REPORT OF THE FOURTEENTH SESSION OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

VIENNA, 1-3 OCTOBER 1998

	The following abbreviations have been used in this report:
CA	Contributing Author
CLA	Co-ordinating Lead Author
COP	Conference of the Parties to the UN FCCC
COP-x	xth Session of the COP
FCCC	Framework Convention on Climate Change (UN)
GCOS	Global Climate Observing System
GHG	Greenhouse Gas
HFCs	Hydrofluorocarbons
IEA	International Energy Agency
IPCC-x	xth Session of the IPCC
LA	Lead Author
RE	Review Editor
OECD	Organization for Economic Co-operation and Development
SBSTA	Subsidiary Body for Scientific and Technological Advice of the COP
SPM	Summary for Policymakers
TAR	Third Assessment Report of the IPCC
TEAP	Technology and Economics Assessment Panel under the Montreal
	Protocol on Substances that Deplete the Ozone Layer
UN	United Nations
UNEP	United Nations Environment Programme
WG	Working Group of the IPCC
WGB	Bureau of an IPCC Working Group
WMO	World Meteorological Organization

1. OPENING OF THE SESSION (agenda item 1)

- 1.1 The session was opened at 0945 hours on 1 October 1999 in the Vienna International Centre, Vienna. The agenda as approved is given in annex A.
- 1.2 The remarks of Prof. G.O.P. Obasi and Dr. Klaus Töpfer were distributed during the session. They are available from the Secretariat on request.
- 2. APPROVAL OF THE DRAFT REPORT OF THE THIRTEENTH SESSION (MALDIVES, 22 & 25-28 SEPTEMBER 1997) (agenda item 2)
- 2.1 With respect to paragraph 7.5, a query was raised as to the number of terms a member of the Bureau could hold office and the duration of the term of office of the IPCC Chairman and the other members of the Bureau. It was suggested that these questions could be part of the review of the Procedures under agenda item 10.

- 2.2 With no further comments, the draft was approved.
- 3. IPCC WORK PROGRAMME AND BUDGET FOR 1999-2001 (agenda item 3)
- 3.1 The Panel agreed with the proposal of the Bureau that the Financial Task Team, while open-ended, consist of the following core membership:

Dr. L.G. Meira Filho (Brazil) - Co-Chairman Mr. Daniel Reifsnyder (USA) - Co-Chairman

The three Co-Chairmen of the Working Groups from the developing countries

Australia

Germany

Japan

Netherlands

Norway

Switzerland

UK.

- 3.2 The Government of Antigua and Barbuda requested to be on the Financial Task Team.
- 3.3 The IPCC approved its work programme and budget for 1999, which is attached as annex B.
- 4. ACTIONS TAKEN AT THE SEVENTH SESSION OF WORKING GROUP I, THE FIFTH SESSION OF WORKING GROUP II AND THE FOURTH SESSION OF WORKING GROUP III AND ONGOING WORK OF THE WORKING GROUPS (agenda items 4 & 5)
- 4.1 The Panel was informed that the Working Groups meeting during the preceding two days had approved the outlines of their respective contributions to the TAR and the lists of Co-ordinating Lead/Lead Authors/Review Editors proposed by the respective Working Group Bureau. The choice of the Contributing Authors would be left to the CLAs, with the concurrence of the Working Group Bureau.
- 4.2 The Co-Chairmen of Working Group I reported that 128 Lead Authors/Review Editors from 32 countries (16 of whom were developing/transitional economy countries) had been chosen for the WG I TAR report. Of this, 13 were women, 29 were from developing/transitional economy countries and 3 from industry. The number of Lead Authors during the Second Assessment was 88 (2 women, 12 from developing/transitional economy countries, total number of countries 19 of whom 7 were developing/transitional economy countries).
- 4.3 The Co-Chairmen of Working Group II reported that there were 19 chapters in the WG II TAR report with 42 Co-ordinating Lead Authors. A total of 170 Lead Authors had been chosen from 60 countries of which about 45% were from the developing/transitional economy countries and 23 were women.

- 4.4 The Co-Chairmen of Working Group III reported that there were 10 chapters in the WG III TAR report with 19 Co-ordinating Lead Authors (of whom 8 were from developing countries and 2 from countries with economies in transition) and 110 Lead Authors and Review Editors (4 women, 39 from developing countries and 8 from transitional economy countries) from 40 countries (with 24 developing/transitional economy countries and 3 industries).
- 4.5 The Panel accepted the actions of the respective Working Groups.

Working Group I

4.6 The Special Report, Aviation and the Global Atmosphere, was on schedule and slated for completion in March/April 1999. A meeting of Lead Authors to consider comments from the government review would take place in Montreal on 26-28 October 1998.

Working Group II

- 4.7 The Special Report, Methodological and Technological Aspects of Technology Transfer: An Opportunity for Technical Co-operation, was expected to be completed around September 1999. A meeting of Lead Authors was planned for New Delhi on 9-11 December 1998.
- 4.7 With respect to the IPCC Task Group on Climate Scenarios for Impact Assessments (TGCIA), the Panel was informed that the Bureau at its Sixteenth Session (Bad Münstereifel, 2 July 1998) had endorsed, for the consideration of the Panel, the continuation of the Task Group and its work programme. The Panel agreed to the measure.

Working Group III

- 4.8 With respect to the Special Report, Emissions Scenarios, the so-called "open-process" for comments on the scenarios would last until the end of 1998. The expected date of completion of the report was late 1999.
- 5. TAR SYNTHESIS REPORT (agenda item 6)
- 5.1 The IPCC agreed on the approval and adoption process for the Synthesis Report in the TAR. Annex C contains the decision.
- 5.2 With respect to the identification of policy-relevant scientific questions to be addressed in the Synthesis Report, the Chairman informed the Panel that there had been inputs from some governments, including the European Union, through the SBSTA. He requested further inputs; all the inputs would be taken into account in drafting the policy-relevant scientific questions for the consideration of the Panel at its Fifteenth Session.
- 6. IPCC UN FCCC INTERACTION (agenda item 7)

Adequacy of the global observing systems for climate

- 6.1 The Chairman noted that the Conference of the Parties to the FCCC, in Kyoto (December 1997), had requested the preparation of a report on the adequacy of global observing systems for climate. He requested Dr. K. Dawson, the Chairman of the Steering Committee for the Global Climate Observing System (GCOS), to inform the Panel on the status of the report.
- 6.2 Dr. Dawson informed the Panel that an Executive Summary of the report had been submitted to the SBSTA by the WMO on behalf of the international sponsors for the global observing systems and that the document was available on the web pages of the FCCC and would be considered at COP-4. The full report had since been completed. It covered all components of the global climate observing system including the atmosphere, oceans, land, cryosphere and biosphere. The need for action arose because (a) satisfactory global coverage for many variables had not been achieved, (b) regional coverage was not adequate in many areas, (c) observations of selected variables often did not have adequate accuracy or precision to be reliably used as indicators of climate change and (d) key data sets, although collected, were often not effectively exchanged. What was urgently needed was a commitment by nations to provide coverage for the key variables, to halt and revise the degradation of existing observing systems, and to exchange information more effectively. The report recommended that each Party to the FCCC should undertake programmes of systematic observations in accordance with national plans that should be developed in concert with the overall strategy for global climate observations.
- 6.3 The Panel expressed dismay at the deteriorating state of the existing system and agreed that the observational network, for all parts of the climate system, needed to be expanded, strengthened and made more accurate. It requested the Chairman to convey this concern to COP-4.

HFCs

- 6.4 The Panel was informed that the IPCC/FCCC Joint Working Group (JWG) had considered the issue of HFCs (ozone-friendly but not global-warming-friendly) at a meeting on 1 October 1998. Representatives of the Scientific Assessment Panel and the Technology and Economics Assessment Panel (TEAP) of the Montreal Protocol were also present at the meeting. It had been agreed to include consideration of the issue in chapter 3 of the report of Working Group III in the TAR. The TEAP would be invited to nominate experts for consideration as Lead Authors for the chapter. A joint IPCC/TEAP workshop would also be planned for 1999.
- 6.5 The Panel endorsed the agreements reached at the JWG.
- 7. LOCATION AND MANAGEMENT OF THE PROGRAMME ON NATIONAL GREENHOUSE GAS INVENTORIES (agenda item 8)
- 7.1 The Bureau was informed that Governments had been invited by letter (reference no. 18044/M/IPCC/WGI dated 22 July 1998) for their views on (a) the aims and objectives of the programme and the division of responsibilities between the IPCC and the COP and (b) establishing an IPCC Task Force on National Greenhouse Gas Inventories. The Governments had also been requested to (a) express their willingness or otherwise of funding and hosting a Technical Support Unit for the potential Task Force and (b) nominate experts for

consideration as Chairperson of the Task Force. Nineteen responses to the letter had been received.

- 7.2 The Panel decided on the establishment of a Task Force on National Greenhouse Gas Inventories with a Bureau and a Technical Support Unit (TSU). The TSU will be hosted, housed and funded by the Government of Japan. The details of the decision are contained in annex D.
- 8. IPCC SPECIAL REPORT ON LAND USE, LAND USE CHANGE AND FORESTRY (agenda item 9)
- 8.1 The IPCC approved the outline of and the procedure for completing the Special Report. The details are to be found in annex E.
- 9. POSSIBLE AMENDMENTS TOI THE IPCC PRINCIPLES AND PROCEDURES (agenda item 10)
- 9.1 The IPCC reviewed and amended the Principles Governing its Work. The Principles, as amended, appear in annex F.
- 9.2 The Panel deferred action on the Procedures for Preparation, Review, Approval, Acceptance and Publication of its Reports for a future session. The Chairman of the Ad Hoc Group on Principles and Procedures, Mr. David Warrilow (UK), would include all proposed amendments in a single document, which would be sent to Governments for review.
- OTHER BUSINESS
- 10.1 There was none.
- 11. TIME AND PLACE OF THE NEXT SESSION
- 11.1 The Panel agreed to meet in its Fifteenth Session in March/April 1999. A possible venue was San Jose in Costa Rica. The Secretary would circulate the exact dates and venue when the decisions were made.
- 12. CLOSING OF THE SESSION
- 12.1 The session closed at 2040 hours on Saturday, 3 October 1998. The list of attendees is given in annex G.

ANNEX A

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

FOURTEENTH SESSION Vienna, 1-3 October 1998

AGENDA

- 1. OPENING OF THE SESSION
- 2. APPROVAL OF THE DRAFT REPORT OF THE THIRTEENTH SESSION
- 3. IPCC WORK PROGRAMME & BUDGET FOR 1999-2001
- 4. ACTIONS TAKEN AT THE SEVENTH SESSION OF WORKING GROUP I, THE FIFTH SESSION OF WORKING GROUP II, AND THE FOURTH SESSION OF WORKING GROUP III
- 5. TAR SYNTHESIS REPORT
- 6. ONGOING WORK OF THE WORKING GROUPS
- 7. IPCC UN FCCC INTERACTION
- 8. LOCATION AND MANAGEMENT OF THE PROGRAMME ON NATIONAL GREENHOUSE GAS INVENTORIES
- 9. IPCC SPECIAL REPORT ON LAND USE, LAND USE CHANGE AND FORESTRY
- 10. POSSIBLE AMENDMENTS TO THE IPCC PRINCIPLES AND PROCEDURES
- 11. OTHER BUSINESS
- 12. TIME AND PLACE OF THE NEXT SESSION
- 13. CLOSING OF THE SESSION

IPCC Budget for 1999

(Adopted at the Fourteenth Session, Vienna, 1-3 October 1998)

The IPCC Financial Task Team met on seven occasions during the Fourteenth Session of the IPCC with representation from each of the IPCC Working Groups and participation of the IPCC Chair and the IPCC Secretary. Based on these discussions and the resulting recommendations of the Co-Chair of the IPCC Financial Task Team, the Panel, meeting in plenary:

- 1) Adopted the Budget for 1999 contained in the attached Table 1, and took note of the information contained in the attached Tables 2 and 3;
- 2) Requested that the Secretary, in consultation with the IPCC Financial Task Team, prepare a budget proposal for 2000 and a forecast budget for 2001 and transmit them to governments in accordance with the IPCC Financial Rules prior to the Fifteenth Session of the IPCC;
- 3) Noted that additional financial resources were urgently needed by the IPCC to prepare its Third Assessment Report (TAR) and to support the work of the United Nations Framework Convention on Climate Change, in particular through preparation of the TAR and several Special Reports as well as to continue its work on National Greenhouse Gas Inventories;
- 4) Urged governments and others in a position to do so to contribute early and generously to the WMO/UNEP IPCC Trust Fund to enable the IPCC to continue its work programme, to increase the participation of experts from developing countries and economies in transition, and to ensure that the IPCC is able to respond to the needs of the Framework Convention in a timely manner.

Table 1 **BUDGET FOR** 1999

Activity	Amount (CHF)
Joint Working Group Meetings	45,000
National GHG Inventories	500,000
IPCC XV, Bureau 18, WG I/III (6 days) 4/1999	
	1,134,600
IPCC XVI, Bureau 19, WG-III (9 days) 12/1999	
	1,274,400
Lead Author Meetings	
WG-I	481,950
WG-II	1,530,900
WG-III	850,500
SR Land Use Change/Forestry	680,400
SR Technology .Transfer	374,200
SR Emissions Scenarios	85,050
Review Editors	
WG-I	0
WG-II	107,730
WG-III	0
SR Land Use Change/Forestry	28,350
SR Technology Transfer	147,420
SR Emission Scenarios	22,680
Expert Meetings	
WG-I	255,150
WG-II	623,700
WG-III	567,000
Translation & Publication (6 languages)	
SR Aviation	180,000
SR Technology Transfer	204,000
Support to developing country Co-Chairs	150,000
Secretariat	600,000
TOTAL	9,843,030

Table 2
BUDGET DETAILS FOR 1999

Activity	Purpose	DC/EIT support	Other	TOTAL
16 11 01		10.50	expenditure	
Meetings of the	Co-ordinate	42,600	2,400	45,000
JWG	between IPCC and UNFCCC		(Secretary of the	
National GHG	On-going		IPCC) 500,000	500,000
Inventories	On-going		300,000	500,000
IPCC XV, Bureau	Approve/accept	894,600	240,000	1,134,600
18, WG/WGIII	SR-Aviation	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 10,000	1,107,000
joint session	Approve SyR-	(115 DC/EIT, 17		
(6 days, April	LAs	Bur., 10 LA)		
1999)	Amend			
	Procedures,			
IDCC 177	Approve SyR. Qs	014 (00	3.60.000	1.071.100
IPCC XVI, Bureau 19, WG	Approve/accept SR-Tech.Transfer	914,400	360,000	1,274,400
III (9 days,	Adopt 2000	(100 DC/EIT, 17		
Dec.1999)	budget & other	Bur., 10 LA)		
Meetings of Lead	Prepare TAR	231, 10 211)		4,003,000
Authors	1100000			1,005,000
WG-I		481,950		
		(85 journeys)	1	
WG-II		1,530,900		
WO III		(270 journeys)		
WG-III		850,500 (150 journeys)		
		(150 Journeys)		
Special Reports	Prepare/complete			
	SRs			
Sinks		680,400		
		(120 journeys)		
Tech. Transfer		374,200		
] ,		(66 journeys)		
Em. Scenarios		85,050		
Review Editors	Prepare TAR	(15 journeys)		306,180
Review Editors	Fiepaie IAK			300,160
WG-I		0		
		(0 journeys)		
WG-II		107,730		
		(19 journeys)		
WG-III		0		
		(0 journeys)		
Special Reports	Prepare/complete			
	SRs			
Sinks		28,350		
		(5 journeys)		
Tech. Transfer		147,420		
		(26 journeys)		
Em. Scenarios		22,680		
]	(4 journeys)		

Expert Meetings		1,445,8
WG-I Emission Scenarios	(10 journeys)	
GWPs	(15:	
TGCIA	(15 journeys)	
	(20 journeys)	
SUBTOTAL	255,150	
WG-II Adaptation & Mitigation	(20 journeys)	
Vulnerability	(20 journeys)	
Valuing impacts	(20 journeys)	
Regional meetings (Africa, Asia, Latin America, Small Island States)	(50 journeys)	
SUBTOTAL	623,700	
WG-III Impacts of Annex I Actions	(10 journeys)	·
Cl. Change, Development, Sustainability & Equity	(15 journeys)	
Social & Behavioral Aspects of Decision-making	(10 journeys)	
Non-Energy Non- CO ₂ Mitigation	(10 journeys)	
Costing Methodologies in Mitigation, Adaptation & Impacts	(10 journeys)	
Economic Instruments to Mitigate Climate Change	(10 journeys)	
2 nd Meeting on Annex I Actions	(10 journeys)	

Mitigation	(10 journeys)		
Scenarios			
Integrated	(15 journeys)		
Assessment in			
Latin America			
SUBTOTAL	567,000		
Translation &			384,000
Publication SPM			
(6 languages)			
		100,000	
Aviation		180,000	
Tech. Transfer		204,000	
Support to		150,000	150,000
developing Co-			
Chairs			
Secretariat		600,000	600,000
TOTAL	7,606,630	2,236,400	9,843.030

Table 3
CONTRIBUTIONS NEEDED IN 1999

Item	Amount (CHF)
Total budget for 1999 (from Table 1)	9,843,030
Less expected carry-over from 1998	758,000
Less WMO contribution	190,000
Less UNEP contribution (\$ 110,000)	160,000
Less UN FCCC contribution (\$ 310,000)	450,000
FUNDS NEEDED	8,285,030

ANNEX C

Approval and Adoption Procedures for the Synthesis Report

(Approved at the Fourteenth Session, Vienna, 1-3 October 1998)

The Synthesis Report consists of a 5-10 page Summary for Policymakers (SPM) and a 30-50 page longer report. The proposed approach will allow the Panel in plenary meetings to approve the SPM line by line and to ensure that the SPM and the longer report of the Synthesis Report are consistent, and the Synthesis Report is consistent with the underlying working group assessment reports from which the information has been synthesized and integrated. This approach will likely take 5-7 working days of the Panel working in plenary meetings.

- Step 1: The longer report (30-50 pages) and the SPM (5-10 pages) of the Synthesis Report are prepared by the writing team.
- Step 2: The longer report and the SPM of the Synthesis Report will undergo simultaneous expert/government review.
- Step 3: The longer report and the SPM of the Synthesis Report are revised by lead authors, with the assistance of the review editors.
- Step 4: The revised drafts of the longer report and the SPM of the Synthesis Report are submitted to governments at least four weeks before the session of the Panel.
- Step 5: The longer report and the SPM of the Synthesis Report are both tabled for discussion in plenary meetings of the Panel:
 - * The Panel in plenary meetings will first provisionally approve the SPM line by line.
 - * The Panel in plenary meetings will review and adopt the longer report of the Synthesis Report, section by section, i.e., roughly one page or less at a time. The review and adoption process for the longer report of the Synthesis Report should be accomplished in the following manner:
 - When changes in the longer report of the Synthesis Report are required either to conform it to the SPM or to ensure consistency with the underlying working group assessment reports, the Panel and authors will note where changes are required in the longer report of the Synthesis Report to ensure consistency in tone and content. The authors of the longer report of the Synthesis Report will then make changes in the longer report of the Synthesis Report. Those Bureau members who are not authors will act as review editors to ensure that these documents are consistent and follow the directions of the Panel in plenary meetings.

- The longer report of the Synthesis Report is then brought back to the Panel in plenary meetings for the review and adoption of the revised sections, section by section. If inconsistencies are still identified by the Panel, the longer report of the Synthesis Report is further refined by the authors with the assistance of the review editors for review and adoption by the Panel-this process is conducted section by section, not line by line.
- * The final text of the SPM will be approved and the final text of the longer report of the Synthesis Report will be adopted by the Panel in plenary meetings.

DECISION ON THE IPCC NATIONAL GREENHOUSE GAS INVENTORIES PROGRAMME

(Fourteenth Session, Vienna, 1-3 October 1998)

The Panel decided:

- (i) That the IPCC reiterate through the JWG the importance and urgency of dialogue with the UNFCCC regarding the Inventory Programme, in particular the need within the next two years for the IPCC and the UNFCCC to agree on a comprehensive joint plan covering scientific and operational aspects and including a clear division of responsibilities between the IPCC and the UNFCCC.
- (ii) To establish a Task Force on National Greenhouse Gas Inventories (TFI). The Task Force shall have a Bureau to provide guidance to the IPCC National Greenhouse Gas Inventories Programme and develop it as required. The terms of reference and membership of the Task Force Bureau for the interim period until IPCC XVI are in the Annex.
- (iii) To thank and accept the offer of the Government of Japan to set up and provide financial support for a Technical Support Unit for the TFI to be located at the Institute for Global Environmental Strategies (IGES), and to provide a Co-Chairperson for the Task Force. The TSU shall work under the guidance of the Task Force Bureau until IPCC-XVI.
- (iv) To thank and welcome the understanding with the OECD and IEA that they would continue to support the IPCC National Greenhouse Gas Inventories Programme until the establishment of the Japanese TSU (expected to be in 6-9 months) and that they would provide assistance to the Government of Japan and to the TSU as required.

Annex

INTERIM TERMS OF REFERENCE AND MEMBERSHIP OF THE BUREAU OF THE TASK FORCE ON NATIONAL GREENHOUSE GAS INVENTORIES TO COVER THE PERIOD UNTIL IPCC XVI

Interim Terms of Reference

- 1. To oversee and provide necessary guidance for the current IPCC National Greenhouse Gas Inventories Programme, as approved at IPCC XIII, at the OECD/IEA.
- 2. To draw up under the guidance of the JWG and in consultation with the UNFCCC Secretariat and SBSTA a comprehensive joint plan for the Inventory Programme covering

scientific and operational aspects and including a clear division of responsibilities between the IPCC and the UNFCCC.

- 3. To propose to IPCC XVI a detailed programme including a budget in accordance with IPCC financial procedures for the Inventory Programme under IPCC responsibility.
- 4. To provide advice and assistance as requested to the Government of Japan in the setting up of the Technical Support Unit for the Task Force on National Greenhouse Gas Inventories.
- 5. To propose terms of reference for the Task Force for the period following IPCC XVI.
- 6. To report to IPCC XVI.

Interim Membership

- 1. The membership and Co-Chairs of the Task Force Bureau will be designated by the IPCC Bureau.
- 2. It should number 8–12 drawn from members of the IPCC Bureau or from countries represented on the Bureau and selected so as to include the range of necessary expertise and appropriate geographical representation.
- 3. It should include two Co-Chairs, one from a developed country and one from a developing country. It should also include one representative from Japan.
- 4. When the Technical Support Unit for the Task Force on National Greenhouse Gas Inventories is set up in Japan, the developed country Co-Chair will be from Japan. This appointment will be made in consultation with the Chair of the IPCC. When that appointment is made, any necessary revision will be made in the membership of the Task Force Bureau.
- 5. Representatives of the UNFCCC Secretariat, OECD and IEA will be invited to sessions of the Task Force Bureau. Other experts will also be invited to attend as appropriate.

IPCC Special Report: Land Use, Land Use Change and Forestry

(Outline approved at the Fourteenth Session, Vienna, 1-3 October 1998)

Chair: Robert Watson

The IPCC Special Report on Land Use, Land Use Change and Forestry is being prepared in response to a request from SBSTA made at its Eighth Session (Bonn, 2-12 June 1998).

The outline of the Special Report was approved by the IPCC in plenary meetings at its Fourteenth Session (Vienna, 1-3 October 1998). This outline responds to the SBSTA mandate and addresses issues raised in FCCC/SBSTA/1998/INF1.

The Special Report has been designed to provide scientific, technical, economic and social information that can assist governments operationalize Article 3.3 of the Kyoto Protocol. It will provide information relevant to assessing the potential for other human-induced additional activities as mentioned in Article 3.4 and issues associated with operationalizing this Article. It also provides information relevant to other Articles of the Kyoto Protocol. While the Special Report will primarily focus on carbon dioxide, it would address methane and nitrous oxide as appropriate.

The Special Report will be policy relevant, but will not be policy prescriptive.

The IPCC has approved the topics that need to be addressed in the Special Report, but will allow the lead authors to re-organize the outline to minimize duplication of topics and ensure the most logical flow of information. The IPCC requested that the outlines of the chapters dealing with Articles 3.3 and 3.4 be as parallel as possible. The Panel also recognized that the contents of different chapters are closely linked and therefore noted that many chapters will need to have common lead authors to ensure consistency. In addition, there is a need for common lead authors with the relevant chapters in the Third Assessment Report.

The Special Report on Land Use, Land Use Change and Forestry will be approved and accepted by the Panel in plenary meetings, since it cuts across all the three IPCC Working Groups and the Task Force on National Greenhouse Gas Inventories (TFI). The procedures for the preparation, review, acceptance, approval, adoption and publication of IPCC Special Reports shall apply.

The Special Report will be chaired by R. Watson and guided by up to three "Overall Co-ordinating Lead Authors". Each chapter will have one or two Co-ordinating Lead Authors in addition to numerous Lead and Contributing Authors. There will be a Steering Committee for this Special Report comprising of the IPCC Chair, two members of the IPCC

Bureau from each Working Group (one of the Co-Chairs and one Vice-Chair) and the Chair of TFI. The Steering Committee will approve the selection of Co-ordinating Lead Authors and Lead Authors and oversee the whole process. The Secretary of the IPCC and the Heads of the Working Group Technical Support Units will be ex-officio members of the Steering Committee. There will be a one-person Technical Support Unit for this report located with the Chair, IPCC Secretary or one of the Working Group Technical Support Units (funding and the individual for this position have yet to be identified).

Outline of the IPCC Special Report: Land Use, Land Use Change and Forestry

Summary for Policymakers (5-10 pages)

Chapter 1 – Introduction and Mandate (2 pages)

This chapter will briefly discuss the SBSTA mandate and the relationship of this Special Report to the IPCC Third Assessment Report.

Chapter 2 - Global Perspective (10 pages)

This chapter will be a primer to explain how the carbon cycle operates, and the potential to influence the atmospheric concentrations of greenhouse gases by land-use activities.

Executive Summary

- 2.1 Introduction
- 2.2 Biogeochemical Cycles (global stocks, flows, processes, timescales and uncertainties)
- 2.3. Terrestrial Ecosystems and the Role of Management (sources, sinks and stocks by land cover type, land-use and region)
- 2.4. Global Greenhouse Gas Emission Reductions and Sequestration Potential (competition for land including socio-economic aspects)
- 2.5. Features of Global Carbon Models and National Inventories

Chapter 3 - Implications of Different Definitions and Generic Issues (30 pages)

This chapter will focus on exploring the implications of different definitions on the Kyoto Protocol, the different methodologies that can be employed to measure and assess carbon stocks and pools, and issues associated with accounting and reporting.

Executive Summary

3.1 Introduction

- 3.2 Implications of Different Definitions by Broad Category (e.g., forests, afforestation, reforestation, deforestation, forest degradation, sustainable forest management, restoration of degraded lands, agriculture and land practices, and full carbon accounting and its anthropogenic implications)
- 3.3 Measurement of Above and Below Ground Biomass and Soil Carbon (stocks -remote sensing and in-situ; flows -- direct flux measurements and stock differences;
 accuracy and precision; verifiability; propagation of errors; effects of contiguous and
 non-contiguous commitment periods; integration and consistency of methods -national inventories and modelling).
- 3.4 Accounting and Reporting Issues (Direct human-induced vs. indirect human-induced vs. natural; program vs. project activities; baselines 1990 baselines, 1990-2007 baselines; stock differences 2012-2008; attribution of stocks and changes in stocks -- pre-1990 vs. post-1990 activities; fires and pests; permanence, additionality; leakage; techniques for treating uncertainties; and costs of accounting and reporting).

Chapter 4 - Afforestation, Reforestation and Deforestation Activities -- Article 3.3 (25 pages)

This chapter will address a wide range of scientific and technical issues and options associated with Article 3.3 by region.

Executive Summary

- 4.1 Introduction
- 4.2 Options for definitions and their general implications (afforestation, reforestation and deforestation)
- 4.3 Processes, timescales, and carbon accounting rules (pools; spatial scales -- project to biome to national inventory; direct vs. indirect)
- 4.4 Data needs for operationalizing afforestation, reforestation and deforestation activities (observational and modelling methods for area change in land use and carbon stock for different time periods; operational implications of uncertainties; sensitivity analysis of uncertainties; verification)
- 4.5 Data availability (ground, aircraft and satellite data for land use/cover and carbon stocks in all pools by ecosystem at the project, biome and national inventory scale; accuracy and precision; costs; models)
- 4.6 Regional and global potentials, differences and implications of afforestation, reforestation and deforestation activities (by pool; activity type -- policies, practices, and technologies; Annex I countries and by region)
- 4.7 Associated impacts of afforestation, reforestation and deforestation activities (environmental, biogeochemical cycles -- biodiversity, soil quality, watersheds, etc. and socio-economic -- poverty, employment, resettlement, agriculture, forestry, etc.)

Chapter 5 - Additional Human-Induced Activities -- Article 3.4 (30 pages)

This chapter will address a wide range of scientific and technical issues associated with assessing the potential of additional human-induced activities mentioned in Article 3.4. It will also address issues that would arise in operationalizing Article 3.4.

Executive Summary

- 5.1 Introduction (implications of Kyoto Protocol; ancillary benefits; sequestration, emissions reductions and substitution potential; additional human-induced activities -- Arable, Pastoral and Forestry Land Management, Restoration of Degraded Lands, Protected Areas, Agroforestry, Urban Expansion and Infrastructure, Modern Biomass Energy, etc.)
- 5.2 Processes, timescales and carbon accounting rules (pools; spatial scales -- project to biome to national inventory; direct vs. indirect; temporary vs. long-term sequestration)
- 5.3 Data needs for operationalizing Article 3.4 activities (past, present and projected landuse activities and cover; carbon pools; project and program; observational and modelling methods for area change in land use and carbon stock for different time periods; operational implications of uncertainties; sensitivity analysis of uncertainties; verification)
- 5.4 Potential magnitude of carbon sinks and sources by activity type, regionally and globally (barriers; costs and benefits; short vs. long-term sequestration, including threats to permanence; accounting rules; detailed table on types of current land use and practices which have implications for C; detailed table on types of land use change and conversion; highlight important changes; competition for land; evolution vs. additional activities)
- 5.6 Land Use and its relationship to carbon and energy (modern biomass and energy-intensive materials -- tables of specific options)
- 5.7 Associated impacts of additional activities (environmental, biogeochemical cycles -- biodiversity, soil quality, watersheds, etc. and socio-economic -- poverty, employment, resettlement, agriculture, forestry, etc.)

Chapter 6 - Project Based Activities (10 pages)

This chapter will address the unique issues associated with project-based activities related to the Kyoto Protocol.

Executive Summary

- 6.1 Introduction (relationship between projects, regional and national programs and national accounts; potential magnitude of activities in terms of land area and carbon)
- 6.2 Specific issues arising from the implementation of biotic activities (accounting units and procedures; baseline and additionality questions; leakage; permanence; risks and

- risk management strategies; associated costs, benefits and environmental impacts, including employment)
- 6.3 Scientific and technical aspects of monitoring, evaluation and verification (protocols, approaches, costs and practicalities; uncertainties; pilot project experience)

Chapter 7 - Implications of the Kyoto Protocol for the Reporting Guidelines (10 pages)

This chapter will review the adequacy of the IPCC reporting guidelines for the National Greenhouse Gas Inventories in light of the Kyoto Protocol assess what changes may be required. It will also assess the scientific and technical elements of an IPCC reporting framework for project-level activities.

Executive Summary

- 7.1 Introduction
- 7.2 Review of relevance of the IPCC Guidelines for reporting activities under the Kyoto Protocol (implications of proposed definitions discussed in this Special Report; country case and regional studies)
- 7.3 Implications for potential additions and modifications to the IPCC National Greenhouse Gas Inventory Guidelines for different activities under the Kyoto Protocol (elements for carbon stock accounting; periodicity of input data and implications for assessing annual fluxes; alternative methods and approaches to the Revised Guidelines; potential additions and modifications to IPCC Modules for accounting framework in the light of the Kyoto Protocol)
- 7.4 Scientific and technical reporting framework for project-level activities for greenhouse gases (elements for reporting project-level activities; reporting monitoring and verification procedures; issues related to consistency and comparability with national inventories; integration of project with national inventories)
- 7.5 Supplementary information for reporting under the 1996 IPCC National Greenhouse Gas Inventory Guidelines (identify major gaps in knowledge)

PRINCIPLES GOVERNING IPCC WORK

Approved at the Fourteenth Session (Vienna, 1-3 October 1998) on 1 October 1998

INTRODUCTION

1. The Intergovernmental Panel on Climate Change (hereinafter referred to as the IPCC or, synonymously, the Panel) shall concentrate its activities on the tasks allotted to it by the relevant WMO Executive Council and UNEP Governing Council resolutions and decisions as well as on actions in support of the UN Framework Convention on Climate Change process.

ROLE

- 2. The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. IPCC reports should be neutral with respect to policy, although they may need to deal objectively with scientific, technical and socio-economic factors relevant to the application of particular policies.
- 3. Review is an essential part of the IPCC process. Since the IPCC is an intergovernmental body, review of IPCC documents should involve both peer review by experts and review by governments.

ORGANIZATION

- 4. Major decisions of the IPCC will be taken by the Panel in plenary meetings.
- 5. The IPCC Bureau, the IPCC Working Group Bureaux and any Task Forces of the IPCC shall reflect balanced geographic representation with due consideration for scientific and technical requirements.
- 6. IPCC Working Groups and any Task Forces constituted by the IPCC shall have clearly defined and approved mandates and work plans as established by the Panel, and shall be open-ended.

PARTICIPATION

- 7. Participation in the work of the IPCC is open to all UNEP and WMO Member countries.
- 8. Invitations to participate in the sessions of the Panel and its Working Groups, Task Forces and IPCC workshops shall be extended to Governments and other bodies by the Chairman of the IPCC.

9. Experts from WMO/UNEP Member countries or international, intergovernmental or non-governmental organisations may be invited in their own right to contribute to the work of the IPCC Working Groups and Task Forces. Governments should be informed in advance of invitations extended to experts from their countries and they may nominate additional experts.

PROCEDURES

- 10. In taking decisions, and approving, adopting and accepting reports, the Panel and its Working Groups shall use all best endeavours to reach consensus. If consensus is judged by the relevant body not possible: (a) for decisions on procedural issues, these shall be decided according to the General Regulations of the WMO; (b) for approval, adoption and acceptance of reports, differing views shall be explained and, upon request, recorded. Differing views on matters of a scientific, technical or socio-economic nature shall, as appropriate in the context, be represented in the scientific, technical or socio-economic document concerned. Differences of views on matters of policy or procedure shall, as appropriate in the context, be recorded in the Report of the Session.
- 11. Conclusions drawn by IPCC Working Groups or Task Forces are not official IPCC views until they have been accepted by the Panel in a plenary meeting.
- 12. Invitations to participate in the sessions of the Panel and its Working Groups, Task Forces and IPCC workshops should be extended at least six weeks in advance of the opening of the session.
- 13. Major reports, including Assessment Reports, Special Reports and Methodological Reports, basic documentation and other available reports for consideration at the sessions of the Panel and its Working Groups shall normally be made available by the IPCC Secretariat at least four weeks in advance of the session and, to the extent possible, in all official UN languages.
- 14. Interpretation into all official UN languages shall be provided for all sessions of the IPCC meeting in plenary, of its Bureau and its Working Groups.
- 15. The scheduling of the sessions of the Panel and its Working Groups and Task Forces shall be co-ordinated, to the extent possible, with other related international meetings.
- 16. These Principles shall be reviewed at least every five years and amended as appropriate.
- 17. Procedures for the preparation, review, acceptance, approval, adoption and publication of IPCC reports are given in Appendix A.
- 18. Financial procedures for the IPCC are given in Appendix B.

FINANCIAL PROCEDURES FOR THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

Approved at the Twelfth Session, Mexico City, 11-13 September 1996

Scope

1. These procedures shall govern the financial administration of the Intergovernmental Panel on Climate Change (IPCC). In so far as not specifically provided under these procedures, the Financial Regulations of the World Meteorological Organization (WMO) shall apply.

Financial Period and Financial Year

2. The financial period shall be the biennium, which shall be identical to the WMO biennium. The financial year shall be the calendar year.

IPCC Trust Fund

3. The joint WMO/UNEP IPCC Trust Fund is administered, by mutual agreement between the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), the two sponsoring Organizations, under the Financial Regulations of the WMO.

Currency

4. The currency for budgeting and reporting receipts and expenditures shall be the Swiss Franc.

Budget

- 5. The Secretary of the IPCC shall prepare the budget and transmit it to governments at least 60 days before the session of the Panel at which the budget is to be adopted.
- 6. The budget shall consist of:
 - (a) the proposed budget for the next year;
 - (b) a forecast budget for the second year; and
 - (c) an indicative budget for the third year.
- 7. The Panel shall consider the proposed budget, and shall adopt a budget by consensus prior to the commencement of the financial year that it covers.
- 8. Adoption of the budget by the IPCC shall constitute authority to the Secretary to incur obligations and make payments for the purposes for which the appropriations were approved

and up to the amounts so approved, provided that the commitments are covered by related income.

9. The Secretary may, consistent with WMO Financial Regulations, make transfers within each of the main appropriation lines of the approved budget and may also make transfers between such appropriation lines up to such limits as the Panel may set from time to time.

Contributions

- 10. The resources of the IPCC shall comprise:
 - the person-year costs of the Secretary of the IPCC and costs of housing the IPCC Secretariat, provided by WMO;
 - (b) the person-year costs of the Programme Officer provided by UNEP;
 - (c) annual cash contributions provided by WMO and UNEP to the IPCC Trust Fund;
 - (d) annual cash contributions provided by the UN Framework Convention on Climate Change to the IPCC Trust Fund in support of the work of the IPCC;
 - (e) annual cash contributions provided by governments to the IPCC Trust Fund;
 - (e)-bis² annual cash contributions provided by governments to the IPCC Trust Fund on the basis of an indicative scale, adopted by consensus by the Panel, and based on such a scale of assessments of the United Nations as may be adopted from time to time by the General Assembly, adjusted so as to ensure that no Party contributes less than 0.01 per cent of the total; that no one contribution exceeds 25 per cent of the total; and that no contribution from a least developed country exceeds 0.01 per cent of the total;
 - (f) contributions provided in kind by governments, such as support for Technical Support Units, publications, translation, meetings, workshops, etc.;
 - (g) other cash and in kind contributions to the IPCC Trust Fund;
 - (h) the uncommitted balance of appropriations from previous financial periods;
 - (i) miscellaneous income.
- 11. Contributions under 5.23(e) shall be used in accordance with such terms and conditions as may be agreed upon by the Secretary and the contributor.
- 12. Contributions from governments are due on 1 January of each calendar year.
- 13. All cash contributions shall be paid in convertible currencies into the bank account designated by the WMO.
- 14. The Secretary shall acknowledge promptly all pledges and contributions and shall inform the Panel at each session on the status of pledges, payments of contributions and of expenditures. The report of the Secretary shall include specific reference to contributions in kind and shall quantify such in kind contribution, to the extent feasible.

¹The Panel deferred decision on this sub-paragraph. The sub-paragraph is to be treated as if it is in square brackets.

²The Panel deferred decision on this sub-paragraph. The sub-paragraph is to be treated as if it is in square brackets.

³Working Capital Reserve

15. Within the IPCC Trust Fund there shall be maintained a working capital reserve at a level to be determined from time to time by the Panel by consensus. The purpose of the working capital reserve shall be to ensure continuity of operations in the event of a temporary shortfall of cash. Drawdowns from the working capital reserve shall be restored from contributions as soon as possible.

Accounts and Audit

- 16. The accounts and financial management of the IPCC Trust Fund shall be subject to the internal and external audit process of the WMO.
- 17. A final audited statement of accounts for the financial period shall be provided, in accordance with WMO practice, to the Panel as soon as possible after the accounts for the financial period are closed.

General Provisions

- 18. In the event that WMO and UNEP decide to terminate the IPCC Trust Fund, they shall so advise governments at least six months before the date of termination so decided. The Panel shall decide, in consultation with WMO and UNEP, on the distribution of any uncommitted balance after all liquidation expenses have been met.
- 19. Any amendments to these procedures shall be adopted by the Panel by consensus.

³The Panel deferred decision on this entire paragraph. The paragraph is to be treated as if it is in square brackets.

ANNEX G

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

FOURTEENTH SESSION Vienna, 1-3 October 1998

LIST OF ATTENDEES

(This was distributed during the session. It is not attached here to save bulk.)

LIST OF PARTICIPANTS

IPCC WORKING GROUP I SEVENTH SESSION Vienna, 30 September 1998

IPCC WORKING GROUP II FIFTH SESSION Vienna, 29-30 September 1998

IPCC WORKING GROUP III FOURTH SESSION Vienna, 29-30 September 1998

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE FOURTEENTH SESSION Vienna, 1-3 October 1998 Robert T. WATSON (Chairman-IPCC)

The World Bank

Environment Department - Rm MC 5-119

1818 H Street, NW Washington DC 20433

USA

Tel: +1 202 473 6965/6950/1755(secr.)

Fax: +1 202 477 0565

E-mail: rwatson@worldbank.org

Pranyera BEKTESHI

Albanian Hydrometeorological Institute

Rruga e Durresit 219

Tirana

ALBANIA

Tel: +355 42 235 18 Fax: +355 42 235 18

E-mail: cep@cep.tirana.al

Ms Ermira FIDA

National Environmental Agency

Rr. B Curri. No 9

Tirana

ALBANIA

Tel: +355 42 65229/64905

Fax: +365 42 65229/64632 E-mail: cep@cep.tirana.al

Marieta MIMA

Environmental Centre for Administration

& Technology, ECAT

22, Audyi Frasheri

Pall 16/Shk 6/Ap 53

Tirana

ALBANIA

Tel: +355 42 239 30

Fax: +355 42 239 30

E-mail: nil@ecat.tirana.al

John W. ASHE

(ANTIGUA & BARBUDA)

Permanent Mission to the UN of

Antigua & Barbuda

610 Fifth Avenue, Suite 311

New York, NY 10020

USA

Tel: +1 212 541 4117

Fax: +1 212 757 1607

Vicente BARROS

Dept. de Sciencias de la Atmosfera

University of Buenos Aires

C. Universitaria

PAB II 2o Piso

Buenos Aires

ARGENTINA

Tel: +54 1 576 3364 x 28

Fax: +54 1 576 3356 x 12

E-mail: barros@at1.fcen.uba.ar

Osvaldo F. CANZIANI

Aranguren 342

Casilla de Correo 141, Sucursal 5

В

В

1405 Buenos Aires

ARGENTINA

Tel: +541 982 4862

Fax: +541 982 4862

E-mail: ocanz@arrobba.com.ar

Martiros TSARUKYAN

Ministry of Nature Protection

35, Moskovian Street

Yerevan, 375002

ARMENIA

Tel: +3742 534982/151959

Fax: +3742 151959/151840

E-mail: nature@arminico.com

John ZILLMAN

Bureau of Meteorology

G.P.O. Box 1289 K

Melbourne, Vic. 3001

AUSTRALIA

Tel: +61 3 9669 4558

Fax: +61 3 9669 4548

E-mail: wmo@bom.gov.au

Ms Elizabeth CURRAN

Bureau of Meteorology

G.P.O. Box 1289 K Melbourne, Vic. 3001

AUSTRALIA

Tel: +61 3 9669 4249

Fax: +61 3 9669 4473

E-mail: b.curran@bom.gov.au

Ian CARRUTHERS

Greenhouse Policy Group

Australian Greenhouse Office

Canberra, ACT 2601

AUSTRALIA

Tel: +61 02 6274 1405

Fax: +61 02 6274 1439

E-mail: ian.carruthers@ea.gov.au

Anthony WEIR

Greenhouse Response Branch

Department of primary Industries & Energy

Edmund Barton Building

Barton, ACT 2601

AUSTRALIA

Tel: +61 2 6272 5961

Fax: +61 2 6271 6599

E-mail: tony.weir@dpie.gov.au

Martin KRIECH

Federal Ministry for the Environment

Youth and Family Affairs

Stubenbastei 5

A-1010 Vienna

AUSTRIA

Tel: +43 1 515 22 1740 Fax: +43 1 515 22

E-mail: martin.kriech@bmu.gv.at

Klaus RADUNSKY

Federal Environment Agency

Spittelauer Lände 5

1090 Vienna

AUSTRIA

Tel: +43 1 31304 5534

Fax: +43 1 31304 5400

E-mail: radunsky@uba.ubavie.gv.at

Stefan P. SCHLEICHER

University of Graz

Universitätsstraße 15 F/4

8010 Graz

AUSTRIA

Tel: +43 316 380 9520

Fax: +43 316 380 9520

E-mail: sts@wsr.ac.at

Isa ALIYEV

National Centre on Climate Change

of the Azerbaijan Rep

Result Rza str. 3

370 000 Baku

AZERBAIJAN

Tel: +99 412 93 2905

Fax: +99 412 98 5176

E-mail: aliyev@iglim.baku.az

Ragimov KHAYAM

Academy of Sciences of the Azerbaijan Republic

Institute of Geography

Resul Rza Str. 3

Baku370 000

AZERBAIJAN

Tel: +99 412 932905

Fax: +99 412 985176

E-mail: aliyev@iglim.baku.az

Philip S. WEECH

The Bahamas Environment, Science &

Technology Commission

P.O. Box CB -10980

Nassau

BAHAMAS

Tel: +242 327 4691

Fax: +242 327 4626/5806/5807

E-mail: nicu@batelnet.bs

Alexander APATSKY

Ministry of Natural Resources & Environment

Protection

10a, Kollectornaya Str.

Minsk

BELARUS

Tel: +375 1722 03986/207969

.Fax: +375 1722 05583/204

E-mail:

Koen SMEKENS

Energy System Analysis Centre

for Product and process Assessment

VITO

Boeretang 200

B-2400 Mol

BELGIUM

Tel: +32 14 33 5813

Fax: +32 12 32 1185

E-mail: smekensk@vito.be

Ms Martine VANDERSTRAETEN

Federal Office for Scientific, Technical

and Cultural Affairs (OSTC)

Rue de la Science 8

B-1000 Brussels

BELGIUM

Tel: +32 2 238 3610

Fax: +32 2 230 5912

E-mail: vdst@belspo.be

Jean-Pascal VAN YPERSELE DE STRIHOU

Institut d'Astronomie et de Géophysique G. Lemaître

Université Catholique de Louvain

Chemin du Cyclotron 2

B-1348 Louvain-la-Neuve

BELGIUM

Tel: +32 10 473296

Fax: +32 10 474722

E-mail: vanypersele@astr.ucl.ac.be

Ramon FRUTOS

National Meteorological Service

P.O. Box 717

Belize City

BELIZE

Tel: +501 25 2012

Fax: +501 25 2101

E-mail: ozone@btl.net

Epiphane D. AHLONSOU

Service météorologique

ASECNA

B.P. 379

Cotonou

BENIN

Tel: +229 301413/300148

Fax: +229 300839

Newton PACIORNIK

Ministry of Science and Technology

Esplanada dos Ministérios

Bloco E Sala 473

70067-900 Brasilia-DF

BRAZIL

Tel: +55 21 528 4381 Fax: +55 21 528 5858

E-mail: newton@furnas.gov.br

Jose Jorge A. ALMEIDA

(BRAZIL)

Embassy of Brazil Lugeck 1/V/15 Vienna 1010

AUSTRIA

Tel: +512 0631

Ms Radistina KANDILAROVA

Ministry of Environment and Waters

67W Gladstone Street

1000 Sofia

BULGARIA

Tel: +359 2 8472 2358 Fax: +359 281 0509

E-mail

Hristo VASILIEV

Energoproject PLC

Leonardo da Vinci 17

1407 Sofia

BULGARIA

Tel: +359 2 688034 Fax: +359 2 668951

E-mail: nhv@enpro.bg

Mamadou HONADIA

Ministère de l'Environnement et du Tourisme

Ouagadougou

BURKINA FASO

Tel: +226 31 24 64 Fax: +226 31 64 91

E-mail: honadia@fasonet.bf

Abdoulaye OUEDRAOGO

Direction de la Météorologie nationale

01 B.P. 576

Ouagadougou 01

BURKINA FASO

Tel: +226 30 0904/300925

Fax: +226 30 0917

E-mail: meteo@cenatrin.bf

Longin NDORIMANA

IGEBU

B.P. 331

Bujumbura

BURUNDI

Tel: +257 27 6025

Fax: +257 27 6025

E-mail: igebu@cbinf.com

Maurice SHIRAMANGA

IGEBU

B.P. 331 Bujumbura

BURUNDI

Tel: +257 27 6025

Fax: +257 27 6025

E-mail: igebu@cbinf.com

Evariste SINARINZI

IGEBU

B.P. 331

Buiumbura

BURUNDI

Tel: 257 27 6025

Fax: 257 27 6025

E-mail: igebu@cbinf.com

Roger TONLEU

Ministère de l'Environnement

et des Forêts

Yaounde

CAMEROON

Tel: +237 239 461

Fax: +237 215 350

Telex: 8687KN

Paul EGGINTON

Geological Survey of Canada

Natural Resources Canada

601 Booth Street

Ottawa, Ontario

CANADA K1A 0E8

Tel: +613 992 2451

Fax: +613 992 0910

E-mail: egginton@nrcan.gc.ca

Ms Sushma GERA

Environment Division

Department of Foreign Affairs

and International Trade

125 Sussex Drive

Ottawa, Ontario K1A 0G2

CANADA K1A 0G2

Tel: +613 944 0051

Fax: +613 944 0064

John M.R. STONE

В

Policy, Program and International Affairs Directorate

Atmospheric Environment Service

Environment Canada

4th floor, North Tower

Les Terrasses de la Chaudière

10 Wellington Street

Hull, Quebec

CANADA K1A 0H3

Tel: +1 819 997 3805 Fax: +1 819 994 8854

E-mail: john.stone@ec.gc.ca

Ms Joan MASTERTON

Science Assessment & Policy Integration

Atmospheric Environment Service

Environment Canada

4905 Dufferin Street

Downsview, Ontario

CANADA M3H 5T4 Tel: +1 416 739 4321

Fax: +1 416 739 4882

E-mail: joan.masterton@ec.gc.ca

Betoloum NEASMIANGODO

Ministere de l'Environnement et de l'Eau

BP 429 Ndjamena

CHAD

Tel: +235 52 30 81

Fax: +235 52 30 43

Rombon OUGABET

Ministère de l'Environnement et de l'Eau

BP 447 Ndiamena

CHAD

Tel: +235 52 39 19

Fax: +235 52 38 39

Langtangar YEMANGAR

Ministère de l'Environnement et de l'Eau

BP 429

Ndjamena CHAD

Tel: +235 52 30 81

Fax: +235 52 30 43

Ms Yingyi CHEN

Dept. of Science and Technology

National Oceanic Administration

Funsingmenwai Street 1

Beijing

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 68032211

Fax: +8610 68032211/5706

Yihui DING

В

China Meteorological Administration

National Climate Centre

Baishiqiaolu No. 46, Western Suburb

Beijing 100081

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 621 72277/2246

Fax: +8610 621 76804

E-mail: yhding@public.bta.net.cn

Lin ERDA

Agrometeorology Institute

Chinese Academy of Agricultural Sciences

30, Baishiqiao Road

Beijing 100081

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 6217 8364

Fax: +8610 6217 5320

E-mail: lined@ns.ami.ac.cn

Guide JIA

Ministry of Foreign Affairs

2 Chao Nan Street

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 659 63255

Fax: +8610 659 63209

E-mail:

Xuedu LU

Department of Science and Technology

for Social Development

State Science and Technology Commission

15-B Fuxing Road

Beijing 100862

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 6851 4054

Fax: +8610 6851 2163

E-mail: luxd@cs.sstc.gov.cn

Aimin MA

Department of Spatial Planning and

Regional Economy

State Planning Commission

38 S. Yuetan Street

Beijing 100824

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 685 76760

Fax: +8610 685 76760

E-mail: maam@acca21.edu.cn

Dahe OIN

Bureau of Science and Technology for Resources

and Environment

Chinese Academy of Sciences

52 Sanlihe Road Beijing 100864

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 685 97544 Fax: +8610 685 97552

E-mail: dhqin@rose.cashq.ac.cn

Baoguo TIAN

Dept. of Rural and Social Development Ministry of Science and Technology

15B, Fuxing Road

Beijing

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 68515 544 Fax: +8610 68512 163

E-mail: tianbg@ms.nstm.net.cn

Bangzhong WANG

Dept. of Meteorological Services and Climate

China Meteorological Administration

46, Baishiqiao Road Beijing 100081

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 621 76290 Fax: +8610 621 74797

E-mail: dmsc@public3.bta.net.cn

Xiaomin WANG

China Meteorological Administration

46 Baishiqiaolu Western Suburb Beijing 100081

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 62173417 Fax: +8610 62174797 Tlx: 22094 FDSMA CN

E-mail: xiaomin@rays.cma.gov.cn

Gai YIN

Dept. of Science and Technology

State Environmental Protection Administration

Beijing

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 66151787

Fax:

Jianyun ZHANG

Water Resources Information Centre

Ministry of Water Resources

Beijing

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 6320 2480 Fax: +8610 6320 2480 E-mail: jyzhang@nmr.gov.cn Jingmeng ZOU

China Meteorological Administration

46 Baishiqiaolu Western Suburb Beijing 100081

CHINA, PEOPLE'S REPUBLIC OF

Tel: +8610 621 74240 Fax: +8610 621 74797/3417 Tlx: 22094 FDSMA CN

E-mail: icdcmacn@public.bta.net.cn

Mohamed YAHAIYA

Ministere de l'Environnement

B.P. 41 Moroni COMOROS

Tel: +269 73 2222

Fax: +269 73 6388

E-mail:

Ahamada Mohamed SAID

Ministère de l'Environnement

B.P. 41 Moroni COMOROS

Tel: +2691 730815

Fax: +2691 736553

E-mail:

Eddine Said Ali NASSER

Direction générale de l'Environnement

BP 41 Moroni COMOROS

Tel: +269 736 553

Fax: +269 736 553/849

Benjamin DZABA-BOUNGOU

Ministere du Tourisme et de l'Environnement

BP 958 Brazzaville CONGO

Tel: +242 81 40 30

Fax: +243 88 03425

E-mail:

Victor MASSALA

Direction Générale de l'Environnement

Service des Installations Classées

B.P. 2722 Brazzaville CONGO

Tel: +243

Fax: +243 88 03 425 E-mail: 5282 KG Pierre MBOUYOU

Ministère de l'Environnement

BP 15392

Brazzaville

CONGO

Tel: +242 833 046 Fax: + 242 81 0330

E-mail:

Zvonimir KATUSIN

Meteorological and Hydrometeorological Office

Gric 3

HR-10 000 Zagreb

CROATIA

Tel: +385 1 45 65 706 Fax: +385 1 43 10 26

E-mail: katusin@cirus.dhz.hr

Ramon PICHS-MADRUGA

Centro de Investigaciones de Economía Mundial

Calle 22 No. 309, entre 3^{ra} y 5^a Avenida

Miramar

Habana 13, CP 11300

CUBA

Tel: +537 242507/292969

Fax: +537 242507

E-mail: ciem@ceniai.inf.cu

Ms Ivana NEMESOVA

Institute of Atmospheric Physcis

Bocni II

14131 Praha 4

CZECH REPUBLIC

Tel: +4202 769703

Fax: +4202 71763745 E-mail: ivanan@ufa.cas.cz

Jan PRETEL

Czech Hydrometeorological Institute

Na Sabatce 17

14306 Praha 4 - Komorany

CZECH REPUBLIC

Tel: +4202 4403 2414 Fax: +4202 4403 2415

E-mail: pretel@chmi.cz

Jens Hesselbjerg CHRISTENSEN

Danish Meteorological Institute

Lyngbyvej 100

DK-2100 Copenhagen Ø

DENMARK

Tel: +45 39 15 75 00

Fax: +45 39 15 74 60

E-mail: jhc@dmi.dk

Jes FENGER

National Environmental Research Institute

Department of Atmospheric Environment

P.O. Box 358

DK-4000 Roskilde

DENMARK

Tel: +45 4630 1105

Fax: +45 4630 1214

E-mail: jes.fenger@dmu.dk

Jesper GUNDERMANN

Danish Energy Agency

Climate Change Section

44. Amaliegade

DK-1256 Copenhagen K.

DENMARK

Tel: +45 33 92 67 83

Fax: +45 33 92 68 67

E-mail: jgu@ens.dk

Ms Kirsten HALSNÆS

UNEP Collaborating Centre on Energy

and Environment

Risø National Laboratory

P.O. Box 49

DK-4000 Roskilde

DENMARK

Tel: +45 46 77 5112

Fax: +45 46 32 1999

E-mail: ucc-khal@risoe.dk

Lars PRAHM,

Danish Meteorological Institute,

Lyngbyvej 100

DK-2100 Copenhagen Ø

DENMARK

Tel: +45 39 157502

Fax: +45 39 151080

E-mail: lpp@dmi.dk

Ulrik TORP

Danish Environmental Protection Agency

29. Strandgade

DK-1404 Copenhagen K.

DENMARK

Tel: +45 32 66 03 46

Fax: +45 32 66 04 62

E-mail: ut@mst.dk

Raphael VELOZ

Ana Josefa Poello # 33

Minador Sun

Santo Domingo

DOMINICAN REPUBLIC

Tel: +1 809 473 6334

Fax: +1 809 547 3305

Tlx: 3460115

Luis CACERES

Ministerio de Energia y Minas

Inst. Nacional de Meteorología e Hidrología

(INAMHI)

Inaquita 700 y korea

Ouito

ECUADOR

Tel: +593 2 456728 Fax: +593 2 456728 E-mail: inamhi@ecnet.ec

Jorge CHAVEZ

Inst. Nacional de Meteorologia e Hidrologia

(INAMHI)

Paris 270 y Gaspar de Villaroel

Ouito

ECUADOR

Tel: +593 2 456728 Fax: +593 2 456728

Cable: DIRMETECUADOR, QUITO

Ms Ivette de AGUILAR

Ministerio de Medio Ambiente y Recursos

Renovables

Alameda Roosevelt y 55 Avenida Norte,

Edificio Torre El Salvador

San Salvador

EL SALVADOR

Tel: +503 260 7260 Fax: +503 260 3117

E-mail: y.aguilar@solnet.net

Semere HABTETSION

Department of Energy

Ministry of Mines and Energy

P.O. Box 5285

Asmara

ERITREA

Tel: +291 1 127944 Fax: +291 1 127652

E-mail: semere@doe.er.punchdown.org

Peeter KARING

Meteorological & Hydrological Institute

Ravala 8

EE-0001 Tallinn

ESTONIA

Tel: +372 6 46 1563 Fax: +372 6 45 4277

E-mail: emhi.karing@forn.ee

Ms Bedada BALCHA

National Meteorological Services

P.O. Box 1009

Addis Ababa

ЕТНІОРІА

Tel: +2511 51 22 99 Fax: +2511 55 70 66

E-mail: nmsa@telecom.net.et

Ms Almaz DEMESSIE

National Meteorological Services

P.O. Box 1090

Addis Ababa

ЕТНІОРІА

Tel: +2511 512299

Fax: +2511 517066

E-mail: nmsa@padis-gn.apc.org

Ms Aselefech KEBEDE

National Meteorological Services

P.O. Box 1090 Addis Ababa

ETHIOPIA

Tel: +25 11 158705

Fax: +25 11 517066

Telex: 21474 TMET ET

Raino HEINO

Finnish Meteorological Institute

P.O Box 503

FIN-00101 Helsinki

FINLAND

Tel: +358 9 1929 4120

Fax: +358 9 1929 4129

E-mail: raino.heino@fmi.fi

Erkki JATILA

Finnish Meteorological Institute

P.O Box 503

FIN-00101 Helsinki

FINLAND

Tel: +358 9 1929 2200

Fax: +358 9 1929 2203

E-mail: erkki.jatila@fmi.fi

Ms. Pirkko KORTELAINEN

Finnish Environment Institute

P.O. Box 140

FIN-00251 Helsinki

FINLAND

Tel: +358 9 403000

Fax: +358 9 40300 390

E-mail:pirkko.kortelainen@vyh.fi

Riitta PIPATTI

VTT Energy

P.O. Box 1606

FIN-02044 VTT

FINLAND

Tel: +358 9 4561

Fax: +358 9 456 6538

E-mail: riitta.pipatti@vtt.fi

Jukka SAARINEN

Ministry of Trade and Industry

Pohj. Makasiinikatu 6

00130 Helsinki

FINLAND

Tel: +358 9 160 4806 Fax: +358 9 160 2695

E-mail:

Michel PETIT

В

Ecole Polytechnique 91128 Palaiseau Cédex

FRANCE

Tel: +33 1 6933 4077 Fax: +33 1 6933 3818

E-mail: michel.petit@polytechnique.fr

Marc GILLET

Mission interministérielle à l'Effet de Serre

35 rue Saint Dominique

75700 Paris

FRANCE

Tel: +33 1 4275 8717 Fax: +33 1 4753 7634

E-mail: marc.gillet@mies.premier-ministre.gouv.fr

Bubu P. JALLOW

Department of Water Resources

7. Marina Parade

Banjul

GAMBIA

Tel: +220 224122 Fax: +220 225009

E-mail: dwrs@delphi.com

Ms Sirra NJAI

Fisheries Department

6, Marina Parade

Banjul

GAMBIA

Tel: +220 201283

Fax: +220 224154

E-mail: gamfish@delphi.com

Bah SAHO

GREC, Dept. of State for Trade

Independence Drive

Baniul

GAMBIA

Tel: +220 392838 Fax: +220 227756 Nikoloz I, BERADZE

Ministry of Natural Resources

and Environmental Protection

150 Pr. Davida Agmashenebeli

Tbilissi 380012

GEORGIA

Tel: +99532 953682

Fax: +99532 955006

E-mail: meteo@ns.global-erty.net

Ramaz-Begiarovic CHITANAVA

Hydrometeorological Dept.

150 Pr. Davida Agmashenebeli

Tbilissi 380012 GEORGIA

Tel: +99532 950253/953682

Fax: +99532 955006/943479

E-mail: meteo@ns.global-erty.net

Michael ERNST

Federal Ministry for the Environment,

Nature Conservation and Nuclear Safety

P.O. Box 120629

D-53048 Bonn

GERMANY

Tel: +49 228 305 2314

Fax: +49 228 305 3337/3524

Herbert HÜSTER

Federal Ministry of Transport

Bonn

GERMANY

Tel: +49 228 300 7842

Fax: +49 228 300 7849

E-mail: herbert.huester@bmv.bmv.bund400.de

Eberhard JOCHEM

F

FhG Institute for Systems and Innovation Research

Breslauer Straße 48

D-76139 Karlsruhe

GERMANY

Tel: +49 721 6809169

Fax: +49 721 6809270

E-mail: ejo@isi.fhg.de

Helmut KÜHR

German IPCC Coordination Office

DLR-PT

Godesberger Allee 117

D-53175 Bonn

GERMANY

Tel: +49 228 81996-18

Fax: +49 228 81996-40

E-mail: helmut.kuehr@dlr.de

Rolf SARTORIUS

Federal Environmental Agency

P.O. Box 33 00 22 D-14191 Berlin

GERMANY

Tel: +49 30 8903 2511 Fax: +49 30 8903 2282

Manfred SCHULZ

Federal Ministry of Economics

Villemombler Str. 76 D-53107 Bonn

GERMANY

Tel: +49 228 615 2168 Fax: +49 228 615 3457

Juan de Dios CALLE SCHLESINGER

CONAMA

7a Av. 7-09, Zona 13

Guatemala

GUATEMALA

Tel: +502 2 440 7939 Fax: +502 2 440 7938 Cable: GUATEOBS

Fulgencio GARAVITO

Inst. Nacional de Sismología y Vulcanología,

Meteorología e Hidrología (INSIVUMEH) 7e, Avenida 14-57, zona 13

Guatemala

GUATEMALA

Tel: +502 2 331 4986 Fax: +502 2 331 5005

E-mail: insivume@ops.org.gt

Mamadou NIMAGA

Ministère des Resources Naturelles,

Energie & Environnement

Direction Nat, de l'Environnement

B.P. 4665 Conakry

GUINEA

Tel: +224 464850 Fax: +224 412012

Telex: 22350 MINE GEO GE

Jose Ernesto SALGADO RUBIO

Direccion Nacional de Aeronautica

Civil

Apartado 30145

Tegucigalpa DC

HONDURAS

Tel: +504 233 8075 Fax: +504 233 80 75

E-mail:

Tibor FARAGO

(Observer)

Fo utca 44

H-1011 Budapest

HUNGARY

Tel: Fax:

E-mail: tibor_farago@mail.matav.hu

Halldor THORGEIRSSON

Division of International Affairs

Ministry for the Environment

Vonarstraeti 4

150 Reykjavik

ICELAND Tel: +354 560 9600

Fax: +354 562 4566

E-mail: halldor.thorgeirsson@umh.stjr.is

Rajendra K. PACHAURI

В

TERI

Darbari Seth Block

Habitat Place

Lodhi Road

New Delhi 110 001

INDIA

Tel: +91 11 462 7651

Fax: +91 11 462 1770

E-mail: pachauri@teri.ernet.in

J.R. BHATT

Ministry of Environment & Forests

Paryavaran Shawan

C.G.O. Complex

Lodi Road

New Delhi 110001

INDIA

Tel: +91 11 4363962

Fax: +91 11 4360678

Telex: W-66185 DOE IN

R.T.M. SUTAMIHARDJA

State Ministry for Environment

Jalan D.I. Pandjaitan Kav. 24

Kebon Nanas Jatinegara

Jakarta Timur 13410

INDONESIA

Tel: +62 21 858 1764/851 7164

Fax: +62 21 858 0112

E-mail: depas3lh@cbn.net.id

Tlx: 461 43 IA

В

Mr. GUNARDI

State Ministry for Environment Jalan D.I. Panjaitan Kav 24

Kebon Nanas Jakarta-13410

INDONESIA

Tel: +62 21 851 7164 Fax: +62 21 858 0111 E-mail: climate@cbn.net.id

Ir HANDOKO BIOTROP SEAMEO

11, Jalan Raya Tajur Km 6, Bogor

P.O. Box 116

Bogor

INDONESIA

Tel: +62 251 323 848 Fax: +62 251 326 851

E-mail: shierary@indo.net.id

Domenico GAUDIOSO

ENEA C.R. Casaccia Via Anguillarese 301

00060 S. Maria di Galeria (RM)

ITALY

Tel: +39 6 3048 6564 Fax. +39 6 3048 4925

E-mail: gaudioso@casaccia.enea.it

Hideo HARASAWA

National Institute for Environmental Studies

16-2 Onogawa

Tsukuba, Ibaraki 305

JAPAN

Tel: +81 298 50 2507 Fax. +81 298 50 2572

E-mail: harasawa@nies.go.jp

Gen INOUE

National Inst. for Environmental Studies (NIES)

16-2 Onogawa, Tsukuba

Ibaraki

305 JAPAN

Tel: +81 298 50 2402 Fax: +81 298 58 2468

E-mail: inouegen@nies.go.jp

Kotaro KIMURA

Global Environmental Affairs Office Ministry of Int. Trade and Industry 1-3-1 Kasumigaseki, Chiyoda-ku Tokyo 100-8901

JAPAN

Tel: +81 3 3501 3567 Fax: +81 3 3501 3560

E-mail: kkaa9466@miti.go.jp

Hiroki KONDO

Meteorological Research Institute

1-1. Nagamine

Tsukuba 305 0052

JAPAN

Tel: +81 298 53 8590 Fax: +81 298 55 2552

E-mail: hkondo@mri-jma.go.jp

Naoki MATSUO

Global Environmental Affairs Dept.

Global Industrial and Social Progress Research

Institute

3rd floor Shousen-Mitsui Bldg. 2-1-1 Toranomon, Minato-ku

Tokyo 105-0001

JAPAN

Tel: +81 3 5563 8800 Fax: +81 3 5563 8810

E-mail: gimatsuo@blue.ocn.ne.jp

Nobuo MIMURA

Ibaraki University

Center for Water Environment Studies

4-12-1 Nakanarusawa

Hitachi, Ibaraki 316-8511

JAPAN

Tel: +81 294 385169 Fax: +81294 358146

E-mail: mimura@hcs.ibaraki.ac.jp

Hideyuki MORI

Research and Information Office Global Environment Department

Environment Agency

1-2-2 Kasumigaseki Chiyoda-ku

Tokyo 100-8975

JAPAN

Tel: +81 3 3581 3422

Fax: +81 3 3581 3423

Toshio TAJIMA

Global Environmental Affairs Office Ministry of Int. Trade and Industry 1-3-1 Kasumigaseki, Chiyoda-ku

Tokyo 100-8901

JAPAN

Tel: +81 3 3501 7830 Fax: +81 3 3501 7697 E-mail: ttaa2526@miti.go.jp Tomihori TANIGUCHI

Department of Quantum engineering and Systems

Science

7-3-1 Hongo, Bukyo-ku

Tokyo 113 8656

JAPAN

Tel: 81 3 5800 6862 Fax: 81 3 5800 6862

E-mail: tt-tomi@q.tu.tokyo.ac.jp

Hiroshi WATANABE

Global Environmental Affairs Dept.

Global Industrial and Social Progress Research

Institute

3rd floor Shousen-Mitsui Bldg. 2-1-1 Toranomon, Minato-ku

Tokyo 105-0001

JAPAN

Tel: +81 3 5563 8800 Fax: +81 3 5563 8810

E-mail: hwatanabe@sepia.ocn.ne.jp

Yoshiki YAMAGATA

National Inst. for Environmental Studies (NIES)

16-2 Onogawa, Tsukuba

Ibaraki

305 JAPAN

Tel: +81 298 50 2545 Fax: +81 298 50 2572

E-mail: yamagata@nies.go.jp

Jaser K. RABADI

Meteorological Department

Marka

P.O. Box 341011

Amman **IORDAN**

Tel: +962 6 4892408/4892409/4894408

Fax: +962 6 4894409 Telex: 21908 METAM JO

Ms Svetlana MIZINA

Ministry for Ecology and Natural Resources

Hydrometeorology & Environmental

Monitoring Agency

32 pr. Abaya,

Almaty 480072

KAZAKSTAN

Tel: +7 3272 542527

Fax: +7 3272 542285

E-mail: svetlana.mizina@kniimosk.almaty.kz

Ms Olga V. PILIFOSOVA

Main Administration for Hydrometeorology

Abai Prospekt 32

Almaty 480072

KAZAKSTAN

Tel: +7 3272 542 227 Fax: +7 3272 542 285

E-mail: pilifo@kniimosk.almaty.kz

Ms Irina B. YSERKEPOVA

Main Administration of Hydrometeorology

Seifullin Street 597 Alma Ata 480072

KAZAKSTAN

Tel: +73272 542262 Fax: +73272 542285

E-mail: irina@kniimosk.almaty.kz

Joseph K. NJIHIA

Kenya Meteorological Department

P.O. Box 30259

Nairobi

KENYA

Tel: +2542 567880

Fax: +2542 567888 or 567889

Tlx: 22208

E-mail: dmcnrb@lion.meteo.go.ke

Richard S. ODINGO

Department of Geography

University of Nairobi

P.O. Box 30197

Nairobi

KENYA

Tel: +254 2 334244

Fax: +254 2 336885

E-mail: r.odingo@go.ke

Laban A. OGALLO

Department of Meteorology

University of Nairobi

P.O. Box 30197

Nairobi

KENYA

Tel: +2542 567864

Fax: +2542 567888/9

E-mail: logallo@lion.meteo.ge.ke

Hassan NASSARALLAH

В

В

c/o Dr. Mohammed Al-Sarawi

Director-General

Environment Public Authority

P.O. Box 24395

Safat 13104

KUWAIT

Tel: +965 245 6833/6834/2790

Fax: +965 245 6836/242 1993

Tlx: petrol 22363 KT

OktvabrN. TOKOEV

Ministry of Environmental Protection

1 Karasuiskya Street

GSP, 720403

Bishkek

KYRGYZ REPUBLIC

Tel: +996 3312 213862 Fax: +996 3312 214422

Somphone PHANOUSITH

Science, Technology and

Environment Organization

P.O. Box 2279

Ventiane

LAOS, PEOPLE'S DEM. REPUBLIC OF

Tel: +856 21 213470 Fax: +856 21 213472

E-mail: somphone@steno.gov.la

Motlatsi MOKHOTHU

P.O. Box 12348

Maseru 100

LESOTHO

Tel: +266 340601 Fax: +266 340000

E-mail: mn.mokhothu@nul.ls

Ms Joalane MPHETHI

Lesotho Meteorological Services

P.O. BOX 772

Maseru

LESOTHO

Tel: +266 325041

Fax: +266 325057

E-mail: bulane@lesoff.co.za

Bruno T. SEKOLI

Lesotho Meteorological Services

P.O. Box 772

Maseru-100

LESOTHO

Tel: +266 317250

Fax: +266 325057

Telex: 4479 WEATHER.LO

Petras KORKUTIS

Lithuanian Administration

of Hydrometeorology

6, Rudnyos Street

Vilnius, GSP, 232600

LITHUANIA

Tel: +3702 751194

Fax: +3702 724160

E-mail:

Ms Nirivololona RAHOLIJAO

Direction de la Météorologie et de l'Hydrologie

BP 1254

Antananariyo

MADAGASCAR

Tel: +26120 22 402 41 x228

Fax: +26120 22 405 81

E-mail: meteo@dts.mg

Jean-Claude RAKOTONDRASOA

Direction de la Météorologie et de l'Hydrologie

B.P. 1254

Antananariyo

MADAGASCAR

Tel: +26120 22 402 41 x206

Fax: +26120 22 405 81

E-mail: meteo@dts.mg

Ms Christine TSARANAZY-RAZAFI

Direction de la Météorologie et de l'Hydrologie

B.P. 1254

Antananarivo

MADAGASCAR

Tel: +26120 22 405 35

Fax: +26120 22 405 81

E-mail: meteo@dts.mg

Ms Roza FATCHI

National Economic Council

P.O. Box 30136

Capital City

Lilongwe 3

MALAWI

Tel: +265 78 2300

Fax: +265 78 224/782 233

E-mail: nec@malawi.net

Donald R. KAMDONYO

Meteorological Department

P.O. Box 2

Chileka

MALAWI

Tel: +265 692333

Fax: +265 692329

Telex: 446 11 WEATHER MI

Ah Kee CHAN

Malaysian Meteorological Service

Jalan Sultan

Petaling Jaya

Selangor 46667

MALAYSIA

Tel: +603 756 3225

Fax: +603 756 3621

E-mail: cak@kjc.gov.my

Kok Seng YAP

Malaysian Meteorological Service

Jalan Sultan Petaling Jaya Selangor 46667

MALAYSIA

Tel: +603 7569422/7587422

Fax: +603 7578052 E-mail: yks@kjc.gov.my

Abdullahi MAJEED

В

Department of Meteorology

Ghazee Building Male 20-05

MALDIVES

Tel: +960 323303

Fax: +960 327351/32 0021 Tlx: 896 66032 FINANCEMF

Mohamed KHALEEL

Ministry of Planning, Human Resources &

Environment

Ghazee Building, Ameer Ahmed Magu

Male

MALDIVES

Tel: +960 313039 Fax: +960 327351

E-mail: env@planning.gov.mv

Mamadou Lamine FOFANA

Direction de la Météorogie Nationale

Boîte Postale 237

Bamako **MALI**

Tel: +223 222588/222589/222101

Fax: +223 228635/224151

E-mail:

Vanesha SUNNASSEE

Ministry of Economic Development 9th floor, Emmanuel Anquetil Bldg.

Port Louis

MAURITIUS

Tel: +230 201 1597 Fax: +230 212 4124

Telex 4722 METEO IW

Soobaraj.N. SOK APPADU

Meteorological Service

St. Paul Road

Vacoas

MAURITIUS

Tel: +230 6861031/32 Fax: +230 6861033

E-mail: meteo@intrnet.mu

Jose-Carlos TENORIO-MARANON

National Institute of Ecology Av. Revolucion 1425, Nivel 31

Col. Tlacopac. C.P. 01040

Deleg. Alvaro Obregon

Mexico City
MEXICO

Tel: +525 624 3544/3547 Fax: +525 624 3593

E-mail: jtenorio@ine.gob.mx

Victor MAGANA

Centro de Ciencias de la Atmosfera Universidad Nacional de Mexico

Mexico City 04510

MEXICO

Tel: +52 5 622 4088 Fax: +52 5 616 0789

E-mail: victor@regino.atmosfera.unam.mx

Ms Punsalmaa BATIMA

Institute of Meteorology and Hydrology

Khudaldaany gudami 5, Ulaanbaatar 210646

MONGOLIA

Tel: +976 1 326 614 Fax: +9761 326 611

E-mail: meteoins@magicnet.mn

Luvsan NATSAGDORJ

Hydrometeorological Research Institute

MNE, Khudaldaany str. 5

Ulaanbaatar 11

MONGOLIA

Tel: +976 1 326114

Fax: +976 1 326611

E-mail: meteoins@magicnet.mn

U SOE TINT

Dept. of Meteorology and Hydrology

Mayangon 11061

Kaba Aye Pagoda Road

Yangon

MYANMAR

Tel: +951 665669

Fax: +951 65944

E-mail: 21512 BURMET BM

Johan J. BEYERS

Meteorological Service

Private Bag 13224

Windhoek

NAMIBIA

Tel: +264 61 208 2166 Fax: +264 61 208 2197

E-mail:

Alphonsus BAEDE

Royal Netherlands Meteorological Institute

KNMI

P.O. Box 201 3730 AE De Bilt

THE NETHERLANDS

Tel: +31 30 220 6446 Fax: +31 30 221 0407 E-mail: baede@knmi.nl

Luitzen BIJLSMA

Riikswaterstaat/RIKZ

P.O. Box 20907

2500 EX Den Haag

THE NETHERLANDS

Tel: +31 70 311 4373 Fax: +31 70 311 4300

E-mail: 1.bijlsma@rikz.rws.minvenw.nl

Ton BOON VON OCHSSEE

Ministry of Foreign Affairs

P.O. Box 20061

2500 EB Den Haag

THE NETHERLANDS

Tel: +31 70 348 6025 Fax: +31 70 348 4303

E-mail: ochssee@dml.minbuza.nl

Siebe C. van de GEIJN

Instituut voor Agrobiologisch en Bodemyruchtbaarheidsonderzoek

AB-DLO

P.O. Box 14

6700 Wageningen

THE NETHERLANDS

Tel: +31 317 475850 Fax: +31 317 423110

E-mail: s.c.vandegeijn@ab.dlo.nl

Bert Jan HEIJ

RIVM

P.O. Box 1

3720 BA Bilthoven

THE NETHERLANDS

Tel: +31 30 274 2970 Fax: +31 30 2744436

E-mail: bertjan.heij@rivm.nl

Bert METZ

В

RIVM

P.O. Box 1

3720 BA Bilthoven

THE NETHERLANDS

Tel: +31 30 274 3990

Fax: +31 30 274 4435 E-mail: bert.metz@rivm.nl Leo A. MEYER

Ministry of Housing, Spatial Planning

and Environment

P.O. Box 30945

2500 GX The Hague

THE NETHERLANDS

Tel: +31 70 339 4407

Fax: +31 70 339 1311

E-mail: meyer@dle.dgm.minvrom.nl

Johannes W. NIEUWENHUIS

Ministry of Housing, Spatial Planning

and Environment

P.O. Box 30945

2500 GX The Hague

THE NETHERLANDS

Tel: +31 70 339 2386

Fax: +31 70 339 1310

E-mail: j.w.nieuwenhuis@dle.dgm.minvrom.nl

Ms Maresa OOSTERMAN

Royal Netherlands Meteorological Institute

KNMI

P.O. Box 201

3730 AE De Bilt

THE NETHERLANDS

Tel: +31 30 220 6759

Fax: +31 30 221 0407

E-mail: oosterma@knmi.nl

Aad P. VAN ULDEN

Royal Netherlands Meteorological Institute

KNMI

P.O. Box 201

3730 AE De Bilt

THE NETHERLANDS

Tel: +31 30 220 6447

Fax: +31 30 221 0407

E-mail: vanulden@knmi.nl

Martin MANNING

National Institute of Water and Atmospheric

Research (NIWA)

P.O. Box 14-901, Kilbirnie

Wellington

NEW ZEALAND

Tel: +64 4 386 0535

Fax: +64 4 386 2153

E-mail: m.manning@niwa.cri.nz

Gerald RYS

Ministry of Research, Science and Technology

P.O. Box 5336

Wellington

NEW ZEALAND

Tel: +64 4 472 6400

Fax: +64 4 471 1284

E-mail: grys@morst.govt.nz

Bachirou MAGAGI

Ministère du Commerce, des Transports

et du Tourisme

Direction de la Météorologie Nationale

B.P. 218 Niamey **NIGER**

Tel: +227 73 21 60 Fax: +227 73 38 37

Sani MAHAZOU

Service de la Lutte contre les Pollutions

Direction de l'Environnement

B.P. 578 Niamey NIGER

Tel: +227 733329 Fax: +227 732784 Telex: 5590 NI Niamey E-mail: smahazou@intnet.ne

Øyvind CHRISTOPHERSEN

Ministry of Environment

Box 8013 Dep. 0030 Oslo

NORWAY

Tel: +4722 246042 Fax: +4722 242755 E-mail: chr@md.dep.no

Lorents LORENTSEN

В

Department of Planning and Analysis

Ministry of Finance P.O. Box 8008 Dep. N-0030 Oslo

Tel: +4722 24 4400 Fax: +4722 24 9512

E-mail: lorents.lorentsen@fin.dep.telemax.no

Thomas MARTINSEN

Norwegian Pollution Control Authority

P.O. Box 8100 DEP

0032 Oslo

NORWAY

NORWAY

Tel: +47 2257 348 Fax: +47 2267 6706

Shafqat Ezdi SHAH

Ministry of Environment

Islamabad

PAKISTAN

Tel: +92 51 9224581 Fax: +92 51 9202211

E-mail:

Aristides LORLESSE

ANAM

Apartado 2016 Paraíso Corregimiento de Ancón

Panama City PANAMA

Tel: +507 232 4317 Fax: +507 232 4317 E-mail: fsspm@sinfo.net

Raul GUTIERREZ

Autoridad Nacional del Ambiente

Apdo 2016, Paraiso

Ancon

PANAMA

Tel: +507 232 5361 Fax: +507 232 5361

E-mail: forestal@ns.inrenara.stri.si.edu

Efrain TAPIA

Autoridad Nacional del Ambiente Administracion Nacional de Cuencas

Apdo 2016 Ancon

PANAMA

Tel: +507 232 4486 Fax: +507 232 4317

E-mail: dinach@ns.inrenare.stri.si.edu

Eduardo CALVO

Comision Nacional de Cambio Climatico

Consejo Nacional del Ambiente

Av. San Borja Norte 226

Lima 41

PERU

Postal address:

Casilla postal 11-0014 Lima 11 – Jesus Maria

Tel: +511 225 5370 Fax: +511 225 5369

E-mail: ecalvo@mail.cosapidata.com.pe

Alberto PASCO-FONT

Consejo Nacional del Ambiente (CONAM)

Av. San Borja Norte 226 -

Lima **PERU**

Tel: +51 1 225 53 70

Fax: +51 1 225 53 69

E-mail: alberto@grade.org.pe

Javier PAULINICH

Ministerío de Relaciones Exteriores

Jiron Ucayali s/n

Lima **PERU**

Tel: +51 1 426 0128 Fax: +51 1 426 0128 Eduardo PEREZ DEL SOLAR

Ministerio de Relaciones Exteriores

Jiron Ucayali s/n

Lima

PERU Tel:

Fax: +51 1 427 09 95

E-mail: dma 05@rree.gob.pa

Ms Bernarditas C. MULLER

Office of the UN and International Organizations

Department of Foreign Afffairs

2330 Roxas Blvd.

Pasay City

Metro Manila 1330

PHILIPPINES

Tel: +632 834 4814/4911

Fax: +632 833 1322

E-mail: bcmuller@hotmail.com

Wojciech GALINSKI

Research Institute of Forestry

3, Bitwy Warszawaskiej Str.

00973 - Warsaw

POLAND

Tel: +4822 7567 854 (home)

Fax: +4822 224 935

E-mail: wgalinski@polbox.pl

Ms Anna OLECKA

Institute of Environmental Protection

Climate Protection Centre

Kolektorska 4

Warszawa 01-628

POLAND

Tel: +48 228 33 8507

Fax: IDEM

E-mail: klimat@warman.com.pl

Jong-Sik BANG

Ministry of Environment

REPUBLIC OF KOREA

Tel: +82 2 504 7245

Fax: +82 2 504 7206

E-mail: climate@hanmail.net

Ha-man CHO

Meteorological Research Institute

2 Waryong-Dong

Chongno-Gu

Seoul 110-360

REPUBLIC OF KOREA

Tel: +82 2 765 7017

Fax: +82 2 766 5978

E-mail: hmicho@iris.metri. re.kr

Yong-hun JUNG

Korea Energy Economics Institute

665-1 Naeson-dong

Euiwang-si, Kyunggi-do

Seoul

REPUBLIC OF KOREA 437 082

Tel: +82 343 20 2275

Fax: +82 343 20 2163

E-mail: yhjung@ccmail.keei.re.kr

Kyung-soo KIM

Ministry of Foreign Affairs and Trade

Sejong-ro 77

Seoul Chongro-ky

REPUBLIC OF KOREA

Tel: +82 2 720 2329

Fax: +82 2 722 7581

E-mail: kskim@mofa.go.kr

Seol-cheol KIM

Korea Environment Institute

Sadang-Dong

Dongjok-Gu

.Seoul

REPUBLIC OF KOREA

Tel: +82 2 3488 7659

Fax: +82 2 3488 7688

E-mail: sckin@keins.kei.re.kr

Ms Tamara SEVCUN

Hydrometeorological Service

Ministry of Environment

193 Grenoble str.

MD Chisinau

REPUBLIC OF MOLDOVA

Tel: +373 277 3536

Fax: +373 277 3636

Tlx: 163219 PGDSU

Valentin SOFRONI

Hydrometeorological Service

193 Grenoblya Street

2043 Chisinau

REPUBLIC OF MOLDOVA

Tel: +373 2 773511

Fax: +373 2 773636

E-mail: sofroni@ani.mol

Mikhail ANTONOVSKY

Institute of Global Climate & Ecology

University Prospect 6-2-100

107258 Moscow

RUSSIAN FEDERATION

Tel: +7095 137 6255

Fax: +7095 160 0831

Yuri IZRAEL

R

Institute of Global Climate & Ecology

Glebovskaya 20 B 107258 Moscow

RUSSIAN FEDERATION

Tel: +7095 169 2430 Fax: +7095 160 0831

Tlx: 111120

Serguei M. SEMENOV

Institute of Global Climate and Ecology

Glebovskaya 20 B 107258 MOSCOW

RUSSIAN FEDERATION

Tel: +7095 307 1792 Fax: +7095 160 0831 E-mail: semenov@glasnet.ru

Anwar ABU ALELA

Ministry of Finance and National Economy

Riyadh

SAUDI ARABIA

Tel: +9662 4050000 Fax: +9662 4033130

Ayman A. ABA-ALKHAIL

Saudi Aramco Company

P.O. Box 6414

Dharan

SAUDI ARABIA

Tel: +9663 874 6996 Fax: +9663 873 9963

Tlx: abaaaa..@aramco.com.sa

Fareed S. AL-ASALY

Saudi Aramco Company

P.O. Box 989

Dharan 31311

SAUDI ARABIA

Tel: +9663 874 6068 Fax: +9663 873 1209

E-mail: asalyfs@aramco.com.sa

Saiyed AL-KHOULI

MEPA

P.O. Box 10779

Jeddah 21447

SAUDI ARABIA

Tel: +9662 6400502 Fax: +9662 6400502

Adnan BAGHDADI

Ministry of Foreign Affairs

P.O. Box 92745

Riyadh 11663

SAUDI ARABIA

Tel: +966 5564 1512

Fax: +966

Taha M. ZATARI

Directorate of Meteorology &

Environmental Protection

P.O. Box 1358

Jeddah 21431

SAUDI ARABIA

Tel: +9662 651 2312

Fax: +9662 651 3640

Tix: 401800

Alioune NDIAYE

Direction de la Météorologie Nationale

Ministère du Tourisme et du Transport Aérien

B.P. 8257 Dakar-Yoff

SENEGAL

Tel: +221 820 5671

Fax: +221 820 1327 Tlx: 31519 METEO SG

E-mail: DMN@orstom.sn

Luc CHANG-KO

Seychelles Nat.'l Climate Change Committee

Meteorological Services

P.O. Box 181

Mahe

SEYCHELLES

Tel: +248 384065

Fax: +248 373594

E-mail: lchangko@seychelles.net

Antoine-Marie MOUSTACHE

Ministry of Agriculture and Marine Resources

Grand Anse

Mahe

SEYCHELLES

Tel: +248 378252

Fax: +248 225245

E-mail: antmoust@seychelles.net

Ogunlade DAVIDSON

Department of Mechanical Engineering

University of Sierra Leone

PMB

Freetown

SIERRA LEONE

Tel: +232 22 226786

Fax: +232 22 224439

E-mail: ogunlade.davidson@risoe.dk

Prince PALMER

Dept. of Agriculture, Forestry and the Environment

c/o Meteorological Department

F18. Charlotte Street

Freetown

SIERRA LEONE

Tel: +232 22 242146

Fax: +232 22 241613

E-mail:

Jerry PRATT

Meteorological Department F. 18 Charlotte Street

Freetown

SIERRA LEONE

Tel: +232 22 222554/226692 Fax: +232 22 224439/223252 Cable: DIMETEO FREETOWN

L'ubomir ZIAK

Ministry of the Environment of the Slovak Republic

Air Protection Department

Nam. L. Stura 1 81235 Bratislava

SLOVAKIA

Tel: +4217 516 2543 Fax: +4217 516 2031

E-mail:

Lucka KAJFEZ-BOGATAJ

University of Ljubljana

BTF - Agrometeorology

Jamnikarjeva 101

1000 Ljubljana

SLOVENIA

Tel: +386 61 123 1161 Fax: +386 61 123 1088

E-mail: lucka.kajfez.bogatan@bf.uni-lj.sl

Andrej KRANJC

Hydrometeorological Institute of Slovenia

Vojkova 1/B 61000 Liubljana

SLOVENIA

Tel: +38661 327461 Fax: +38661 1331396

E-mail: andrej.kranj@rzs-hm.sl

Gert COETZEE

South African Weather Bureau

Department of Environmental Affairs & Tourism

Private Bag X097, Pretoria 0001 SOUTH AFRICA

Tel: +27 12 309 3052 Fax: +27 12 323 4518

E-mail: coetzee@cirrus.sawb.gov.za

G.H.P. DHARMARATNA

Department of Meteorology

No. 383 Bauddhaloka Mawatha

Colombo 7

SRI LANKA

Tel: +941 686499

Fax: +941 691443/698311

E-mail: meteo@slt.lk

T.K. FERNANDO

Department of Meteorology

Bauddhaloka Mawatha

Colombo-7

SRI LANKA

Tel: +941 682 041 Fax: +941 691 443

E-mail: meteo@slt.lk

Andrayas W. MOHOTTALA

Department of Meteorology

No. 383 Bauddhaloka Mawatha

Colombo 7

SRI LANKA

Tel: +94 1 691443

Fax: +94 1 698311

E-mail: meteo@slt.lk

Mohan MUNASINGHE

В

(SRI LANKA)

4201 East West Highway

Chevy Chase, MD 20815

USA

Tel: +1 301 654 1270

Fax: +1 301 654 2586

E-mail: munasinghe@eureka.lk

Ali Mohamed Salih SAAD

Meteorological Authority

P.O. Box 574

Khartoum

SUDAN

Tel: +249 11 778836

Fax: +249 11 771693

Telex:23088 GVMET SD

Sabir ALI TAHA

Meteorological Authority

P.O. Box 574

Khartoum

SUDAN

Tel: +24911 778836

Fax: +24911 771693

Telex: 23 088 GVMET SD

Cornelis R. BECKER

Meteorological Service Suriname

P.O. Box 2273

Duisburg

Paramaribo

SURINAME

Tel: +597 491143

Fax: +597 490627

Tlx: NR 390 SN

E-mail: cbecker@sr.nct

Samuel S. SHONGWE

National Meteorological Service

P.O. Box 58 Mbabane

SWAZILAND

Tel: +268 45728 Fax: +268 41530 Tlx: 2001 WD

E-mail: weather@realnet.co.sz

Lars WESTERMARK

Swedish Commission on Climate Change

Naturvardsverket 10648 Stockholm

SWEDEN

Tel: +46 8 698 1197 Fax: +46 8 698 1475 E-mail: law@environ.se

Fortunat JOOS

В

Physics Institute University of Bern Sidlerstrasse 5 CH-3012 Bern

SWITZERLAND Tel: +41 31 631 4461

Fax: +41 31 631 4405 E-mail: joos@climate.unibe.ch

José ROMERO

Office Fédéral de l'Environnement, des Forêts et du Paysage

Division des Affaires internationales Papiermühlestrasse 172, Ittigen

CH-3003 Bern

SWITZERLAND

Tel: +41 31 322 6862 Fax: +41 31 323 0349

E-mail: jose.romero@buwal.admin.ch

Fouad ABOUSAMRA

Minister of State for Environmental Affairs

P.O. Box 3773

Tolyani Damascus

SYRIAN ARAB REPUBLIC

Tel: +444 7608 Fax: +442 0696 Telex: 412686

Imad Aldin KHALIL

Meteorological Department

P.O. Box 3773 Damascus

SYRIAN ARAB REPUBLIC

Tel: +6620 55214 Fax: +662 0553 Telex: 412686 env.sy Mr Supavit PIAMPHONGSANT

Ministry of Science, Technology and Environment

60/1 Soi Phibun Wattana 7

Rama VI Road Bangkok 10400

THAILAND

Tel: +66-2 2479656 Fax: +66-2 246 8106

E-mail: supavit.p@moste.go.th

'Ms Orapin WONGCHUMPIT

Int. Environmental Affairs Division

Office of Environmental Policy & Planning

Ministry of Science, technology and Environment

60/1 Soi Phibun Wattana 7

Rama VI Road Bangkok 10400

THAILAND

Tel: 66-2 2714322, 2723054 Fax: 66-2 2714322, 271326

E-mail: orapin@environnet.degp.go.th

Ms Wanna TANUNCHAIWATANA

Int. Environmental Affairs Division

Office of Environmental Policy & Planning

Ministry of Science, technology and Environment

60/1 Soi Phibun Watthana 7

Rama VI Road Bangkok 10400 THAILAND

Tel: +662 2723054

Fax: +662 2714322,2713226

E-mail: wanna@environnet.degp.go.th

Harrideo RAMNANAN

Meteorological Office

Piarco Airport,

Port of Spain

TRINIDAD & TOBAGO

Tel: +1 868 669 5465

Fax: +1 868 669 4009/4727

E-mail:

Skander BEN ABDALLAH

Ministry of Environment and Land Use Planning

Centre Urbain Nord

Immeuble ICF - BP 52

2080 Ariana

TUNISIA

Tel: +216 1 704258 or 704000 Fax: +216 1 704 340/705 343 E-mail: boc.meat@rdd.tn

Yadh LABANE

Institut National de la Météorologie

BP 156

2035 Tunis Carthage

TUNISIA

Tel: +216 1 773 400 Fax: +216 1 772 609

E-mail: labbene@hp meteo.inm.tn

Amanmurat DURDIEV

National Institute of Deserts, Flora and Fauna

Ashgabat 744000

TURKMENISTAN

Tel: +993 12 353791 Fax: +993 12 353716

E-mail: babaev@desert.ashgabad.su

Amangelov Y. YAKUBOV

Administration of Hydrometeorology

28 Engels Street

Ashgabat 744000

TURKMENISTAN

Tel: +993 12 353009 Fax: +993 12 511397

Telex: 292062 TURKMENHYDROM

E-mail:

Bwango APUULI

Ministry of Natural Resources

Department of Meteorology

P.O. Box 7025

Kampala

UGANDA

Tel: +256 41 251798

Fax: +256 41 251797

Tlx: 61163 Weather UG

E-mail: bapuuli@starcom.co.ug

Stephen A.K. MAGEZI

Dept. of Meteorology

P.O. Box 7025

Kampala

UGANDA

Tel: +256 41 251798

Fax: +256 41 251797

Telex: 61163 Weather UG

Abushen W. MAJUGU

Ministry of Natural Resources

Dept. of Meteorology

P.O. Box 7025

Kampala

UGANDA

Tel: +41 233559

Fax: +41 251797

Telex: 61163 WEATHR UG

Vasili LUTSKO

Technogenic and Ecological Safety Department

Cabinet of Ministers

12 Grushevskogo str.

8252006 Kiev

UKRAINE Tel: +380 44 226 3303

Fax: idem

E-mail:

Viadneslav MANUCALO

State Committee for Hydrometeorology

6, Zolotovorotskaya str.

MSP 252601 Kiev 34

UKRAINE

Tel: +380 44 224 5113

Fax: +380 44 229 4917

E-mail: manukalo@meteo.freenet.kiev.ua

Ms Nataliia TOKAR

State Committee for Hydrometeorology

6. Zolotovorotskaya str.

252601 Kiev 34

UKRAINE

Tel: +380 44 221 9338

Fax: +380 44 228 1375

E-mail:

Terence BARKER (CLA)

9, St. Paul's Road

Cambridge CB1 2EZ

UNITED KINGDOM

Tel: +44 1 223 335288

Fax: +44 1 223 335299

E-mail: terry.barker@econ.can.ac.uk

P. BRAMWELL

Department of the Environment (DETR)

123 Victoria Street

London SW1E 6DE

UNITED KINGDOM

Tel: +44 171 890 5228

Fax: +44 171 890 5269

E-mail: penny@globatmo.demon.co

Sir John T. HOUGHTON

c/o IPCC WG I TSU

Meteorological Office, Hadley Centre

В

London Road

Bracknell, Berkshire RG12 2SY

UNITED KINDGOM

Tel: +44 1344 856 615

Fax: +44 1344 856 912

Tlx: 849801 WEABKA G

Ms Catherine JOHNSON

Department of the Environment (DETR)

3/F3 Ashdown House 123 Victoria Street London SW1P 3PY

UNITED KINGDOM

Tel: +44 171 890 5226 Fax: +44 171 890 5269

E-mail: cathy@globatmo.demon.co.uk

Jim PENMAN

Department of the Environment (DETR)

123 Victoria Street London SW1P 3PY UNITED KINGDOM

Tel: +44 171 890 5225

Fax: +44 171 890 5269

Ms Vicky SIMPSON

Department of the Environment (DETR)

3/F3 Ashdown House 123 Victoria Street London SW1P 3PY

UNITED KINGDOM

Tel: +44 171 890 5232 Fax: +44 171 890 5269

E-mail: vicky@globatmo.demon.co.uk

David A. WARRILOW

Department of the Environment Room B252, 43 Marsham Street

LONDON SW1P 3PY

UNITED KINGDOM

Tel: +44 171 276 8339 Fax: +44 171 276 8509

E-mail: davidw@globatmo.demon.co.uk

В

Buruhani NYENZI

Directorate of Meteorology

Box 3056 Dar es Salaam

UNITED REPUBLIC OF TANZANIA

Tel: +255 51 112471/110227

Fax: +255 51 666079/112471/110231

E-mail: bnyenzi@nyenzi.com

Mark MWANDOSYA

The Centre for Energy, Environment,

Science and Technology

1372 Darume Road, Oysterbay

P.O. Box 5511 Dar Es Salaam

UNITED REPUBLIC OF TANZANIA,

Tel: +255 51 667569 Fax: +255 51 666079 E-mail: ccest@intafrica.com Ms Margot ANDERSON

US Department of Agriculture

Room 112A J.L. Whiten Building

14th and Independence Washington DC 20014

USA

Tel: +1 202 720 4186

Fax: +1 202 490 4915

E-mail: manderson@oce.usda.gov

Ms Rosina BIERBAUM

Office of Science & Technology Policy

443 OEOB, 17 & Pennsylvania Ave. NW

Washington DC 20502

USA

Tel: +1 202 456 6202

Fax: +1 202 456 6025

E-mail: rbierbaum@ostp.eop.gov

Ms Jean BRENNAN

US Dept. of State

OES/EGC Room 4330

Washington DC

USA

Tel: +1 202 647 4069

Fax: +1 202 647

E-mail: jbrennan@state.gov

Maurice K. CRAWFORD

USAID

1300 Pennsylvania Ave., NW

Washington DC 20533

USA

Tel: +1 202 712 5985

Fax: +1 202 2163230

E-mail: macrawford@usaid.gov

William G. HOHENSTEIN

EPA

401 M Street SW

Washington, DC 20460

USA

Tel: +1 202 260 7019

Fax: +1 202 260 6405

E-mail: hohenstein.william@epa.gov

Neil LEARY

US EPA

401 M Street SW

Washington, DC 20460

USA

Tel: +1 202 260 8111

Fax: +1 202 401 0454

E-mail: leary.neil@epa.gov

James J. McCARTHY

Harvard University

Museum of Comparative Zoology

В

26 Oxford Street

Cambridge, MA 02138

USA

Tel: +1 617 495 2330 Fax: +1 617 495 0506

E-mail: james j_mccarthy@harvard.edu

Rafe POMERANCE

Department of State 22nd and C Street, NW

Washington DC 20520-7818

USA

Tel: +1 202 647 2232 Fax: +1 202 647 0217

E-mail:

Raymond PRINCE

US Department of Energy

Mail Code PD-61

1000 Independence Avenue SW

Washington, DC 20585

USA

Tel: +1 202 586 4765 Fax: +1 202 586 5391

E-mail: raymond.prince@hq.doe.gov

Daniel REIFSNYDER

Department of State

Office of Global Change

OES/EGC - Rm 4330 A

Washington DC 20520-7818

USA

Tel: +1 202 647 3935

Fax: +1 202 647 0191/736 7336

E-mail: dreifsny@state.gov

Ms Tatjana OSOSKOVA

Centre for Environmental Pollution Observation

72, Observatorskaya Street

700052 Tashkent

UZBEKISTAN

Tel: +7371 133 6117

Fax: +7371 133 6117/2025

E-mail: root@ecol.gov.uz

Armando RAMIREZ ROJAS

Universidad Central de Venezuela

Instituto de Ciencias de la Tierra

Apartado 3895

Caracas 1010-A

VENEZUELA

Tel: +582 605 2154/69 Fax: +582 605 2168/55

E-mail:

Ms Evelyn BRAVO DIAZ

Ministerio de Energía y Minas

Torre Oeste, Piso 7, Parque Central

Caracas

VENEZUELA

Tel: +582 575 4431

Fax: +582 575 4431

Trong Hieu NGUYEN

Service hydrométéorologique

4, rue Dang Thai Than

Hanoi

VIET NAM

Tel: +84 4 825 3343

Fax: +84 4 355 993

Tlx: HYDROMETEO HANOI

Gabriel B. CHIPETA

Meteorological Department

P.O. Box 30200

10101 - Lusaka

ZAMBIA

Tel: +260 1 252728

Fax: +260 1 251889

E-mail: gchipeta@zamnet.zm

Nkonde M. LOMBANYA

Ministry of Foreign Affairs

P.O. Box 50069

Lusaka

ZAMBIA

Tel: +260 1 252708

Fax: +260 1 250240

Telex: 41290 ZA

K. TÖPFER

Executive Director

United Nations Environment Programme

P.O. Box 30552

Nairobi

KENYA

Tel: +2542

Fax: +2542

Alex ALUSA

United Nations Environment Programme

P.O. Box 30552

Nairobi

В

KENYA

Tel. +2542 62 3455

Fax: +2542 62 3410

E-mail: alex.alusa@unep.org

Lambert KUIJPERS

United Nations Environment Programme

Technical University P.O. Box 513

5600 MB Eindhoven THE NETHERLANDS

Tel: +31 40 250 3797 Fax: +31 40 246 6627 E-mail: lambermp@wxs.nl

G.O.P. OBASI Secretary-General

World Meteorological Organization

P.O. Box 2300 1211 Geneva 2 SWITZERLAND Tel: +41 22 7308 111

Fax: +41 22 734 2326

David K. DAWSON WMO/GCOS

RR#1 S84A Cl. Okanagan Falls, BC CANADA

Tel: +250 497 8621 Fax: +250 497 8621 E-mail: kdawson@vip.net

Mike COUGHLAN

World Meteorological Organization

WCP

P.O. Box 2300 1211 Geneva 2 SWITZERLAND

Tel: +41 22 7308 111 Fax: +41 22 734 2326

Arshad M. KHAN

International Atomic Energy Agency

Wagramerstrasse 5 P.O. Box 100 A-1400 Vienna AUSTRIA

Tel: +43 1 72600 22787 Fax: +43 1 2600 29598 E-mail: a.khan@iaea.org

Kok Kee CHOW Chairman SBSTA

Malaysian Meteorological Service

Jalan Sultan Petaling Jaya Selangor 46667 MALAYSIA

Tel: +603 756 9422 Fax: +603 755 0964 E-mail: chow@kjc.gov.my Dennis TIRPAK
UNFCCC Secretariat
Climate Change Secretariat

P.O. Box 260 124 D-52153 Bonn GERMANY

Tel: +49 228 815 1424 Fax: +49 228 815 1999 .E-mail: dtirpak@unfccc.de

Ms Renate CHRIST European Commission Boulevard du Triomphe 174 B-1160 Brussels

BELGIUM
Tel: +32 2 296 5582

Fax: +32 2 296 9557 E-mail: renate.christ@dg11.cec.be

Anver GHAZI

European Commission

Climate and Natural Hazards Unit, DG XII/D.2

200 rue de la Loi B-1049 Brussels BELGIUM

Tel: +32 2 295 8445 Fax: +32 2 296 3024

E-mail: anver.ghazi@dg12.cec.be

N. NAKICENOVIC

IIASA

Laxenburg

A2361 AUSTRIA Tel: +43 22 368107

Fax: +43 22 3673148 E-mail: naki@iiasa.ac.at

Laurie MICHAELIS

OECD

Environment Directorate 2, rue André Pascal 75775 Paris Cédex 16

FRANCE

Tel: +33 1 4524 9817 Fax: +33 1 4524 7876

E-mail: laurie.michaelis@oecd.org

Ms Karen TREANTON

International Energy Agency (IEA)

9, rue de la Fédération 75739 Paris Cédex 15

FRANCE

Tel: +33 1 4057 6633 .Fax: +33 1 4057 6649

E-mail: karen.treanton@iea.org

Gary J. BRENNAND

Organization of the Petroleum ExportingCountries (OPEC)

Obere Donaustrasse 93

1020 Vienna AUSTRIA

Tel: +43 1 21112-0 Fax: +43 1 2164320 E-mail: gjb@opec.org

Ms Claude CLEMENZ

Organization of the Petroleum ExportingCountries (OPEC)

Obere Donaustrasse 93

1020 Vienna AUSTRIA

Tel: +43 1 21112-0 Fax: +43 1 2164320

E-mail: cclemenz@opec.org

Davood GHASEMZADEH

Organization of the Petroleum ExportingCountries (OPEC)

Obere Donaustrasse 93

1020 Vienna AUSTRIA

Tel: +43 1 21112-297 Fax: +43 1 2164320

E-mail: ghasemzadeh@opec.org

Kenneth GREGORY

Centre for Business and the Environment

80, Cecil Park

Pinner, Middlesex HA5 5HH

UK

Tel: +44 181 866 6870

Fax: idem

E-mail: kennethgregory@msn.com

James A. LOSEY

GLAXO Wellcome

c/o Skadden Arps

1440 New York Ave. NW Washington DC 20005

USA

Tel: +1 202 371 7204 Fax: +1 202 393 5760

E-mail: jlosey@skadden.com

Robert G. GEHRI

The Climate Council

Suite 700

2550 M Street, N.W.

Washington, D.C. 20037-1350

USA

Tel: +1 202 457 6512 Fax: +1 202 457 6315

E-mail: robert.p.gehri@scsnet.com

Donald H. PEARLMAN
The Climate Council

Suite 700

2550 M Street, N.W.

Washington, D.C. 20037-1350

USA

Tel: +1 202 457 6512 Fax: +1 202 457 6315

E-mail: dpearlman@pattonboggs.com

Mack McFARLAND

Environmental Program

DuPont Fluoroproducts

Chestnut Run Plaza 702-2330-A Centre and Faulkland Roads Wilmington DE 19805

USA

Tel: +1302 999 2505 Fax: +1 302 999 2816

E-mail: Mack.McFarland@usa.dupont.com

Frances MACGUIRE

Friends of the Earth International

26-28 Underwood Street

London N1 7JQ

UK

Tel: +44 171 490 1555 Fax: +4 171 490 0881

E-mail: francesm@foe.co.uk

Manfred TREBER

Germanwatch

Budapester Straße 11

D-53111 Bonn

GERMANY

Tel: +49 228 6049217 Fax: +49 228 6049219

E-mail: germanwatch.bn@bonn.comlink.apc.org

David FINNEGAN

Global Climate Coalition

c/o American Automobile Manufacturers Association 4805 King Richard Drive Annandale VA 22003

USA

Tel: +1 202 778 0101 Fax: +1 202 861 0473

Robert McFADDEN

Global Climate Coalition

c/o 5902 Mt. Eagle Drive No. 1415

Alexandria, VA

USA

Tel: +1 202 763 329 3629 Fax: +1 202 326 5528 Ms Anita J. CICERO

International Pharmaceutical Aerosol Consortium (IPAC)

c/o Gardner, Carton &Douglas 1301 K Street, N.W., Suite 99 East Tower Washington D.C. 20005

USA

Tel: +1 202 408 7163 Fax: +1 202 289 1504 E-mail: acicero@gcd.com

Gary FOULDS (IPIECA)

BHP Research

Newcastle Laboratories

P.O. Box 188 Wallsend, NSW Newcastle

AUSTRALIA 2287 Tel: +61 2 49 79 2531 Fax: +61 2 49 79 2020

E-mail: foulds.gary.ga@bhp.com.au

Jonathan GRANT

IPIECA

Monmouth House 87-93 Westbourne Grove London W2 4UL UK.

Tel: +44 171 221 2026

Fax: +44 171 229 4948 E-mail: jgrant@ipieca.org

Haroon S. KHESHGI (IPIECA)

Exxon Research & Engineering Co. 1545 Route 22 East, Clinton Township Annandale, New Jersey 08801-3059 USA

Tel: +1 908 730 2531 Fax: +1 908 730 3301 E-mail: hskhesh@erenj.com

Eric KINGSTON (IPIECA)

120. Collins Street Melbourne, Victoria **AUSTRALIA 3000** Tel: + 613 965 27043

Fax: +613 965 26739

Lawrence LEUNG

(IPIECA)

BHP Research - Newcastle Laboratories

P.O. Box 188

Wallsend NSW 2287

AUSTRALIA

Tel: +61 2 4979 2518 Fax: +61 2 4979 2020

E-mail: leung.lawrence.hk@bhp.com.au

John SHINN (IPIECA)

Chevron Research & Technology Company

100 Chevron Way Room 35-1132

Richmond 94802

USA

Tel: +1 510 242 2502 Fax: +1 510 242 4808/1376 E-mail: shinh@chevron.com

Richard SYKES

(IPIECA)

Shell International

Carel van Bylandtlaan 16

Postbus 162

2501 AN The Hague

THE NETHERLANDS

Tel:, +31 70 377 1900 Fax: +31 70 377 3797

E-mail: richard.m.sykes@si.shell.com

Brett ORLANDO

IUCN - The World conservation Union

Washington Office 1400 16th Street, NW Washington D.C.

USA

Tel: +1 202 797 5454 Fax: +1 202 797 5461

E-mail: borlando@iucnus.org

William HARE

Greenpeace International

Keizersgracht 176 1016 DW Amsterdam THE NETHERLANDS Tel: +31 20 523 6204

Fax: +31 20 523 6200

E-mail: bhare@ams.greenpeace.org

Cary COOK

Greenpeace International

1436 U Street NW Washington DC 20009

USA

Tel: +1 202 319 2419 Fax: +1 202 462 4507

E-mail: gary.cook@wda.greenpeace.org

Mahendra KUMAR

SPREP

P.O. Box 240

Apia SAMOA

Tel: +685 21 929 Fax: +685 20 231

E-mail: sprep@sprep.org.ws

Ms Emma CORNISH

The Uranium Institute

12 Floor, Bowater House West

114 Knightsbridge London SW1X 7LJ

UK

Tel: +44 171 225 0303 Fax: +44 171 225 0308 E-mail: emma@uilondon.org

Ms Jennifer L. MORGAN

World Wildlife Fund (WWF)

1250, 24th Street NW Washington DC 20037

USA

Tel: +1 202 778 9514 Fax: +1 202 331 2391

E-mail: jennifer.morgan@wwfus.org

Peter L. READ

(Observer)

No. 1 Line

RD5, Palmerston North

NEW ZEALAND

Tel: +64 63 55 9194 Fax: +6463 55 0421

E-mail: p.read@massey.ac.nz

IPCC TECHNICAL SUPPORT UNITS

David GRIGGS

IPCC WG I Technical Support Unit

Meteorological Office, Hadley Centre

London Road

Bracknell RG12 2SY

UNITED KINGDOM

Tel: +44 1344 856 615 Fax: +44 1344 856 912

E-mail: djgriggs@meto.gov.uk

Paul VAN DER LINDEN

IPCC WG I Technical Support Unit

Meteorological Office

Hadley Centre

London Road

Bracknell RG12 2SY

UNITED KINGDOM

Tel: +44 1344 856 090

Fax: +44 1344 856 087

E-mail: pvanderlinden@meto.gov.uk

Dave DOKKEN

IPCC WG II Technical Support Unit

400 Virginia Av. SW, Suite 750

Washington DC 20024

USA

Tel: +1 202 314 2229

Fax: +1 202 488 8678

E-mail: ddokken@usgcrp.gov

Richard MOSS

IPCC WG II Technical Support Unit

400 Virginia Av. SW, Suite 750

Washington DC 20024

USA

Tel: +1 202 314 2224

Fax: +1 202 488 8678

.E-mail: rmoss@usgcrp.gov

Laura VANWIE McGRORY

IPCC WG II Technical Support Unit

400 Virginia Av. SW, Suite 750

Washington DC 20024

USA

Tel: +1 202 314 2228

Fax: +1 202 488 8678

E-mail: lvanwie@usgcrp.gov

Robert SWART

IPCC WG III Technical Support Unit

RIVM

P.O. Box 1

3720 BA Bilthoven

THE NETHERLANDS

Tel: +31 30 274 3026

Fax: +31 30 274 4465

E-mail: rob.swart@rivm.nl

Ms Erna DAR ZIV

Chief, WMO Conferences Unit

World Meteorological Organization

P.O. Box 2300

1211 Geneva 2

SWITZERLAND

Tel: +41 22 730 8111

Fax: +41 22 734 2326

IPCC SECRETARIAT

N. (Ram) SUNDARARAMAN Secretary of the IPCC

Ms Rudie BOURGEOIS Ms Chantal ETTORI Ms Cecilia TANIKIE

IPCC Secretariat c/o World Meteorological Organization P.O. Box 2300 1211 Geneva 2 SWITZERLAND

Tel: +41 22 7308/284/254/208

Fax: +41 22 733 1270

E-mail: IPCC_Sec@gateway.wmo.ch