international organizations as appropriate, to develop, test and refine methods and to conduct assessments.

As per decision 6/CP.1 (Annex I) on Functions to be carried out by the SBSTA, the SBSTA should continue, on a priority basis, "to summarize and, where necessary, convert the latest international scientific, technical, socio-economic and other information provided by competent bodies including, inter alia, the Intergovernmental Panel on Climate Change (IPCC), into forms appropriate to the needs of the Conference of the Parties, including in support of the review of the adequacy of commitments". In this regard, the ongoing consideration of the IPCC TAR pursuant to the first stages of a work programme agreed at SBSTA 16, and a stock-taking based on the TAR to review the adequacy of commitments in relation to the ultimate objective of the Convention, must be priority work items for the SBSTA.

## 2) The strategic direction of the methodological work of the SBSTA, including principles for prioritizing work;

In general, the methodological work of the SBSTA should be pursued in the context of its contribution to achieving the ultimate objective of the Convention. In this context, within its existing mandate, the SBSTA should:

- review current work and consider additional information and methods needed to better serve the SBI and assist Parties implementation of the Convention and the Kyoto Protocol pursuant to existing decisions; and
- 2) consider additional work to support the analytical needs of the Convention for future decision-making.

For instance, two key elements that can be better addressed to fulfil the ultimate objective of the Convention are the furthering of methods for vulnerability assessment, especially in LDCs and for early engagement of more countries in emissions reductions.

In developing its work plan, the SBSTA should consider, first, the priority of the work in the context of the further implementation of the Convention and the Kyoto Protocol; second, the type of work that might be undertaken; and third, what the SBSTA's role in these processes may be. For example, the SBSTA might best contribute by furthering the collection of global information through national reporting to improve the completeness, comparability and compatibility of data and information underpinning methodological work. The SBSTA is also in a position to further the refinement and testing of methodologies by promoting national experience with methodologies to implement adaptation and mitigation programs, thereby strengthening its relationship with the SBI. The SBSTA may actively engage in promoting the development and improvement of methods to ensure methods are best suited to support climate change policymakers needs.

Other key questions include: determining the global benefit of the work, keeping in mind what can be done at national and international level; the global availability of information, state of knowledge and expertise on a subject; synergies with relevant international organizations; the associated cost implications and whether Parties are prepared to provide additional funding if required.

To date, the SBSTA has primarily facilitated the collection and sharing of information on methods and the recommendation of guidelines for reporting but has been less active in the development of methods. Canada believes that over the next 5-8 years increasingly sophisticated methods and decision-making tools will be needed by Parties to further develop their portfolio of adaptation and mitigation strategies, and improve the overall effectiveness of implementation of CoP decisions. As Parties step up implementation of the Convention and Kyoto Protocol, particularly as elaborated in the Marrakech Accords, they will be breaking ground in many areas and will undoubtedly uncover new problems and new solutions. In this regard, the link between the SBI and the SBSTA and reporting on Parties' experience with implementation to the SBSTA takes on increasing importance, as does the SBSTA's role to provide the tools necessary to bridge agreed conceptual frameworks and the challenges faced with their practical application.

It is important to take stock as well. The SBSTA should request the secretariat to assess lessons learned from the use of existing methods and tools, especially on whether and how institutions in both Annex 1 and non-Annex 1 countries have integrated their use into national decision-making processes.

The SBI will continue to be guided by National Communications in order to identify and report to the SBSTA on information and methodology gaps and other implementation challenges. However, in many instances as the complexity of the tools needed increases, the SBSTA itself may not have the information, scientific capacity or expertise necessary and it may be necessary for the SBSTA to consider new ways to generate the information, research, and technical inputs needed to better analyze and address the problems.

As well, the increasing complexity and level of detail needed to support future international decision making will require the SBSTA to take on a more active role in activities to develop appropriate methods and tools to support the analytical needs of the Convention in future negotiations.

As noted in FCCC/STSTA/2002/INF.12, in a few instances the SBSTA has invited other international bodies and United Nations organizations to develop or compile information about methods for use by Parties. The SBSTA could increase the extent to which it communicates and cooperates with and invites the assistance of competent international organizations and intergovernmental and non-governmental bodies.

Given the need for better convergence of climate change policies and the development agenda, the SBSTA should consider how to enhance synergies and to leverage resources with methodological work being undertaken to support non-climate policy goals, for instance work related to the Millennium Development Goals. The SBSTA should request the secretariat to strengthen its role in this regard, as per 6/CP.1 11(b), in its liaison with competent international bodies and financial institutions, in order to ensure an adequate flow of information in both directions.

## 3) Review of specific methodological activities and requests for new areas of methodological work:

### A. Methodological questions arising from consideration of the IPCC TAR

In a separate but related submission (FCCC/SBSTA/2003/MISC.2), Canada shared views on the implications of the Third Assessment Report for the work of the Convention and requested that priority be given to methodological work in several areas as listed and further elaborated below:

i) Enhancing the data and information base of the Convention

Information underpins all of the methodological work of the SBSTA and should therefore be a key priority. The SBSTA should undertake an assessment of the information required to support the necessary methodological work and subsequently undertake to generate this information.

National communications from developing countries indicate that most countries face constraints related to data. Methodological work under SBSTA should focus on ways to strengthen data quality and availability in developing countries, especially in the area of inventories, vulnerability assessment, adaptive and mitigative capacities, and options.

ii) Socio-economic information for vulnerability assessment and emissions scenarios

There is a need for increased focus on the socio-economic aspects of climate change. More socio-economic information and methods to support vulnerability assessment are crucial for understanding impacts and prioritizing responses based on "the most vulnerable" sectors and regions. In terms of

assessing vulnerabilities, many of the gaps in existing information are at the local level and if further work is done on impact identification and vulnerability assessment it should focus on building models from local data.

### iii) Assessing adaptive and mitigative capacity

The SBSTA needs to take a close look at the concepts of adaptive and mitigative capacity put forth in the TAR as a means to better target capacity building efforts, including financial and technological resources. Technology needs are very much tied to socio-economic scenarios and adaptive and mitigative capacity assessments and technology needs assessments need to be closely coordinated with these activities. In pursuing how best to build capacity to deal with climate impacts and reduce greenhouse gas emissions along with other development goals, methods will be needed to identify additional capacity needs specific to climate from general capacity needed for overall development.

## iv) Mainstreaming Climate Change and Development Policy

A convergence of climate change policy and development policy is essential to an effective response to climate change. A compilation of case studies and best practices for integrating environment and development issues would be useful for both donors and Parties, and to begin analysis of approaches to integrate climate change into existing sector policies and national development plans. The SBSTA, through the secretariat, should work in cooperation with relevant international organizations, including the Global Environment Facility (GEF) and international financial institutions (IFIs), on methods to integrate adaptation to and mitigation of future climate risks into national development.

### v) Cost-benefit assessment of climate change policies

The SBSTA needs to enhance coverage of the economic aspects of climate change and promote approaches to assist policy makers to more easily compare the costs and benefits of a portfolio of mitigation and adaptation strategies.

## vi) Adaptation and mitigation planning frameworks

Considerable focus has been given to assessing adaptation and mitigation options, but enhanced emphasis needs to be placed on the policy frameworks needed to plan for implementation of these options at the appropriate national/sub-national/community/sector level.

### vii) Risk assessment and management frameworks

Parties require decision making tools to synthesize and integrate the wide range of information and tools currently available, and those that will be developed in the future, to set coherent national and international mid to long-term goals.

## B. Methodological questions specific to the Convention

#### i) Non-Annex 1 National Communications

Additional methodological work may be needed to support the needs of non-Annex I Parties. The upcoming workshop on preparation of national communications will help to identify needs that may arise as a result of the use of the revised guidelines for non-Annex 1 national communications and methodological items that may warrant work in the SBSTA.

The Least Developed Countries Expert Group (LEG) in assisting LDCs prepare national adaptation programs of action (NAPAs), has provided annotations to the NAPA guidelines. The Consultative Group of Experts (CGE), mandated to provide technical advice and support to assist Non-Annex 1 Parties in the preparation of national communications, is encouraged to also consider technical annotations to the new guidelines for Non-Annex 1 national communications. Some necessary methodologies have already been considered in the work undertaken by the SBSTA. For example, all Parties are to prepare inventories using comparable methodologies (UNFCCC Article 4.1a) and thus the CGE, in preparing technical annotations on inventories, should base its work on the work undertaken by the SBSTA. Further work undertaken in assessing ways to improve GHG inventories and assessment of emissions trends for Annex 1 countries could therefore also be easily applied to non-Annex 1 reporting requirements.

In areas where there is less experience, as work is progressing in other international organizations or under the SBSTA (e.g. as with adaptation and mitigation policy frameworks, socio-economic scenarios for vulnerability assessment, technology needs assessments), the technical annotations would be a living document, providing updates on various methodologies as they are developed and refined, and ultimately encouraging developing countries to use the best available methods. Such an approach would allow the Parties to test, refine and gain experience with methods, and strengthen coherency and synergy between the work done under the SBI and the SBSTA.

## ii) Assessing impacts, vulnerability and adaptation to climate change

The compendium of adaptation methods and tools should continue to be updated by the secretariat and Parties, and the relevant organizations and practitioners should be encouraged to submit these to the secretariat for compilation. Greater emphasis should be given to local and regional strategies, recognizing that adaptation options are very specific to each country and region and need to be country driven. Canada requests that, in addition to specific adaptation options, enhanced priority be given to focus on adaptation planning and decision-making tools to assist Parties to assess and implement appropriate strategies. Also important is the collection of methodologies focussed on vulnerability and adaptive capacity assessment. Techniques for assessments related to current climate are useful and should be sought from non-climate change communities as well, such as insurance, risk management, disaster prevention, natural resource management and community development.

## iii) Funding for adaptation

Pursuant to the SBSTA's mandate in 6/CP.1 (Annex I 5(b)) "to seek information and provide advice on methodological questions in support of the guidance to be provided by the Conference of the Parties to the financial mechanism, and guidelines in the application of the concept of 'agreed full incremental cost'", further work might include developing a methodology for assessment of the global benefits of adaptation projects and programmes. The GEF is currently thinking through this issue and the SBSTA should ensure that it is involved.

#### iv) Adaptation and mitigation technologies

Carbon capture and storage may provide a practical, cost-effective and perhaps necessary means to mitigate global GHG emissions. The TAR suggests that emissions from fossil and/or biomass-fueled power plants could be reduced substantially through pre- or post-combustion carbon capturel and storage, and that carbon capture and storage is important for a higher emission world or a lower stabilization target, but also important for moderate targets. The IPCC agreed at its 20<sup>th</sup> session to prepare a Special Report on Carbon Capture and Storage to be completed in early 2005. The SBSTA should consider methodological work related to this issue once the IPCC report is presented to the CoP.

### v) Development and Transfer of Technology

Canada would like to ensure that the development of the prototype technology transfer information system/clearing house (*TT: Clear*) focuses on ensuring an easily navigable, user-friendly site. Instead of housing much information in its own database that must be managed and kept relevant, which is time-consuming and costly, Canada sees *TT: Clear* as serving as a portal to other key sites of interest. Canada is aware of the recommendation of the EGTT to link *TT:Clear* to the Sustainable Alternative Network site to ensure a supply/demand matchmaking capability by users and sees this as an example of the appropriate value-added synergies that could be developed.

Feedback on the *TT: Clear* site should be fully assessed before the prototype evolves to a permanent platform or engenders offspring such as *TT: Tools* 

The Technology Needs Assessment handbook has been piloted at a recent workshop in Dakar and Canada continues to seek to ensure, before it is finalized this year, that the handbook serves as a useful and easily referenced tool for developing countries' needs assessments and can be 'ever-greened' to incorporate best practices.

Canada supports the Program of Work of the EGTT and encourages the SBSTA to continue work on enabling environments and capacity building that complements and builds on that done within the EGTT and other bodies to facilitate the transfer of technology in meeting the objective of the Convention and Protocol.

## vi) Cooperation with Relevant International Organizations

Canada supports efforts by the Joint Liaison Group, in accordance with its mandate as specified in FCCC/SBSTA/2001/2, paragraph 42 (d), to enhance co-operation between the UNFCCC, UNCBD, UNCCD and their respective secretariats, to avoid duplication of efforts and use available resources more efficiently. The flexibility and efficiency provided by the informal approach taken by this consultative body have generated initiatives relevant to the work of all three conventions, like the joint calendar of events and the common information booth set-up in Johannesburg at the 2002 World Summit on Sustainable Development.

Canada takes note of the upcoming UNFCCC sponsored workshop on synergies and encourages participants to fully explore ways of enhancing coordination between the focal points of the three Rio conventions. We recommend that the UNFCCC encourage cooperation to identify common data needs required to meet the objectives of the three Rio Conventions, in particular the data needed for vulnerability assessments, and to implement short and medium term adaptation strategies. This assessment would be useful to determine how to most efficiently facilitate the development of regional centers of excellence for hydrological, meteorological and other data.

Finally, the UNFCCC secretariat should increase its concerted efforts with UNEP and UNDP and other international agencies whose area of activity might have climate change implications to promote synergies under the common goal of sustainable development.

### C. Methodological questions specific to the Kyoto Protocol

i) Modalities for the Accounting of Assigned Amounts under Article 7.4 of the Kyoto Protocol

Canada supports the ongoing work organized by the secretariat in these areas as a matter of priority to establish the institutions set out in the Protocol for its implementation.

#### ii) Clean Development Mechanism Executive Board

Canada fully supports the continuation of the methodological work on the CDM under the EB. The CDM EB should continue to collaborate with the SBSTA, with its members participating in the SBSTA's key workshops and sessions. Canada supports a similar model for the JI Supervisory Committee, when it comes into existence, to ensure coherency and synergy of work.

The role of sinks in the CDM will be further discussed in the SBSTA and Canada looks forward to a decision on this matter at COP 9. The CDM EB may have to undertake some further work on sinks and CDM methodologies, once the COP elaborates the associated modalities. For the longer term, Canada requests the SBSTA to look at the methodological issues related to the eligibility of forestry and agriculture project activities not eligible during the first commitment period.

### iii) Work of the Article 6 Supervisory Committee

The work of the Article 6 Supervisory Committee, in addition to giving consideration to the relevant work of the Executive Board of the CDM, as appropriate, should also consider other relevant work in this area, especially with a view to simplifying and streamlining Article 6 processes.

iv) The role of energy trade in meeting the objective of the Convention and the Protocol

Canada has signaled the importance of the issue of cleaner or less GHG-emitting energy and the role it plays in meeting the objective of the Convention and the Protocol. The effect of cleaner or less GHG-emitting energy trade on global emissions and the goal of stabilization of GHG concentrations in the atmosphere should be fully analyzed within the UNFCCC process.

#### v) Policies and Measures (P&Ms)

As per previous submissions, Canada requests that in addition to specific mitigation options, enhanced priority be given to planning and decision-making tools to assist Parties to assess and implement appropriate domestic mitigation strategies, and to determine the best level, timing and nature of intervention given national circumstances. Methodological work on processes used to arrive at and implement a strategy, barriers to implementation, the involvement of stakeholders, and how decisions are made to include specific P&Ms in a domestic portfolio of action, would help Parties improve the management of their domestic climate change actions.

Closely tied with this will be the need for further work on options to substitute current high emission practices with lower emission practices and to increase energy efficiencies, efforts to build low emission technologies and practices into future planning and infrastructure decisions, further work on the costs and benefits of avoided emissions and identification and measurement of ancillary benefits to better

reflect them in the assessment frameworks. Further work on cross-cutting issues that are common to a number of sectors would also be useful.

Global action is necessary to stabilize cumulative CO<sub>2</sub> concentrations and reduce climate change. In the next years and decades, opportunities to introduce new facilities and infrastructure will increasingly occur in the developing countries and it is important that non-Annex 1 Parties should have access to information being developed in Annex 1 Parties on a range of applicable good practices in emissions avoidance.

Policy assessment tools will likely become more important for Annex 1 countries once the Kyoto Protocol enters into force. While it is too early for a meaningful ex-post self-assessment and self-evaluation of policies and measures, each Party will be concerned that their P&Ms are effective and achieve their desired results. The SBSTA could begin to look at how such a self-assessment could effectively be undertaken.

## 4) Revision of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories

The current mandate for SBSTA, as suggested in document FCCC/SBSTA/1996/16, emphasizes the importance of continued work on methodological guidelines that support estimation and reporting of greenhouse gas inventories.

Canada notes that as, a first step on specific activities under this agenda item, the SBSTA at its 17<sup>th</sup> session invited the IPCC to revise the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* and to aim to complete the work by early 2006. Along with many Parties, Canada believes these guidelines should be updated and most of our comments focus on the methodological work of the IPCC. With respect to methodological work and in particular GHG inventories, Canada believes that the SBSTA's role should focus on issues related to reporting and review, in keeping with past decisions. With respect to reporting, Canada would like to reiterate what we have stated in past submissions, namely that the current UNFCCC reporting guidelines should be amended so that reporting of a full set of common reporting format (CRF) tables is only required for 1990, or whatever base year is chosen, and the last 5 years including the last year for which a submission is made. Canada does not believe that reporting a full set of tables for all years between the base year and the end of the first commitment period in 2012 is useful and, more importantly, manageable for the secretariat, review teams and the Party reporting. A priority for the SBSTA should be the consideration of a more automated reporting format.

The IPCC Good Practice Guidance 2000 and IPCC Guidelines for National Inventories 1966 should be integrated, in a consistent manner, and become the IPCC 2006 Revised Guidelines for National Greenhouse Gas Inventories. This would provide an integrated set of guidelines that focus on methods for developing emission and removal inventories of greenhouse gases. While the focus of the IPCC work should be on methodologies, every attempt should be made to provide linkages with the current and any future UNFCCC Reporting Guidelines, including the CRF.

The Solvent and Other Product use category should include all product uses such as HFCs in air conditioning equipment, or it should be completely integrated into the Industrial Processes section. Currently this category only includes very minor sources of  $N_2O$  and the ozone precursors.

While consistency is necessary between the 1996 Guidelines and the 2006 Guidelines, a decision must be made on the most appropriate manner in which to deal with other gases, in particular the ozone precursors and sulphur dioxide. Given that the focus of the Framework Convention is on greenhouse

gases not controlled by the Montreal Protocol, it is unclear why the IPCC 1996 Revised Guidelines for National Greenhouse Gas Inventories include the ozone precursors. These gases are not part of the Kyoto Protocol, typically do not have global warming potentials (GWPs) associated with them and are not reviewed as part of the in-depth review process. It is Canada's view that only those gases for which GWPs and methods can be developed should be included in the IPCC Guidelines.

The proposed revision to the 1996 Guidelines not only affords an opportunity to improve methodologies for some sources, add additional sources and integrate good practice guidance, but it offers the chance to harmonize and integrate methods and categories related to LULUCF reporting under the Kyoto Protocol and the existing categories of LUCF and Agriculture. Land use based accounting versus activity based accounting could benefit from additional harmonization.

Also, there are sources and sinks for which the science has not been mature or ready enough to include in the Revised 1996 IPCC Guidelines. Some of these sources, including reservoirs, would benefit from further evaluation of the science and available data and methods for possible inclusion in the 2006 Revised Guidelines.

As part of the IPCC Good Practice Guidance (GPG) for LULUCF work in 2003, standard methodologies should be available at the end of 2003. The IPCC GPG for LULUCF, currently under development, describes three possible accounting approaches (stock change, atmospheric flow and production) that could be used for Tier 2 or Tier 3 reporting. These methodologies should provide clear guidance with respect to the sources of fibre that are included in this accounting as wood products are manufactured from different blends of virgin fibre (harvested wood – domestic + imported); non-wood fibre (e.g. straw, bagasse) and recycled fibre (blend of wood and non-wood fibre).

The harvested wood product (HWP) accounting section of IPCC GPG for LULUCF does not however provide guidance on which approach (stock change, atmospheric flow, production) should be selected. As this issue of "preferred approach" has been raised several times but not resolved, work is needed to advance this decision. For example, Canada, in its January 2003 submission to the SBSTA, proposed that a workshop be held for experts and negotiators in the late summer/early fall 2003 to allow for a full discussion of the accounting objectives related to HWP, and the suitability and implications of each approach. The results of such a workshop could provide important input to the UNFCCC secretariat's paper on HWP that could prepare countries to select the accounting approach for purposes of UNFCCC and Kyoto Protocol reporting.

Canada looks forward to supporting both the work of the SBSTA and the IPCC in developing improved methods, reporting and review guidelines.

## PAPER NO. 3: GREECE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES AND OF THE CZECH REPUBLIC, LATVIA AND SLOVENIA

## INPUT TO THE REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND THE KYOTO PROTOCOL

#### General

Greece, on behalf of the European Union and its Member States, and Czech Republic, Latvia and Slovenia welcome document FCCC/SBSTA/2002/INF.12, prepared by the Secretariat and the invitation to submissions on the subject expressed at SBSTA17 (FCCC/SBSTA/2002/13 para 14d). The EU and Czech Republic, Latvia and Slovenia believe that this exercise helps to further improve the efficiency of the work under the SBSTA and that it facilitates the delivery of the objectives as defined by the Convention in its Article 9.

The EU and Czech Republic, Latvia and Slovenia recognise that several methodological activities are underway by the Subsidiary Body for Scientific and Technological Advice (SBSTA), the Subsidiary Body for Implementation (SBI) the Secretariat and the Executive Board of the clean development mechanism (CDM).

Some areas of work have been agreed at COP 8 after the elaboration of document FCCC/SBSTA/2002/Inf.12 which are therefore not addressed in the document, e.g. the elaboration of a code of practice on the treatment of confidential information under the review process. It is assumed that these areas will be added to those already included in the paper. They are not specifically raised in this submission as they were already agreed.

The following text consists of three parts. The first part addresses the questions raised in the INF.12 document. The second part provides comments to the various topics raised in part III B of the document while in part C additional comments to the individual parts of the Annex are made. Boxes in the Annex that describe already agreed work (e.g. boxes on adjustments to inventories under Art. 5.2, IPCC Good Practice Guidance for LULUCF, modalities for afforestation and reforestation project activities under Article 12 in the first commitment period) are not commented in detail in this submission.

#### Part A Questions raised in the INF.12 document

Should the list of methodological areas reflected in the annex be expanded? What areas of work should be added? What should be the main areas of work over the next 5-8 years?

The EU and Czech Republic, Latvia and Slovenia believe that the subheadings of section B of the INF.12 document under "Topics that may warrant special consideration" reflect the relevant general areas of methodological work under the Convention and the Protocol, namely

- Greenhouse gas inventories
- Projections of greenhouse gas emissions and removals by sinks
- Assessment of policies and measures
- Assessing mitigation and adaptation technologies
- Assessment of the impacts of, vulnerability at and adaptation to climate change

The EU and Czech Republic, Latvia and Slovenia also believe that additional methodological work may be necessary in the future

## 2. Should the SBSTA proactively promote the development, refinement, and improvement of methods and/or focus on the dissemination of information about methods?

In most areas of work, methods have not historically been developed or improved by SBSTA, but have been undertaken by other, more research oriented bodies such as IPCC. SBSTA has tended to develop guidelines on the use of such methods under the UNFCCC and the Protocol. The EU and Czech Republic, Latvia and Slovenia believe that this sharing of tasks, e.g. between SBSTA and the IPCC, was successful and efficient in the past and provides a good basis for work in the future.

In addition to the development of guidance on the use of methods, SBSTA could more proactively disseminate methodological information, e.g. the UNFCCC homepage could act as a clearinghouse of methodological information in different areas with links to international and scientific institutions and Parties with downloadable information, reports, studies or assessments. At the moment, useful additional information is submitted by Parties to the UNFCCC, e.g. in the areas of inventory methodologies, which the EU and Czech Republic, Latvia and Slovenia believe should be made more widely available on the UNFCCC homepage with the consent of the Party concerned.

The reports from a wide range of review activities under the Convention and the Protocol provide valuable sources of information, e.g. in relation to development and improvement of inventories and emission factors and assessments of policies and measures or national circumstances relevant to Parties' adaptation and vulnerability assessment. The EU and Czech Republic, Latvia and Slovenia suggest that it would be useful to analyse and assess these review reports in a more systematic and comprehensive way with the aim of improving methodological work and the review process.

#### 3. Should more testing and analysis of methods be done to guide future work?

The EU and Czech Republic, Latvia and Slovenia believe that there should be a continuous collection of experiences relating to methodologies and a continuous re-evaluation of the adequacy of methodological guidelines and related decisions. UNFCCC Workshops with Parties and experts have been a successful tool to start evaluation and revision of methodological work in the past and should continue in the future. The EU and Czech Republic, Latvia and Slovenia also believe that the past approach with trial periods and further refinement after implementation and use of methodological guidance during such a trial period has been proven as successful and efficient and should continue for new methodological guidance.

Evaluations of the implementation of methodological guidance may be especially relevant in areas where such guidance was explicitly limited to the first commitment period in the decisions taken as these may be areas where further methodological advice may be needed for the subsequent commitment period. For example, the global warming potentials of different greenhouse gases have been fixed in the Kyoto Protocol for the first commitment period, but the IPCC has since revised its advice, and this will need to be reflected in COP decisions.

#### 4. Is there a need to develop a long-term work programme in selected areas? In which areas?

The EU and Czech Republic, Latvia and Slovenia would welcome the development of a long-term methodological work programme as expressed during COP 8 as it would increase clarity and transparency for Parties and support the planning of work. However, such a work programme should be flexible enough to include additional needs if such emerge in the future, especially in the long-term perspective.

#### 5. What organizations should be encouraged to undertake work?

See individual sections under next heading

## Part B. Specific focus of work in each area

The EU and Czech Republic, Latvia and Slovenia in general encourage the secretariat to develop a work plan covering, inter alia, the following areas:

## 1. Greenhouse Gas Inventories

The IPCC has initiated the process of revising the revised 1996 IPCC guidelines for national GHG inventories. The EU and Czech Republic, Latvia and Slovenia believe that there is a need to integrate information found in several documents and sources (1996 guidelines, Good Practice Guidance, Emission Factor database) in one consistent source. Other areas where additional methodological work in the revision process should be considered are: the coverage of existing gaps with regard to sources and gases, the expansion of the Good Practice Guidance on cross-cutting issues (e.g. the key source analysis) in the light of implementation by countries, the reporting tables used to submit inventory data or improved coverage of regional differences (e.g. with regard to emission factors). Any revision of IPCC inventory guidelines should not only incorporate additional and new scientific information from peer-reviewed literature, but also practical experiences from Parties with the implementation of IPCC inventory guidelines. For this purpose, it would be useful if SBSTA would request the Secretariat to support this process with an analysis of practical experiences with IPCC inventory guidelines in order to provide support for IPCC's work. The FCCC secretariat could summarize experiences from the UNFCCC inventory review process as well as from the work in the Consultative Group of Experts on Non-Annex I National Communications (CGE) with the use of IPCC inventory guidelines, to identify widely experienced problems e.g.:

- methodologies where Parties have difficulties in data availability
- methodologies where Parties have difficulties with data confidentiality
- missing areas
- areas with largest uncertainties
- areas where more or improved guidance is needed
- areas where information may need to be updated
- areas where Parties developed interesting country-specific methodological approaches

It would also be useful to conduct an assessment of the requirements related to the IPCC inventory guidelines from the point of view of the UNFCCC inventory review process (e.g. Are guidelines sufficiently clear, precise and unambiguous in order to develop clear and unambiguous technical review assessments?) and to summarize country-specific emission factors made available through the review process. Other institutions involved in the process of implementation of IPCC inventory guidelines, such as the UNDP-GEF National Communications Support Programme, should also be encouraged to summarize their experiences.

With regard to guidelines under Articles 5, 7 and 8, the EU and Czech Republic, Latvia and Slovenia, support the assessment and evaluation of the guidelines developed under these Articles once implemented under the Protocol. It seems premature to already stress the purpose of streamlining reporting and review at this point in time, as inventory guidelines built on revised Convention guidelines have been revised several times in order to make them as efficient and clear as possible.

In the past, the inventory reporting process under the UNFCCC has been a model for other processes, e.g. under the Convention on Long-range Transboundary Air Pollution (CLRTAP) reporting guidelines and

templates for emissions data have been updated and adapted to the CRF. Future methodological work on inventories under SBSTA should intend to cooperate more closely with other Conventions, especially CLRTAP (e.g. data exchange, inclusion of reported data in synthesis and assessment reviews, references to EMEP/CORINAIR Atmospheric Emission Inventory Guidebook where no IPCC methods have been developed) to reduce differences and fill gaps.

The Kyoto Protocol implements the requirement to establish a national greenhouse gas inventory system. Future methodological work should not only comprise inventory guidelines, but also work on inventory systems. Interesting examples of future work on inventory systems could for example be the sharing of information on QA/QC procedures and plans (e.g. sharing of information on implementation), once they are implemented broadly by most Annex I Parties. The inventory review process under the Convention, especially the in-country review, should also assist Annex I Parties in implementing and improving their national inventory systems prior to the start of the first commitment period.

## 2. Projections of greenhouse gas emissions and removals by sinks

Under its monitoring mechanism for anthropogenic CO<sub>2</sub> and other greenhouse gases, the EU is currently developing approaches to improve reporting and comparability of future projections of national emissions and removals by sinks within the EU, e.g. a first workshop on energy projections was held, another on agriculture will follow soon and technical papers are under elaboration. The EU would be pleased to share this work with other Parties and the UNFCCC secretariat once it is finalized. Further work on GHG projections should:

- aim to increase comparability and enhance transparency,
- further promote the use of common definitions,
- lead to an active process of sharing of information on methods and/or models for projections.

With regard to reporting on projections, reporting formats may be improved by adding more specific lists of parameters that should be reported, with projections distinguishing between minimum and additional parameters and between methods/models used.

Further work could also be conducted on the sensitivity analysis and robustness of GHG projections. Comparison of international greenhouse gas projections that was started by the UNFCCC secretariat should continue, e.g. including new sources or specific to some sectors. The international information exchange on projections, including assumptions, should be strengthened and further developed, e.g. through workshops.

Sectoral importance is different among Parties, therefore it is difficult to decide about sectoral priorities of such work. A more detailed analysis of national communications could provide more information about current weaknesses of projecting emissions in specific sectors.

## 3. Assessing policies and measures

The EU views on further methodological work related to policies and measures were already expressed in the submission on good practice in policies and measures (FCCC/SBSTA/2002/Misc.19). Further methodological work concerning policies and measures should also address, inter alia, potential synergies with other Conventions.

Working paper No. 1 on the Comparison of greenhouse gas emission projections from the workshop on preparation of national communications, Bonn, 28 February – 2 March 2001.

#### 4. Assessing mitigation and adaptation technologies

With regard to the question raised - Should information on methods to estimate mitigation pathways and environmental consequences or methods to assess specific technologies be compiled, compared and made more transparent? — the EU and Czech Republic, Latvia and Slovenia believe that mitigation and adaptation pathways should remain a focus of the work in IPCC's assessment reports. SBSTA could contribute by summarizing information reported by Parties in their national communications on mitigation and on adaptation technologies.

The EU and Czech Republic, Latvia and Slovenia welcome dissemination of information as started on the UNFCCC webpage . The EU and Czech Republic, Latvia and Slovenia believe that the assessment of specific technologies as policy options for GHG mitigation is highly depending on national circumstances and that it is difficult to develop general guidance on this issue under SBSTA. Therefore, the focus should be kept on the dissemination of information on such assessment methods as started with the technology page website.

#### 5. Assessing the impacts, vulnerability and adaptation of climate change

Methods and tools for conducting vulnerability and adaptation assessments, based on a variety of results of emissions trajectory and GHG stabilisation levels to be examined by IPCC, are an issue for both Annex I and Non-Annex I Parties. The areas listed under "Options related to future work" in the first box of the Annex and in section III.B.5 seem to relate mainly to Non-Annex I countries. The EU and Czech Republic, Latvia and Slovenia believe that future methodological work on these issues should address all Parties under the Convention and encourages the secretariat to promote the test and evaluation of methods with the view to improve inter alia the quality of future national communications. The difference between first (vulnerability and adaptation) and second box (Article 4.8) in the Annex is unclear.

### Part C: Further areas addressed in the Annex

#### 1. Non-Annex I National Communications

The focus of the work should be the further promotion of and incentives for the implementation of the existing and elaborated methodological guidance related to national communications of Non-Annex I Parties. The EU and Czech Republic, Latvia and Slovenia believe that specific methodological work on national communications should address the needs of both Non-Annex I and Annex I Parties. Existing methodological guidance (e.g. on inventories, projections, vulnerability assessment) should be valid for all Parties. Data availability rather than methods has tended to be the main problem for Non-Annex I Parties, so the EU and Czech Republic, Latvia and Slovenia would support the development of country-specific data and information in Non-Annex I Parties.

## 2. Guidelines under Articles 5, 7 and 8

In addition to the areas highlighted in document FCCC/SBSTA/2002/Inf.12, further work should be conducted on review activities under Article 8 to develop approaches on how the individual inventory review can focus on specific problems or sectors, and on how more detailed assessments using more background information can be integrated in the current general review approach. Further methodological work will be necessary in relation to testing methods for the review of registries in conjunction with the elaboration of technical standards.

## 3. Modalities for the accounting of assigned amounts under Article 7.4

Future work in this area encompasses:

- Development, implementation and testing of the transaction log
- Continuation of work for registries relating to the functional and technical specifications of the technical standards
- Promotion of the exchange of information and experience in relation to the development and establishment of registry systems;
- Establishment of a database, and development of its characteristics for the compilation and accounting of emissions and assigned amounts.

Work on the development of a standard electronic format for the report upon expiration of the additional period for fulfilling commitments is not addressed under decision 19/CP.7 as stated in document FCCC/SBSTA/2002/Inf.12

## PAPER NO. 4: JAPAN

# JAPAN'S VIEWS ON THE REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND THE KYOTO PROTOCOL

Japan welcomes the opportunity to submit its views on the review of methodological work, as invited by the SBSTA at its seventeenth session. Japan is committed to take part in and advance the discussion on the review of methodologies at the SBSTA at its eighteenth and nineteenth sessions. Since methodological work underlies the implementation of the Convention and the Kyoto Protocol, this review will contribute to pursuing the ultimate objective of the Convention if carried out with a comprehensive and strategic perspective. To this end, Japan provides general and specific comments on each topic on the following pages.

#### **General Comments**

Firstly, the review should contribute to the elaboration of a future regime to combat climate change. There is a need for methodologies for appropriate decision-making in taking future actions. In this regard, the review of methodological work should be conducted on a scientific, technical and socioeconomic basis so that the review does not prejudge the outcome gained by the use of the methodologies. In other words, the review should produce practical tools and well-defined results that can assist Parties in making strategic decisions to achieve the ultimate objective of the Convention.

Secondly, the review of methodological work should be carried out in a non-duplicative manner to avoid unnecessary costs or confusion with ongoing work by Parties. This ongoing and/or past work includes methodological issues under other agenda of the SBSTA and the SBI. For example, policies and measures of Annex I Parties are analyzed in detail under the agendum "Good Practice" in policies and measures. If the review focuses on assessing policies and measures, it should be conducted without duplication. It is also important to decide timings of the review carefully to avoid duplication or confusion.

Thirdly, the review of methodological work should be beneficial to both Annex I and non-Annex I Parties. In particular, the review should contribute to sustainable development in Non-Annex I Parties, which face obstacles, including financial ones, in the area of methodological issues. If the review could reduce such obstacles, non-Annex I Parties would benefit from it. In this context, the

review should be conducted with the principle that methodologies should be accessible for all Parties and be utilized at a reasonable cost. In addition, methodological issues are related to the review process under the Convention and the Kyoto Protocol. For instance, greenhouse gas (GHG) inventories and national communications submitted by Annex I Parties are subject to the in-depth review process, which enables Annex I Parties to improve the methodologies to prepare GHG inventories and national communications. However, non-Annex I Parties do not currently benefit from feedback in the in-depth review process. It would be beneficial to non-Annex I Parties that they could apply for an in-depth review on a voluntary basis in cases resources of the secretariat for the review is available.

Lastly, Japan emphasizes the importance of the information each Party gains through the use of methodologies. The information includes the data acquired from the use of methodologies. The information should be collected and utilized by all Parties to contribute to their decision-making and next-phase review of methodological work, including analysis of the information. Therefore, methodological work should take into consideration the compatibility in the reporting of information, such as the common reporting format for GHG inventories.

As for areas of the review of methodological work, Japan is of the view that the five topics listed in the section III of document, FCCC/SBSTA/2002/INF.12, appropriately represent the areas needed for the review. Each topic comprises a common ground for implementing commitments under the Convention and the Kyoto Protocol. In assigning priorities to the areas, Japan stresses that the priorities should be consistent with policy considerations under the Convention and the Kyoto Protocol. In particular, it should be clarified what information is needed in the coming years. With that in mind, Japan gives high priority to three topics: GHG inventories; projections of greenhouse gas emissions and removals by sinks; as well as assessing mitigation and adaptation technologies.

## Greenhouse gas inventories

GHG inventories are the basis of seeking significant emission reduction on a global scale. One of the Parties' role is to address climate change by revising the several guidelines for GHG inventories All Parties have committed themselves to submit their national communications with GHG inventories under the Convention. But some Parties have not yet submitted their GHG inventories. Japan strongly suggests the review of GHG inventories be carried out in a manner that encourages Parties to prepare and submit their GHG inventories.

In the UNFCCC process, the IPCC has provided the platform for developing methodologies. For example, the IPCC has prepared the guidelines for GHG inventories and the good practice guidance on GHG inventories. Currently, the *good practice guidance for Land-Use, Land-Use Change and Forestry* is being drafted. In addition, the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* are to be revised with the aim of completing the work by 2006. Japan underscores the importance of these works.

In revising the IPCC guidelines, Japan insists that the following points should be discussed. The IPCC guidelines and guidance are/will be made available for all Parties, however, applicability of default values and methodologies contained in them have not been fully tested, especially in non-Annex I Parties. Therefore, Japan suggests that further activities to support the IPCC's work on assessment and improvement of their applicability to non-Annex I Parties, in conjunction with capacity building, be facilitated by the secretariat, in collaboration with the IPCC National Greenhouse Gas Inventories Programme Technical Support Unit and other relevant bodies. Such activities may include: comparison of default estimate and national specific estimates; information collection on the availability of country specific inventory data; and, case studies in selected non-Annex I Parties. In relation to this, activities of the IPCC Emission Factor Database (EFDB) should be further stimulated.

Moreover, the revision of the IPCC guidelines is expected to reflect users' requests, including reduction of uncertainties in estimating GHGs emissions, in order to make it more applicable for both Annex I and non-Annex I Parties. Therefore, the SBSTA should consider how it can collaborate with the IPCC to deliver the requests in revising the guidelines.

## Projecting of greenhouse gas emissions and removals by sinks

It is widely recognized that projecting GHG emissions and removals by sinks is essential in the development of climate change policy. However, while the projection of CO<sub>2</sub> emissions from the energy sector seems fairly established, projection of CO<sub>2</sub> removals by sinks and non-CO<sub>2</sub> emissions have room for improvement.

At present, only Annex I Parties are required to include projections of GHG emissions and removals by sinks in their national communications, but the projections will also offer a good basis for non-Annex I Parties to shape their policies for sustainable development. In this regard, projection methodologies

should be produced at a reasonable cost for non-Annex I Parties to include the projection of GHG emissions and removals by sinks in their national communications.

In addition, it is significant to project global trends of GHG emissions. Taking into account the fact that there is considerable disparity in the availability and reliability of data necessary for projection, there is a need for projection methodologies which can describe the trends approximately.

In view of the above points, the work for the development of projection methodologies has high priority for both Annex I and non-Annex I Parties. In addition, scenarios used for projections should be transparent.

## Assessing policies and measures

As described earlier, assessing policies and measures of Annex I Parties has been developed so far under the work on "Good Practice" in policies and measures. Also, this topic may duplicate other topics: assessing mitigation and adaptation technologies; and assessing the impacts, vulnerability and adaptation of climate change. Accordingly, the review of the methodologies in this area should be conducted in a non-duplicative manner. So far Annex I Parties have accumulated information on policies and measures through existing frameworks such as the SBSTA and OECD. With regard to non-Annex I Parties, experiences obtained through Clean Development Mechanism projects could contribute to the development of methodologies to evaluate policies and measures. What the SBSTA and the secretariat should do next is to consider how Parties can make the best use of the accumulated information for establishing their national policies and measures. Hence, the SBSTA and the secretariat should start discussing what kind of information will be beneficial to decision-making.

### Assessing mitigation and adaptation technologies

Japan believes that assessments of both mitigation and adaptation technologies are high priorities in the review of methodological work. According to the Delhi Ministerial Declaration adopted at COP8, mitigation actions are now taking place both in Annex I and non-Annex I Parties and mitigation of GHG emissions to combat climate change continues to have high priority under the provisions of the Convention. The Declaration also emphasizes that urgent action is required to advance adaptation

measures. In Japan's view, however, mitigation of GHG emissions seems to take priority over adaptation both in Annex I and non-Annex I Parties for addressing climate change, given the fact that the IPCC Third Assessment Report confirms that significant cuts in global emissions will be necessary to meet the ultimate objective of the Convention. Development and diffusion of mitigation technologies are needed to achieve emission cuts on a global scale. Hence, methodologies to assess mitigation technologies are indispensable to mitigate GHG emissions. To promote sustainable development in non-Annex I Parties, assessment of mitigation technologies should include the analyses of socio-economic costs and benefits including ancillary benefits, socio-economic and environmental impacts, and social acceptability.

Since climate change causes a wide variety of impacts, it is practical to seek suitable adaptation technologies case by case, but not to discuss different types of technologies together. Hence, adaptation technologies should be prioritized and, according to the priority, assessment of adaptation technologies should take place.

In assessing mitigation and adaptation technologies and disseminating consequent information, the secretariat might collaborate with the Expert Group on Technology Transfer (EGTT) and relevant international organizations including the UNEP/International Environmental Technology Centre (IETC).

#### Assessing the impacts, vulnerability and adaptation of climate change

Assessing the impacts, vulnerability and adaptation covers a variety of issues. It is important to prioritize these issues in reviewing the assessment. From that perspective, case studies conducted by different countries in various geographical regions and sectors identify individual adverse impacts of climate change. The OECD is currently working on the project "Development and Climate Change." In this project, case studies for selected developing countries are being conducted. The outcome of the project will contribute to the development of the methodologies. In addition, Japan has issued a book titled "the South Pacific Resource Book." The book offers new information that was previously lacking and assists countries in conducting assessment on vulnerability and adaptation. It comprises the information based upon thorough investigations that were undertaken in several Pacific Island countries over years. Japan wishes to offer this book as a contribution to the development of the methodology.

#### PAPER NO. 5: NEW ZEALAND

## NEW ZEALAND SUBMISSION ON THE REVIEW OF METHODOLOGICAL WORK UNDER THE CONVENTION AND KYOTO PROTOCOL

This submission responds to the invitation to Parties in paragraph 14(d) of the report of SBSTA 17 (UNFCCC/SBSTA/2002/13) to provide initial views on needs for specific methodological activities and on a strategic approach to future methodological work.

#### Overview

We have taken note of the considerable activity relating to the development of guidelines for reporting information and to the dissemination of information on methods, guidelines, modalities and rules that have been initiated under the Convention since COP1 (as presented in FCCC/SBSTA/2002/INF.12), and observe that this work is at various stages of completion. New Zealand supports the continuing development of thorough, workable and scientifically sound methodologies and guidelines under both the UNFCCC and the Kyoto Protocol where this is appropriate to promote effective implementation of both these agreements.

The intensive period of work on development of the guidelines under Articles 5, 7 and 8 of the Kyoto Protocol has come to end. Although there are still some elements of the guidelines and activities relating to their implementation to be completed, most of the existing work has been completed. Thus this work is entering a new phase, providing an opportunity for SBSTA to initiate some new methodological work.

Importantly for SBSTA, it should not duplicate work going on elsewhere, but draw upon, and be informed by methodological work being undertaken by other groups and organisations, in particular the IPCC. However, SBSTA has a substantive role in making policy decisions that are necessary to advance methodological work.

#### Particular issues

1. **Future negotiations:** Looking ahead to future negotiations under the Convention and the Kyoto Protocol there will be a need for technical information to guide decision-making.

In this respect we acknowledge the considerable resource available in the IPCC Third Assessment Report (TAR) in many areas of relevance (see also New Zealand's separate submission on the TAR). Given the timing of future negotiations (COP/MOP to initiate at least seven years before the end of the first commitment period), in our view the TAR provides the scientific basis on which to commence those negotiations. We acknowledge that the TAR will not be the only technical input, but it is an important one given its broad based support.

Parties will also require additional specific scientific information and data to guide the discussions on future mitigation commitments. One particular area would be issues regarding production and consumption and analysis of the greenhouse gas implications of traded emission-intensive commodities.

There are other activities being undertaken by Parties and international organisations on additional information and data to assist discussion on future mitigation commitments. Pulling some of this material together would be a useful role for the secretariat.

The work on the assessment of contributions to climate change ("The Brazilian Proposal") which has been on SBSTA's agenda for some years, has been referred to the scientific community for analysis and review, and will not return to SBSTA until its 23<sup>rd</sup> session. We note that the scientific analysis

and peer review of this work will also contribute to the methodological and technical work required as an input to future negotiations.

2. Revision of the Revised 1996 IPCC Guidelines for national greenhouse gas inventories: We note that the IPCC Task Force Inventories Bureau has begun, in a preliminary way, the review of the 1996 Guidelines. This is fundamental and essential work, providing the guidelines for estimating greenhouse gas emissions and removals, and is part of the technical information that will be needed to guide decision making during future negotiations (issue 1. above).

In particular, the treatment of harvested wood products needs to be included in the revision of the 1996 Guidelines. Before this can happen though, SBSTA needs to expeditiously complete its work on the issue to ensure that the guidelines developed by the IPCC are reflective of decisions taken by the SBSTA (and the COP). Refer also to New Zealand's separate submission on harvested wood products.

Good practice methodologies for estimating emissions from international marine and aviation bunker fuels are required in order to standardise the approach taken by Parties in producing these estimates<sup>1</sup>. We acknowledge that currently these emissions are excluded from commitments, and political decisions would be required to change this, but at a purely technical and methodological level, as Parties are already required to report these emissions, a standardised approach would greatly assist comparability in this area.

<sup>1</sup> We note from FCCC/SBSTA/2002/INF.12 that methodological aspects relating to emissions from international aviation and marine bunker fuels are to be considered by SBSTA 18.

#### PAPER NO. 6: NORWAY

## VIEWS ON THE REVISION OF THE REVISED 1996 IPCC GUIDELINE FOR NATIONAL GREENHOUSE GAS INVENTORIES

The SBSTA at its seventeenth session invited Parties to provide submissions on needs for specific methodological activities and on a strategic approach to future methodological work. In a Message to Parties, dated 5 December 2002, the secretariat of the UNFCCC invited Parties to provide, additionally, views on the revision of the Revised 1996 IPCC Guideline for National Greenhouse Gas Inventories. Norway welcomes the opportunity to provide views on the revision of the Revised 1996 IPCC Guideline.

### General views

The Revised 1996 IPCC Guideline, including the Good Practice Guidance from 2001, has been an essential tool for the reporting commitment under the Climate Convention, and will be the basis for emission reporting under Article 7 of the Kyoto Protocol in the first commitment period. However, there is a need to improve the 1996 Guidelines in order to take into account recent findings, better emission data and emission factors, as well as new source/sink categories.

An overall aim in the revision of the 1996 IPCC Guideline should be to simplify the Guideline, in order to improve the usability. This simplification could possibly be achieved through improved structure, see comments below, but also by limiting the number of pages.

We believe there is a general need to improve the coverage with regard to sectors, sources and gases. For some sectors we also see the necessity to update the methodology for both tier 1 approaches and for more advanced methodologies. Further, the emission factors in the 1996 Guideline, particularly the regional differentiation of emission factors, need to be reviewed.

## Views on the structure and cross-cutting issues

We believe the new guideline should be one single document which includes the Revised 1996 IPCC guideline, the Good Practice Guidance on emissions from 2001, and the upcoming Good Practice Guidance on LULUCF. The Good Practice Guidance with its decision trees and key source approach should be the basis for this integration.

Furthermore, it is important to retain the main structure (chapters) of the Revised 1996 IPCC guidelines and the Good Practice Guidance, to prevent confusion and discontinuity in the preparation of inventories. However, we believe the appropriateness of the concept with three volumes (Reporting Instructions, Workbook and Reference manual) should be reconsidered in the light of a consolidation of the 1996 Guideline and the Good Practice Guideline. Anyhow, the structure of the new guideline should be adjusted to include new sources and gases and to remove some inconsistencies, such as:

- There should be a new chapter in the guidelines covering carbon storage in geological formation and deep seas. This new sector (and chapter) could be called "Non-biotic Sequestration". Furthermore, the use of CO<sub>2</sub> for enhanced oil recovery (EOR) which also involves CO<sub>2</sub> sequestration, should be considered included in this new chapter.
- In the existing guideline the so-called new gases (HFCs, PFCs and SF<sub>6</sub>) are included under Industrial Processes. We believe this is not a very logical solution, since these emissions are associated with several sectors and not only industry. Hence, one should consider to treat the new gases in a separate chapter or together with solvents.

We believe some cross-cutting issues should be treated in a more stringent and comprehensive manner in the new guidelines. This includes, for example, the following issues:

- Capture and storage of non-biotic carbon is an issue not only relevant for the energy sector, but also
  for industrial processes through carbon sequestration in products (e.g. steel, ferroalloy and carbides),
  and for the waste sector through carbon storage in slow decomposable plastic waste products.
  Hence, this issue should not only be treated in each sector but also for example in the introduction
  part as a cross-cutting issue.
- Export and import of greenhouse gases (mainly CO<sub>2</sub>, HFCs, PFCs and SF<sub>6</sub>) is an issue relevant for both the energy sector (petroleum products), industrial processes (e.g. plastic, CO<sub>2</sub> as a product, HFC chemicals) and for the LULUCF sector (harvested wood). Hence, this issue should not only be treated in each sector but also for example in the introduction part as a cross-cutting issue.
- More clear guidance on how to report emissions from use of energy as feedstock or raw material should be provided.
- Furthermore, guidance on how to allocate CO<sub>2</sub> emission from peat production and combustion, as well as how to allocate different sources of CO<sub>2</sub> from agricultural soil should be provided (for example CO<sub>2</sub> from liming and fertilizer use versus CO<sub>2</sub> due to changes in carbon stock).
- Methodologies in the relevant sectors on the estimation of CO<sub>2</sub> emissions associated with the atmospheric oxidation of CO, nmVOC and CH<sub>4</sub> emissions from non-combustion and non-biogenic processes, such as solvent use, coal mining and handling, venting and leakages of fossil fuels should be included. In addition general guidance on how this cross-cutting issue are to be treated should be provided.

#### Views on the coverage

The new guidelines should include any new greenhouse gases not covered by the Montreal protocol, e.g.  $NF_3$  or other F-gases. Furthermore, the guidelines should continue with the coverage of precursors and aerosols, including  $SO_2$ ,  $NO_x$ , nmVOC and CO. In the existing guideline there are in general no methodologies for the precursors, since such methods are covered in regional programmes, e.g. EMEP/CORINAIR. In the preparation of the new guideline it should be considered whether references to these regional programmes are sufficient or whether a more global approach should be introduced. Anyhow, the good practice approach should be extended to the precursors.

The list of precursors could be extended. For example, the inclusion of  $NH_3$  would be reasonable, since these emissions are linked to the formation of secondary particles and deposition of reduced nitrogen normally will increase the denitrification in soil, and hence increase the  $N_2O$  emissions. Furthermore, an inclusion of particles should be considered. However, any inclusion of new precursors and methodologies for estimating these gases should be done in collaboration with other relevant programmes or conventions, such as the UN-ECE Convention on Long Range Transboundary Air Pollution Programme (CLRTAP) and its Task Force on Emission Inventories and Projections (TFEIP). If it is decided to include particulate matter, it is needed to clarify what types of particles (black carbon, organic carbon etc.) and relevant size distribution which will differ from regional programmes focusing on particle size ( $PM_{10}$  and  $PM_{2.5}$ ).

The new guidelines should be as comprehensive as possible with regard to source coverage. Particularly, we find it important to include  $CO_2$  capture and deposition, both in geological formations and in deep seas. In this regard it is important to develop methodologies for estimation, monitoring and reporting.

These methodologies should enable long-term documentation of any leakages from CO<sub>2</sub> reservoirs, so that non-permanent CO<sub>2</sub>-storage can be detected. The new guidelines should be based on what has already been assessed in the ongoing work of the Special report on CO<sub>2</sub> capture and deposition.

## Views on methodology and emission factors

We believe the *tiered* methodology in the Revised 1996 Guideline has proved to be very useful in the preparation of national emission inventories. Hence, we find it essential to retain this approach in the new guidelines. However, for some source categories one should consider the possibility to replace the least advanced tier 1 default methodologies with more advanced tier 1 methodologies, if new knowledge can justify such improvements in emission factors or estimation methods.

In this regard we also believe that one should consider the deletion of the *reference approach* as a default tier 1 methodology, since this approach in many cases gives inaccurate emission estimates and will not enable the country to report emissions from energy sub-sectors. However, we find the reference approach very valid as a tool for verification of countries' CO<sub>2</sub> emissions from energy sector. Thus, it could be included in the guideline, but not as a tier 1 approach, only as a methodology which can be used in *addition* to more advanced methodologies.

There is a general need to improve and update the emission factors in the guidelines, particularly the regional differentiation of emission factors. In this regard it is important to establish a good interaction with the work undertaken under the Emission Factors Database (EFDB) project. We also see a necessity to update some of the emission factors with regard to new mitigation technologies. However, it is important that emission factors reflecting mitigation technologies are presented consistently with the base year technology.

Furthermore, we would like to underline the need for having a good and transparent dialog with experts from industry and NGOs both before the planned scoping meeting later this year and during the preparation of the new guidelines.

#### PAPER NO. 7: SAUDI ARABIA

#### **METHODOLOGIES**

#### **REFERENCE:**

The SBSTA invited Parties to submit, by 15 February 2003, their views on needs for specific methodological activities and on a more strategic approach to future methodological work, for example, what methodological work should be done, how should it be done, who should undertake the work and what are the priorities. The SBSTA requested the secretariat to prepare a compilation of submissions, and a synthesis based on submissions by Parties and document FCCC/SBSTA/2002/INF.12, in order to initiate discussions on elements of a possible work programme for consideration by the SBSTA at its eighteenth session.

The SBSTA invited Parties to focus submissions on, inter alia, the topics listed in the section III of document FCCC/SBSTA/2002/INF.12.

#### **METHODOLOGIES**

The following submission will examine the future methodological needs on issues related to the impact of response measures for the both the Convention and the Protocol. We will examine in this submission: What methodological work should be done?

How should it be done?

Who should undertake the work?

What are the priorities?

## 1) Methodologies on Implementing Win/Win Policies and Measures:

#### What?

Methodologies are needed to guide Annex I countries in implementing win-win policies and measures that would meet both the need to reduce emissions and the need to minimize adverse social, environmental and economic impacts on developing country Parties, especially those identified in Article 4, paragraphs 8 and 9 of the Convention.

How?

It should be done within the framework of actions taken on policies and measures.

Who?

It should be done by SBSTA.

What priority?

It should be of high priority since no methodological work is established under Article 4.8 on impacts of response measures.

## 2) Methodology on assessing terms of trade and socio-economic impacts on individual developing countries:

What?

There is urgency for methodologies to assist developing countries to examine their vulnerability to terms of trade and socio-economic impacts.

#### How?

It should benefit and improve the effectiveness of current activities for assessing the impact of implemented response measures in a portfolio of approaches; such as:

- a. Data sets;
- b. Development of assumptions that are widely accepted based on standardized approaches so as to improve the effectiveness and speed of the process and reduce costs;
- c. Verification of existing data;
- d. Improving models so that they can address implemented rather than potential policies and measures;
- e. Establishment of baseline data.

Furthermore, in assessing the effects of policies, such factors as market approaches (taxes, subsidies, cap-and-trade), regulations and research and development need to be included in the assessments.

#### Who?

It should be developed by SBSTA in collaboration with international organizations such as UNDP, and OPEC.

## What priority?

It should be of high priority since many developing countries are starting to work on their second national communications.

## 3) Methodology on assessing the impacts on developing countries of policies already implemented by Annex I Parties:

#### What?

Methodologies are needed to assess the impacts on developing countries of policies already implemented by Annex I parties.

#### How?

In order to do so, current models for evaluating the effects of response measures need to be expanded in their coverage of countries and of issues. The objective should not be to determine which model or group of models is more advanced, but rather to agree on which existing models can be used as part of a portfolio of tools for decision-making.

### Who?

It should be developed by SBSTA in collaboration with International Organizations such as OPEC.

### What priority?

It should be of high priority since the Convention is in force and many Annex-I countries have submitted many national communications outlining their policies and measures. In addition, the Kyoto Protocol may enter into force soon and many policies and measures will have negative impacts on many developing countries.

#### PAPER NO. 8: SWITZERLAND

## **SBSTA 18**

## REVIEW OF THE METHODOLOGICAL WORK UNDER THE CONVENTION AND THE KYOTO PROTOCOL

We propose to assess how the different activities requested to the SBs and/or underway could be grouped in a few categories in order to improve their treatment and consistence.

- 1. First of all we would like to insist in the importance and necessity of all activities under the Convention on methodological issues to further enhance the implementation of the Convention and the Kyoto Protocol. Therefore we support the continuation of these activities.
- 2. Consideration should be given on how to classify the various activities in a systematic manner and deal with the various aspects of the methodologies at the same time in a consistent way. A rough classification of ongoing methodological work could encompass the following three categories: "Greenhouse gases", "Mitigation", and "Adaptation".
- 3. We propose to consider together the areas of vulnerability and adaptation, and to deal simultaneously with Article 4.8 and Article 4.9 issues and other related areas under the heading "Adaptation". In the same vein, we would group all areas in relation with Articles 5, 7 and 8 of the Kyoto Protocol under "Greenhouse gases". More specific proposals can be found in the following paragraphs.
- 4. On GHG inventories we think that the next steps should be: best exploit data gathered in the data check and assessment process at the secretariat. On this basis, conduct additional comparative studies regarding data quality and data uncertainty with respect to methods used by Parties. The proper use of reference data, e.g. as produced by the IEA, should be considered as well. A Technical Paper by the Secretariat would be welcome. Then, as soon as feasible, evaluate the experience with Good Practice Guidance to draw lessons for the eventual revision of reporting guidelines.
- 5. On projections of GHG emissions/removals: for the time being, take differing national circumstances fully into account. There is no urgent need to develop guidance for uniform projections but take opportunities to improve consistency and comparability.
- 6. On policies and measures: continue along the lines of decision 13/CP.7.
- 7. On impacts, vulnerability, adaptation: take differing national circumstances fully into account; promote and facilitate exchange of information; make best possible use of national communications and their review to gather information, including information on methods applied at the national level. This could be taken into account when revising the national communications guidelines.
- 8. On Article 5, 7 and 8: for the time being, facilitate implementation and gain experience with newly established guidelines, assess need for revision by 2005.
- 9. On LULUCF: make sure that adequate resources will be available to Convention bodies for incorporation of the results of IPCC work into FCCC/KP guidelines.
- 10. On bunker fuel emissions: this area should be incorporated in the work programme with a view to improve the basis for integration of these emissions in national totals as soon as practicable.

- 11. Other important areas in our view are non-Annex-I communications, flexible mechanisms implementation, technology transfer, LDC needs, adverse effects.
- 12. We feel that COP 9 should adopt a work programme to deal with methodological work under the Convention and the Kyoto Protocol.
- 13. Finally, we would support giving some consideration on how to facilitate the collaboration between the EB of the CDM and the SBSTA on methodological issues.

#### PAPER NO. 9: UNITED STATES OF AMERICA

# SUBSIDIARY BODY ON SCIENTIFIC AND TECHNICAL ADVICE VIEWS ON METHODOLOGICAL ISSUES

The United States welcomes the opportunity to provide views highlighted by SBSTA-17, on the methodological work of the Subsidiary Body for Scientific and Technical Advice (SBSTA), pursuant to paragraph 14 of FCCC/SBSTA/2002/13, taking into account the suggestions reflected in FCCC/SBSTA/2002/INF.12.

The SBSTA and the UNFCCC Secretariat continue to play an important role in identifying and evaluating information of importance to the implementation of the Convention. FCCC/SBSTA/2002/INF.12 provides a useful overview of the range of activities the SBSTA and Secretariat are involved in at this time. FCCC/SBSTA/2002/INF.12 identifies a number of potential additional methodological issues for the SBSTA to consider in the coming years. The United States notes that a distinction should be made regarding the utility of methodologies for national decision makers and those that are useful in the international process. In this regard, we would draw a distinction between methodological activities relating to inventories and those relating to certain other aspects of the paper. The Unite States believes the role of the SBSTA is generally to focus on the dissemination of information about methods, rather than to be directly involving itself in the development, refinement, and improvement of methods. This latter role is more appropriate for other organizations or national institutions than for the Secretariat or the SBSTA.

As a general matter, we believe methodological needs should derive from specific analytical needs identified in discussions of the SBSTA. It is largely through these processes that the relevance and importance of such information is best understood. It may be that future discussions relating to inventories, policies and measures, technology transfer, vulnerability and adaptation, or other aspects of the Convention's work will reveal further specific methodological work needed to advance the efforts of countries to implement the Convention. Reactions to specific items raised by FCCC/SBSTA/2002/IINF.12 are detailed below.

Greenhouse Gas Inventories: The United States notes that the IPCC is initiating a revision of the IPCC Guidelines with a goal to complete the work in 2006. In our view, the most valuable assistance the UNFCCC Secretariat can provide to the IPCC as it undertakes this work program is a review and synthesis of the methods being used by Parties in their inventories, and a summary of the significant findings of reviews conducted to date under the UNFCCC process. This information would be useful to the technical writing teams convened by the IPCC to revise the guidelines because it would provide them with information about how the current inventory guidelines are being implemented and what the key problems or issues have been highlighted by the UNFCCC expert review teams.

With respect to some of the options outlined in FCCC/SBSTA/2002/INF.12:

- ◆ Para 22: The United States does not believe that it would be useful for the UNFCCC Secretariat to compare or analyze "the efficacy of methods used by Annex I Parties." We believe technical experts identified through the IPCC process should do such an effort, to the extent it may be needed.
- ◆ Para 23: Level of Accuracy: The United States does not agree with the underlying premise of this paragraph namely that there is a uniform, minimally acceptable "level of accuracy" across all sources in a GHG inventory. The United States notes that the foundation of the IPCC's work on

good practice was the recognition that accuracy levels would vary across sources and countries, but that in all cases the goal was to reduce uncertainty to the lowest level practicable. Further, the United States believes the issue of project-level accounting and methodological choice should not be linked to the greenhouse gas inventory.

♦ Para 24: Data Analysis: The United States believes the IPCC is in the best position to determine the types of data that are useful to technical experts when they evaluate inventory estimates, and suggests that the IPCC sector experts could evaluate technical aspects of reporting as part of its revision of the IPCC Guidelines. The U.S. does not believe there is sufficient value in the suggested comparison of default and national methods to merit an investment of resources by the UNFCCC Secretariat. The U.S. would not support such an analysis by the UNFCCC Secretariat.

Projections of greenhouse gas emissions and removals by sinks: The United States considers that specific methodologies for projecting greenhouse gas emissions are useful primarily in a national context, given the range of inputs that form their basis. Many of these assumptions are not related to greenhouse gas emissions directly, but will be a function of broader assumptions relating to economic activity in countries involved. To the extent such projections are useful at the international level, they normally are presented in contexts too specific to warrant focused SBSTA work on country projection methodologies themselves. In this regard, the United States considers the current function of the Secretariat in compiling information on greenhouse gas emissions projections to be appropriate. We believe the development and evaluation of projections should continue to be undertaken by other organizations.

<u>Policies and measures</u>: The United States considers that SBSTA work to date on policies and measures, which has focused on exchanging information on policies and measures, has served to highlight differing national circumstances in the implementation of the Convention at the national level. We believe work should continue along its current track. FCCC/SBSTA/2002/INF.12 suggests pursuing work on *ex post* evaluation of policies and measures. We do not believe it will be useful to further assess Parties' implementation of policies and measures for a number of reasons, including: (1) national circumstances make it particularly difficult to assess whether a policy is effective or not: and, (2) policies likely have more than one stated purpose and benefits may arise that had not been considered—making the policy effective but perhaps not exactly as expected.

Mitigation and Adaptation Technologies: The United States also does not believe SBSTA is the best forum for addressing methodologies for technology pathways. Such pathways are generally country-specific and methodologies are subject to significant differences in assumptions and interpretations. This makes the development and global assessments of such methodologies of limited value in a forum such as SBSTA. The United States considers that there are a number of useful ongoing activities to build capacity for countries to assess technologies themselves, based on their national circumstances, and SBSTA could play a role in promoting better access to these assessment methodologies. These efforts include the Climate Technology Initiative, the Experts Group on Technology Transfer, the International Energy Agency, the OECD, UNDP, UNEP, and others. The Experts Group on Technology Transfer is involved in a series of reports that will build on these efforts. New additional SBSTA work on methodologies, either in development of new methodologies or dissemination of existing technologies would be a low priority for methodological work given this already active international effort. We encourage the EGTT, however, to give consideration to the improvement of access to such methodologies.

Assessing the impacts, vulnerability and adaptation to climate change: As in the case of technology assessment, the United States notes that vulnerability assessment will be generally specific to national and local circumstances. The development of assessment methodologies for use by countries in

conducting such assessments is very important, and is at an earlier stage than comparable work relating to technology identified above. The development of such methodologies is best undertaken by other organizations; however, the SBSTA can play a role in encouraging their development, dissemination and application by planners at the country level.

----